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الجامع ــــة الإسلامية \_ غزة شنون البحث العلمي والدراسات العليا كلية قلية قسم الهندسة المدنية إدارة مشروعات هندسية

## Quantifiable Model for Assessing Gaza Municipalities' Development Projects towards MDLF Quality Requirement

نموذج كمي لتقييم مشاريع بلديات قطاع غزة حسب معايير صندوق تطوير وإقراض البلديات

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July/2018



إقــــرار

أنا الموقع أدناه مقدم الرسالة التي تحمل العنوان:

# نموذج كمي لتقييم مشاريع بلديات قطاع غزة حسب معايير صندوق تطوير وإقراض البلديات

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# نتيجة الحكم على أطروحة ماجستير

بناءً على موافقة عمادة البحث العلمي والدراسات العليا بالجامعة الإسلامية بغزة على تشكيل لجنة الحكم على أطروحة الباحثة/ ساره رفعت نعيم رستم لنيل درجة الماجستير في كلية الهندسة/ برنامج الهندسة المدنية/إدارة المشروعات الهندسية وموضوعها:

نموذج كمي لتقييم مشاريع بلديات قطاع غزة حسب معايير صندوق اقراض وتطوير البلديات

Quantifiable Model for Assessing Gaza Strip Municipalities' Development Projects Towards MDLF Quality Requirement

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واللجنة إذ تمنحها هذه الدرجة فإنها توصيها بتقوى الله تعالى ولزوم طاعته وأن تسخر علمها في خدمة دينها ووطنها.

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سورة التوبة الآية (105)

#### Dedication

I dedicate this study to my mother (Mona), who loved, encouraged and supported me

I dedicate this study to my dear father (Dr. Rifat),

To my beloved life partner Hakim,

To my sweet daughter Layan,

To my beloved sisters Shahira, Nuzha and Zena and

My sweet brother Mohammed,

I dedicate this study to my Father in Law and Mother in Law,

And to all my friends and work colleagues.

Hoping that I made all of you proud

**Eng. Sarah Rustom** 



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#### **Abstract**

The aim of the study is to present a new method for assessing the municipal development projects based on developing a quantifiable model to measure the extent to which municipalities comply with MDLF guidelines and standards as a case study.

To accomplish this research and in order to collect its data, a mixed method was used in the research, and all of that was done in the natural environment of the municipalities. An interview and questionnaire was used as the main data collection tool and after developing it, the pilot testing was done for finalizing it. The target group was professional engineering experts, engineers and contractors as well as 25 semi-structured interviews are conducted with the members of the municipalities, and due to some limitation Gaza Strip municipalities were only studied. The researcher distributed a total of 55 questionnaires, while 51 filled questionnaires were collected back (response rate 92.7%) and out of these 50 were analyzed. After the analysis of the first questionnaire, It is been found that the extensive results of analyzing the data collected for the 40 sample projects show that the overall evaluation rate is about 81.014% this rate indicates a very good level. The results were strongly satisfactory in some areas such as readiness of project documents, documents availability, effectiveness, and the environmental and social compliance. The rate satisfactory is dominant in most of the audited items. Only the operation and maintenance level was less satisfactory compared to other items. The finding of the second questionnaire shows that the Minimum threshold to assess the acceptance of the individual evaluation factors was 65.81% and the program is evaluated poor if the final result will be less than 65.81%. Based on these results, the study inveterate several recommendations, the most important that the allocations for operation and maintenance are very limited, which reflect itself on the overall negative evaluation of compliance to maintenance procedures and requirements. It is proposed to add items in the project documents to cover the main operation and maintenance activities.



#### ملخص الدراسة

يهدف هذا البحث الى تقديم طريقة جديدة لتقييم مشاريع التنمية البلدية على أساس تطوير نموذج قابل للقياس لقياس مدى امتثال البلديات لمبادئ ومعايير صندوق تطوير وإقراض البلديات كدراسة حالة.

من أجل تنفيذ هذا البحث وجمع معلوماته ، استخدم الباحث أسلوبًا مختلطًا من مصادر المعلومات الأولية والثانوية ، وكل ذلك تم في البيئة الطبيعية للبلديات. حيث تم استخدام أسلوب الاستبانة والمقابلة كأداة رئيسية لجمع المعلومات ، وبعد تطويره ، استخدم الباحث الاختبار التجريبي للتأكد من سلامة الاستبيانة. وقد تم اختيار خبراء هندسيين محترفين ومهندسين ومقاولين كمجتمع للبحث بالإضافة إلى 25 مقابلة مع أعضاء البلديات ، وبسبب بعض القيود تم دراسة بلديات قطاع غزة فقط. قام الباحث بتوزيع ما مجموعه 55 استبيانا على البلديات والخبراء، حيث تم اعادة 51 استبيانة معبأة (معدل الاستجابة 92.7 ٪) وقد تم تحليل 50 استبيانة من هذه الاستبيانات. بعد القيام بتحليل نتائج البحث الأول ، تبين أن النتائج المكثفة التحليل البيانات التي تم جمعها من أجل 40 عينة من المشاريع تظهر أن معدل التقييم مرضية للغاية في بعض المجالات مثل جاهزية وثائق المشروع ، وتوافر الوثائق ، والفعالية ، والامتثال البيئي والاجتماعي. وأشارت النتائج الى أن معدل الرضى هو السائد في معظم البنود المدققة باستثناء مستوى التشغيل والصيانة كان أقل رضى مقارنة ببقية البنود.

أما بالنسبة الى نتائج البحث الثاني تبين أن الحد الأدنى لتقييم قبول عوامل التقييم الفردية كان 65.81% ويتم تقييم البرنامج ضعيفًا إذا كانت النتيجة النهائية أقل من 65.81%. وبناءً على هذه النتائج ، قامت الدراسة بعمل عدة توصيات ، أهمها أن توزيعات التشغيل والصيانة محدودة للغاية ، والتي تعكس نفسها على التقييم السلبي العام للامتثال لإجراءات ومتطلبات الصيانة. يُقترح إضافة عناصر في وثائق المشروع لتغطية أنشطة التشغيل والصيانة الرئيسية وغيرها من التوصيات سيتم استعراضها.

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#### **List of Abbreviations**

**AHP** The Analytical Hierarchy Process

**BoQ** Bill of Quantity

**ESIA** Environmental and Social Impact Assessment

**ESMF** Environmental and Social Management Framework

**GIS** Geographic Information System

**MDLF** Municipal Development and Lending Fund

MDP Municipal Development Program

**M&E** Monitoring and Evaluation

MIS Management Information System

**MOLG** Ministry of Local Government

**NDP** National Development Plan

**O&M** Operation and Maintenance

**PNA** Palestinian National Authority

**QCQA** Quality Control and Quality Assurance

Organization for Economic Cooperation and

Development/Development Assistance Committee OECD/DAC



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# CHAPTER 1 INTRODUCTION



#### 1.1 Introduction:

Chapter one generally gives a general perception for the reader about the nature of the research. This chapter contains a summary of some important events that have passed on local government institutions, headed by municipalities, followed by problem statement, then the aim and objectives, followed by research scope and limitations. Finally, the methodology of the research is shown.

#### 1.2 Background

The concept of project management is an s an integral part of the concept of management. Despite the multiplicity of management concepts, management is generally defined as a process of setting and achieving objectives through planning, organizing, directing and controlling but according to (PMI) Project Management defines as the art of directing and coordinating human and material resources throughout the life of a project by using modern management techniques to achieve predetermined objectives of scope, cost, time, quality, and participant satisfaction."

Each project has specific objectives to be achieved, here comes the role of evaluating projects to measure the achievement of the desired goals and test the effectiveness and efficiency; we need to evaluate projects to transition from the judgments to more objective stage based on knowledge and scientific research

Project evaluation is defined as "a phase-by-step measurement of several components (relevant, impact, efficiency, effectiveness, and sustainability) to compare what has been accomplished with planning" (Hamad, 2010).

Local government institutions, headed by municipalities, are important institutions. Municipalities in Palestine are responsible for local planning and development, and take an active part in crisis management before, during, and after major events (Rammal and Hamad, 2008). The capacities within the municipalities vary tremendously throughout their different types, depending on availability of resources in addition to other factors; Municipalities are key players in the control of major risks. They have in-depth knowledge of the realities in their territories; they serve as



an interface with the inhabitants and play an important role in the areas of development and organization of activities.

After 1997, municipalities became responsible for the implementation of many sectors such as sewage, water, roads, etc. After a short period of time, municipalities were unable to do all the work because of their weak resources on foreign aid, accordingly. The Municipal Development Program (MDP) was developed by the Palestinian Authority (PNA) to implement the objectives of the Palestinian National Development Plan for Local Development. This program was implemented by a local authority such as the Municipal Development and Lending Fund (MDLF). The first phase lasted three years from 2010 to 2013. The priorities of this phase were to provide technical assistance and annual grants to all the municipalities in the West Bank and Gaza Strip. (MDLF, 2016)

MDP – Phase II, will support municipalities in improving their municipal management practices for better municipal transparency and service delivery. Mechanisms to improve service delivery, citizen engagement, revenue generation and municipal responsiveness will be emphasized. This builds upon the success of Phase I of the Municipal Development Program which focused on performance improvements, particularly in municipal finance and municipal planning. (MDLF, 2016)

Hence, the idea of research related to the assessment of municipal projects of a sample of MDPII-Cycle 02 -window 1 and window 5 sub-projects implemented in Gaza Strip based on the criteria of MDLF and measuring the level of use of funding in a suitable ways to implement the projects as well as the reasons for the inability of some municipalities to implement and complete other projects

#### 1.3 Problem Statement

There is a trend in organizations that the project assessment process is implemented according to the request of financiers who are entitled to know whether their funds are spent properly and whether this expenditure has been sufficient and feasible, but the first reason for evaluation should be for the organization and the project, Evaluation is a valuable tool in demonstrating the effectiveness of the work to



achieve the objectives, whether it has an impact, and works efficiently. If we do not assess the success of our work, compared to objectives and indicators, we may continue to use useful resources for things that are not feasible. (El A'badi, 2009)

The results of many studies showed that there is a need to evaluate the projects to measure their efficiency and effectiveness because the evaluation in general helps to improve the management process and also contributes to the appropriate selection of individuals working in projects in the future depending on their performance in previous projects

Gaza Strip municipalities are facing a great challenge in municipal service delivery including: Management practices that double the already severe budget crisis, staff capacity for quality control measures and monitoring and evaluation system. Less or no local research has been developed in assessing the technical compliance of the municipal development projects in Gaza Strip to best practices measures. The researchers treated the issue in a very shallow way and did not provide solid information about what was being done. They confirmed only the importance of the evaluation and called on all municipalities to begin evaluating their programs. The lack of information on exactly what is happening in the municipalities regarding program evaluation raises the importance of conducting this research.

#### 1.4 Aim and Objectives

#### 1.4.1 Research Aim

The study aim in general to present a new method for assessing the municipal development projects based on developing a quantifiable model to measure the extent to which municipalities comply with MDLF guidelines and standards as a case study.

#### 1.4.2 Research Objectives

The objective of the study is to develop an assessment tool to measure the compliance of the implemented development projects to specifications, technical quality requirements, and structural soundness guidelines. The specific objectives can be summarized as bellow:



- To evaluate a representative sample of infrastructure sub-projects implemented in MDPII-Cycle 02. The assessment will focus on the technical quality, structural soundness, and the compliance of implemented sub-projects with technical specifications.
- 2. To assess the approaches and processes during the implementation of the subprojects and provide recommendations for future improvements.
- 3. To assess the compliance with safeguarding measures in the Environmental Management Plan (EMP).
- 4. To assess the effectiveness of the implementation from institutional, social, technical, and operational dimensions.

#### 1.5 Research Scope and Limitations

This research has been designed to evaluate a representative sample of sub-projects implemented in MDPII-Cycle 02. The assessment focused on the technical quality and structural soundness, and the compliance of implemented sub-projects with technical specifications. Furthermore, it assessed the approaches and processes during the implementation of sub-projects and provided recommendations for future improvements. Moreover, the research assessed the compliance with safeguard measures in the Environmental Management Plan (EMP) of MDP.

The study assessed the effectiveness of the implementation from institutional, social, technical, and operational dimensions. The broad areas under this study includes: sub-project selection, technical soundness, appraisal, appropriateness and sustainability construction management, construction quality, physical status and functionality of the sub-projects; environmental consideration, capacity building activities, O&M management and monitoring mechanism.

The limitations of the research included the following:

1. This study was applied only to the municipalities of the Gaza Strip, due to the difficulty of reaching the municipalities of the West Bank.



- 2. The sample consists of 40 projects out of 504 from MDPI-W1 and W5 Subprojects (by End of Cycle II).
- 3. The target group was project managers in municipalities and professional engineering experts.

#### 1.6 Brief Research Methodology

The researcher will conduct a literature review to highlight previous research done in the area and relevance to the local context. A quantitative tool will then be developed to assess the performance of the implemented projects against the measures and guidelines proposed by MDLF.

In achieving the proposed study, the following steps will be performed:

- 1. Reviewing previous research related to evaluation of development projects from an international perspective.
- 2. Data collection and review of existing documents to understand the background of the implemented sub-projects, including available documents on MDLF, projects appraisal, MDLF operation manual, etc.
- 3. Design a quantitative tool (model) to measure the compliance of implemented projects to MDLF guidelines and measures. The proposed broad areas for evaluation could include:
- Sub-project selection methodology.
- Technical soundness.
- Appraisal.
- Appropriateness and sustainability construction management.
- Construction quality.
- Physical status and functionality of the sub-project.
- Environmental consideration.
- Capacity building activities.
- O&M management.
- Monitoring mechanism.



- 4. Test and validate the tool by selecting a sample of 40 projects out of 504. The sample selection will be based on predefined criteria. Clustering Sampling is proposed to be used.
- 5. Meetings, interviews with different parties and field visits will be conducted to collect the data and validate the tool.
- 6. Analysis of the data will be conducted by using Excel and SPSS software and The Analytical Hierarchy Process (AHP)
- 7. Results and output will be reported in a structured format.

#### 1.7 Research Structure

The research was divided into five main chapters. Each chapter consisted of several sections and the division was divided into sub-sections. The following is a brief summary of the contents of each chapter:

#### 1. Chapter 1 (Introduction):

Chapter one generally gives a general perception for the reader about the nature of the research. This chapter contains a summary of some important events that have passed on "Local government institutions, headed by municipalities, followed by problem statement, then the aim and objectives. Followed by research scope and limitations. Finally, the methodology of the research is shown.

#### 2. Chapter 2 (Literature Review):

Chapter two of this research discusses issues related to the Municipalities sector. The chapter starts discusses program evaluation in general. The chapter starts with a briefing on the development of the evaluation concept followed by defining project evaluation. Then the purpose for conducting an evaluation is presented, its main types, and the stages of project evaluation followed by several evaluation-related topics including evaluation timing, evaluators, and life cycle. Then municipality's history, The Ministry of Local Government, The Municipal Development and Lending Fund, then Municipal Ranking .Finally the Previous Studies related to topic.



#### 3. Chapter 3 (Methodology):

Chapter three discusses the methodology implemented in this research. The methodology includes information about the research design, population, sample size, data collection, questionnaire design, questionnaire content, instrument validity, pilot study, and the method of data processing and analysis. The questionnaire will be the main approach to collect the data and perspectives of the respondents as well as interviews with project managers.

#### 4. Chapter 4 (Discussion of Results):

Chapter four presents the final findings of this research with needed discussion.

#### 5. Chapter 5 (Conclusions and Recommendation):

Chapter five presents the conclusion of this study as well as the recommendations upon it.



# CHAPTER 2 LITERATURE REVIEW



#### 2.1 Introduction

Chapter two of this research discusses issues related to the Municipalities sector. The chapter starts discusses program evaluation in general. The chapter starts with a briefing on the development of the evaluation concept followed by defining project evaluation. Then the purpose for conducting an evaluation is presented, its main types, and the stages of project evaluation followed by several evaluation-related topics including evaluation timing, evaluators, and life cycle. Then municipality's history, MOLG, MLDF, and then Municipal Ranking .Finally the Previous Studies related to topic

The Third World countries have many projects that are concerned with the development of infrastructure, which in turn improves the standard of living of citizens. Many projects are invested in an attempt to improve its infrastructure and the quality of life. Huge amounts of money are put into this activity and more importantly to get value for money. There are two important aspects that can contribute to achieve this goal ensuring monitoring and evaluation. (OTIENO, 2000)

Many stakeholders now use project evaluation as an agency that checks and verifies assumptions. All organizations should continuously check their activities and actively monitor ongoing implementation. Private sector companies for example monitor their activities, such as return on investment. (Wellons, 2002).

#### 2.2 Project Definition

There are different definitions for the project, Kerzner (2001) define project as "temporary undertaking to create a unique product or service". A project has a defined start and end point and specific objectives that, when attained, signify completion

The Project Cycle Management PCM (2004) defines the project as "a series of activities aimed at bringing about clearly specified objectives within a defined timeperiod and with a defined budget".

From another point of view, "the project is a combination of organizational resources pulled together to create something that did not previously exist and that will provide



a performance capability in the design and execution of organizational strategies". (Cleland, and Ireland, 2002).

Another definition is that "the project as a multitask job that has performance, time, cost and scope requirement and that is done only one time. If it is repetitive, it's not a project. A project should have definite starting and ending point (time), a budget (cost), a clearly defined scope or magnitude of work to be done and specific performance requirements that must be met" (Lewis, 2002). Upon searching the term project, we came across the term subproject. Large projects are divided into smaller components to facilitate the management process called subprojects. These subprojects are projects that are independently managed and sometimes subcontracted with external institutions. It is worth mentioning that in large projects, subprojects can consist of a series of smaller subprojects (El Aff, 2007).

#### 2.2.1 Project Life Cycle:

A project life cycle can be defined as "an orderly sequence of integrated activities, performed in phases, leading to success" (Forsberg et al., 2000). The complex nature as well as the diversity of projects results in industries, or even companies within the same industry sector, failing to agree on the life cycle phases of a project (Kerzner, 2001).

Based on the Project Management Body of Knowledge project life cycle is "a collection of generally sequential and sometimes overlapping project phases whose name and number are determined by the management and control needs of the organizations involved in the project, the nature of the project itself, and its area of application." "A life cycle can be documented with a methodology. The project life cycle can be determined or shaped by the unique aspects of the organization, industry or technology employed. While every project has a definite start and a definite end, the specific deliverables and activities that take place in between will vary widely with the project the life cycle provides the basic framework for managing the project, regardless of the specific work involved. Projects vary in size and complexity. No matter how large or small, simple or complex, all projects can be mapped to the following lifecycle structure" (PMBOK, 2008).





According to Project Cycle Management Handbook - PCM (2004), the generic project cycle has five stages: Programming; Identification, Formulation, Implementation, and Evaluation & Audit. Each stage of the project will vary in duration and importance depending on the scale, scope and specific operating modalities under which they are developed. The proper utilization of resources and the allocation of sufficient time for each activity in the project are most importance in order to support the design and effective implementation of relevant and feasible projects.

Based on Adams & Barndt (1978) and King& Cleland (1983) four-stage life cycle has been active. The initial stage, the term "Conceptualization" refers to the status of the strategic need of the project and this is done by top management. At this stage, the initial objectives and alternatives are also identified and the availability of resources to achieve these objectives is determined.

Previous studies have proved that failure to do feasibility studies prior to the establishment of new projects or replacement, renovation and expansion of existing projects, either out of ignorance or intentionally, is a fatal error which leads to a waste and misuse of resources. (Abedel Aziz, 1993)

The planning stage is the second phase in the project life cycle. At this stage, a series of alternative plans and plans are being considered to achieve the objectives of the project, which are initially identified, as well as the availability of the resources used in the project and the budget and some other tasks.

The third which called excavation or between the brackets the actual work of the project. At this stage material is purchased and resources are used to turn the goals into tangible results.

The fourth and final phase of the project life cycle is called the phase of completion and evaluation. The stage of completion is to close the project and hand it over to the owner and the project team is often disbanded and re-assigned of staff to other duties



and send them to new projects and return the resources used in the project to the parent organization and transferred the project to the intended users either the evaluation phase. The goal of this stage is to determine the extent to which the planned goals are achieved on the ground and the project is studied from other aspects such as development efficiency, effectiveness, impact and sustainability. The evaluation should provide reliable and useful information, allowing the lessons learned to be integrated into the decision-making process of both beneficiaries and donors.

Figure 2.1 Show the following main stages that project has to pass through (Adams & Barndt, 1978; King & Cleland, 1983)

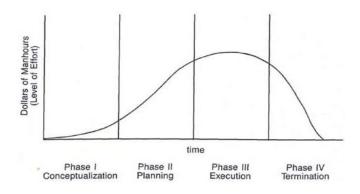


Figure 2.1: Project Life Cycle Phases'

#### 2.2.2 Learning from Projects:

There are many ways to assess and learn from projects, the most important of which are:

- Project monitoring: concentrating on activities and outputs and their influence to outcomes. Monitoring is the continuous observation of a project's development by systematically assembling key execution information for regular analysis.
- Annual project reviews: concentrating on outputs and outcomes. They are a
  type of self-evaluation during which the partners think about how well the
  project is moving ahead towards achieving its objectives, taking into account
  available monitoring and evaluation information. Project reviews are
  typically done yearly but can also be called for particular issues.



- Interim and final evaluations: concentrating on the outcomes of the project
  and the probability that they will achieve impact. Evaluations give a chance
  to inside and out reflection on the strategy and assumptions guiding the
  project. They assess advance made towards the accomplishment of a project's
  objectives and may recommend adjustments to its strategy.
- Impact assessments: deciding whether project interventions have contributed to longer-term impact. They can be ex-post evaluations of projects or they can be part of thematic or country program evaluations that likewise think about linkages between various activities and interventions. (ILO, 2010).

The relevant partners investigate the information from monitoring and evaluation to guarantee that suitable choices are made in an opportune way. This can enhance project implementation and the likelihood that it will achieve the planned objectives, Figure 2.2 can explain that.

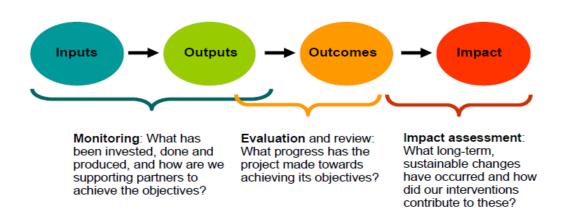


Figure 2.2: Monitoring, evaluation and impact assessment

#### 2.3 Project Evaluation

The idea of evaluation was a key development in the history of this activity. The organizations and agencies that were entrusted with the responsibility to ensure the completion of some projects to help the low-income common groups, and was often requested by the financiers of these projects reports describe and justify how the money spent .These organizations were often limited to reporting on the activity carried out and some facts about the services provided through the project. Through the advancement of human data, the evolution of science and the need for more accurate and comprehensive information to quickly and effectively implement



projects, development stakeholders are beginning to analyze the records of their activities by collecting information through forms to get more information that enables additional accurate planning and more active management. (Saidi, 1989)

In the past, people believed that the evaluation process was an insignificant activity that took time and effort and generated a lot of useless data and conclusions. (El A'badi, 2009) but now they they believe that they should be familiar with and understand the terms that are relevant to the evaluation. Know what they need from information to create right judgment about project matters and needs. As well as be fully prepared to understand what is actually going on in all stages of implementation. (McNamara et al., 2008)

#### **2.3.1** Definition of evaluation:

According to ILO (2012), "Evaluation is an evidence-based assessment of strategy, policy or program and project outcomes, evaluation determines their relevance, impact, effectiveness, efficiency and sustainability". The evaluation process also examines if the best approach was taken, and if it was optimally executed. Additionally, an evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision-making process of both recipients and donors (OECD/DAC, 2002).

Also, "evaluation is the process of measuring the extent of achieving the evaluation criteria "relevance, efficiency, effectiveness, impact and sustainability" at the level of the target groups, administration, employees, partners and community" (Hamad, 2010).

UNDP (2009) defined Evaluation 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. Evaluations, like monitoring, can apply to many things, including an activity, project, program, strategy, policy, topic, theme, sector or organization. The key distinction between the two is that evaluations are done independently to provide managers and staff with an objective assessment of whether or not they are on track. They are also more rigorous in their procedures, design and methodology, and generally involve more extensive analysis. However, the aims of both monitoring and evaluation are very similar: to



provide information that can help inform decisions, improve performance and achieve planned results."

Project evaluation can be defined as "the systematic collection of information about the activities, characteristics, and outcomes of programs, for use by people to reduce uncertainties, improve effectiveness, and make decisions" (Patton, 2008).

According to the World Bank (2004), evaluation must have several characteristics for influencing decision-making which include:

• Useful: Results are feasible, timely and targeted

• Credible: Evaluation must be accurate and impartial

• Transparency: Available to all individual stakeholders

• Independent: Free of bias

The World Food Program (2002) defines project evaluation as "a systematic and objective assessment of an ongoing or completed operation, projects, or policy. The aim is to evaluate relevance, fulfillment of objective, efficiency, effectiveness, impact, and sustainability. An evaluation should provide credible, useful information that enables incorporation of recommendations and lessons into future project design, management, decision-making and corporate policy". In turn, the U.S. Environmental Protection Agency (2004) defines program evaluation as "a systematic way to learn from past experience by assessing how well a program is working. A focused program evaluation will examine especially identified factors of a program in a more comprehensive fashion than learning from experience that occurs in a day-to-day work".

From the above, we conclude that project evaluation is a process that measure the achievement of the evaluation criteria "relevance, efficiency, effectiveness, impact and sustainability" at the level of target groups, management, employees, partners and society.



#### 2.3.2 Why evaluation:

A lot of answers to this question may come to mind. These answers are summarized, for example, In Figure 2.3, and through these different answers we draw the basic reasons that justify, but make the evaluation necessary.



- Help us know how well the project is doing
- Progress recorded to achieve the project objective
- Comparison of expenses with achievements and results
- Identify the effectiveness of efforts to reach the objectives of the project.
- Compare our work with others in the same field
- Make better plans for the future
- Helping to work more effectively
- Collect more information
- Improved supervision and follow-up
- · determine strengths and weaknesses in workflow
- Involve and benefit from others in our experience

Figure 2.3: explain why evaluation

In summary, projects evaluation is necessary to study and analyze the following:

- Activities that undertake by the organization or stakeholders within a particular project.
- Human and material resources contribute as inputs to the project.
- Information, facts and figures of interest to this activity evaluated.

In addition to the foregoing, this process may need to be carried out in other cases, such as at the request of the project financier, a specialized agency, or a supervisory authority, Experiment with new methods or methods on the ground, or measure the impact of introducing some new elements into the project (Lewis, 2002).

#### 2.3.3 Objective of evaluation:

The purpose of the evaluation had better be clear and objective, and if not, the evaluation process will be a misleading process focused on the wrong interests, and the outcome of projects will certainly be not useful to the users of the results.



If the intent of this process is to measure the success of the project as a whole, the approach recommends using the five commonly criteria (impact, effect, effectiveness, relevance and Sustainability) or can focus on one criterion if the purpose of the evaluation is to measure only one factor. For example: Measuring the impact of environmental, social or economic project, and so on. Evaluation can also include more than one criterion depending on the type of project that will be evaluated. (Othman, 2004).

Through a number of studies, a number of direct objectives of the project evaluation procedure can be deduced, as well as those indicated by JICA (2004) that the evaluation has two main objectives:

- Provide the essential information to take correct decisions on the processes,
   policies or strategies associated with ongoing or future projects.
- Provide evidence to stakeholders (donors, partners and target groups), demonstrate the effectiveness of the project performance and its conformity with the planned results, legal and financial requirements, and the extent to which managers use the results of monitoring and evaluation.

Levine (2002) describes other project evaluation objectives which include:

- 1. Enable the process of collective learning and contribute to set facts about what works and what does not work and the reasons for it.
- 2. Check the quality or performance of project management.
- 3. Identify successful policies for replication and expansion.
- 4. Modifying unsuccessful policies.
- 5. Provide the opportunity for the concerned authorities to create their contribution to the outputs and quality of the projects.

Through the evaluation process, the organizations also aim to meet the wishes of the financiers of these projects and to convince them of the appropriateness and effectiveness of these projects in order to maintain the continuity of funding for these organizations. (Crawford, 2002).



Overall, the evaluation aims at determining the suitability of any project and the extent of its efficiency, effectiveness, impact and sustainability and is expected to improve the decision-making procedure and thus lead to better consequences and more efficient use of resources (UNFPA, 2007).

#### 2.3.4 Evaluation Criteria:

Most development-related organizations use OECD/DAC five criteria for evaluating their development assistance: (Imas & Rest, 2009).

- 1. Relevance: The coherence of the objectives of any development intervention with beneficiary requirements, country needs, global priorities, partner policies and development agencies
- 2. Effectiveness: A measure of how aid activity reaches its objectives.
- 3. Efficiency: A measure of output quality and quantity for inputs (this economic term indicates that aid uses the lowest possible cost to achieve the desired results.) Overall efficiency measurement requires comparing alternative methods to achieve the same results to determine whether the most efficient process has been adopted.)
- 4. Impact: Positive and negative changes resulting from development intervention, directly or indirectly, intended or unintentional (impact measurement includes the identification of the main impacts of an activity on social, economic, environmental and other development indicators. And should include the positive and negative impact of external factors, such as changes in terms of trade and financial conditions.)
- 5. Sustainability: The risk of net benefit flows over time (the sustainability concept is particularly important to assess whether the benefits of an activity or program will likely continue after donor funding is withdrawn.) Projects and programs must be environmental as well as financially sustainable.



Table 2.1: Comparison of the Evaluation Criteria

Criterion	Efficiency	Effectiveness	Impact	Relevance	Sustainability
Definition	The productivity of the implementation process.	The extent to which the objectives has been achieved	All positive and negative changes and effects caused by the aid intervention	Whether the objectives are still in keeping with the donor's and local and national priorities and needs	Whether the positive effects will continue after external support has been concluded
What to measure	The delivery of aid	Achievement of objectives	Intended and unintended positive and negative effects	Appropriateness in relation to policies, needs and priorities	Likelihood of benefits to continue
Who's perspective	The implementer	The target group	The society	The society	The society
Point of reference	Similar intervention/be set practice standards	Agreed objectives	Status of affected parties prior to intervention	Needs and priorities of donor and partner	Projected, future situation.
Methodological challenge	What standard to use as reference	Unclear, multiple confounding or changing objectives	Lack of information about affected parties. Cause and effect linkages	Lack of consensus regarding needs and priorities	Hypothetical answers

Source: DANIDA, (1999). Danish International Development Agency Evaluation Guidelines. Evaluation Department, Ministry of Foreign Affairs Copying Center, 2 Edition, Denmark..



# 2.3.5 Project Evaluation Stages:

The UNESCO (2004) divides evaluation into the following main stages as show in Figure 2.4

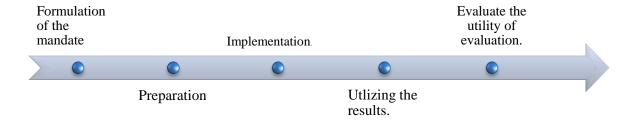


Figure 2.4: Project Evaluation Stages

USAID (1997) put the following main stages for conducting an evaluation:

- Decide if and when to evaluate.
- Plan the evaluation.
- Hold a team-planning workshop.
- Conduct data collection and analysis.
- Communicate evaluation results.
- Review and use evaluation results.
- Submit evaluation report.

# 2.3.6 Project Evaluation Timing:

JICA (2004) has identified three evaluation timelines based on the phase in which they are conducted:

# I. Ex-ante evaluation

This is before the execution of the project; scenarios are developed for what is expected and possible, as well as indicators for measuring the impact of the project in subsequent evaluations.

# II. Midterm evaluation

This evaluation aims to examine the achievements and implement the project by focusing on results-based efficiency, in addition to the return of the work plan and its adjustment according to the results. The results of the evaluation will help the stakeholders to take decisions and monitor the performance.



### III. Final or terminal evaluations

This evaluation takes place after a period of time from the completion of the project and concentrates on efficiency, effectiveness, impact and sustainability. The basic aim of this evaluation is to draw lessons learned and recommendations for future project planning and implementation in a more efficient and effective manner.

We note from the above that these evaluations do not compensate for one another; some projects may be forced to use the three evaluations each according to their time.

# 2.3.7 Evaluation Framework:

According to UNDP, (2009) .This framework serves as an evaluation plan, and should clarify:

- What should be evaluated?
- The activities needed to evaluate
- Who is responsible for evaluation activities?
- When evaluation activities are planned (timing)
- How evaluation is carried out (methods)?
- What resources are required and where they are committed?

# 2.3.8 Difference between Program Evaluation and Project Monitoring:

Project evaluation is directly related to program reporting and monitoring since a great deal of evaluation data is collected during the implementation of the program through the program's reporting and monitoring system. "Monitoring is the continuous assessment of project implementation in relation to agree upon schedules" (Wellons, 2002). According to the UNFPA (2001) "Monitoring is a continuous management function that aims primarily to provide management and main stakeholders with regular feedback and early indications of progress and lack of thereof in the achievement of intended results. Monitoring tracks the actual performance or situation against what was planned or expected according to predetermined standards. Monitoring generally involves collecting and analyzing data on program process and results and recommending corrective measures".



The following table provides details on the main differences in characteristics between Program Monitoring and Program Evaluation

Table 2.2: Main differences between Monitoring and Evaluation

Monitoring	Evaluation
Continuous	Periodicity: at important stages such as mid- term implementation of the program; at the end or core period after the end of the program
Tracks. Control; analyze and document progress	Deep analysis; compares the plan with actual achievements
Focusing on inputs, activities, outputs, implementation processes, continuity of relevance, and potential outcomes at the target level	Focusing on outputs with respect to inputs; results in terms of cost; processes used to achieve results; overall relevance;
Answer what activities were performed and the results that have achieved	Answer why and how results were achieved.
Managers alerts to problems and provides options for corrective actions	Provides managers with strategic and policy options
Self-assessment by program managers, supervisors, community stakeholders, and donors	Internal and / or external analysis by program managers, supervisors, community stakeholders, donors and / or external evaluators

Source: (UNFPA, 2001)

# 2.3.9 Evaluation Methods:

An evaluation can use quantitative or qualitative data, and often includes both. Both methods provide important information for evaluation, and both can improve community engagement. These methods are rarely used alone; combined, they generally provide the best overview of the project. This section describes both quantitative and qualitative methods. (Principles of community engagement, 2011)

# 2.3.9.1 Quantitative Methods

Quantitative data provide information that can be counted to answer such questions as "How many?", "Who was involved?", "What were the outcomes?", and "How much did it cost?" Quantitative data can be collected by surveys or questionnaires,



pretests and posttests, observation, or review of existing documents and databases or by gathering clinical data.

Surveys may be self- or interviewer-administered and conducted face-to-face or by telephone, by mail, or online. Analysis of quantitative data involves statistical analysis, from basic descriptive statistics to complex analyses. Quantitative data measure the depth and breadth of an implementation (e.g., the number of people who participated, the number of people who completed the program). Quantitative data collected before and after an intervention can show its outcomes and impact. The strengths of quantitative data for evaluation purposes include their generalizability (if the sample represents the population), the ease of analysis, and their consistency and precision (if collected reliably).

The limitations of using quantitative data for evaluation can include poor response rates from surveys, difficulty obtaining documents, and difficulties in valid measurement. In addition, quantitative data do not provide an understanding of the program's context and may not be robust enough to explain complex issues or interactions (Holland et al., 2005; Garbarino et al., 2009).

# 2.3.9.2 Qualitative Methods

Qualitative data answer such questions as "What is the value added?", "Who was responsible?", and "When did something happen?" Qualitative data are collected through direct or participant observation, interviews, focus groups, and case studies and from written documents. Analyses of qualitative data include examining, comparing and contrasting, and interpreting patterns (Patton, 2002).

Observations may help explain behaviors as well as social context and meanings because the evaluator sees what is actually happening. Observations can include watching a participant or program, videotaping an intervention, or even recording people who have been asked to "think aloud" while they work (Ericsson et al., 1993).

Interviews may be conducted with individuals alone or with groups of people and are especially useful for exploring complex issues. Interviews may be structured and conducted under controlled conditions, or they may be conducted with a loose set of questions asked in an open-ended manner. It may be helpful to tape-record



interviews, with appropriate permissions, to facilitate the analysis of themes or content. Some interviews have a specific focus, such as a critical incident that an individual recalls and describes in detail. Another type of interview focuses on a person's perceptions and motivations.

Focus groups are run by a facilitator who leads a discussion among a group of people who have been chosen because they have specific characteristics (e.g., were clients of the program being evaluated). Focus group participants discuss their ideas and insights in response to open-ended questions from the facilitator. The strength of this method is that group discussion can provide ideas and stimulate memories with topics cascading as discussion occurs (Krueger et al., 2000; Morgan, 1997).

The strengths of qualitative data include providing contextual data to explain complex issues and complementing quantitative data by explaining the "why" and "how" behind the "what." The limitations of qualitative data for evaluation may include lack of generalizability, the time-consuming and costly nature of data collection, and the difficulty and complexity of data analysis and interpretation (Patton, 2002).

# 2.3.9.3 Mixed Method

According to Johnson and Onwuegbuzie (2004), "Mixed methods research is formally defined here as the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study. Mixed methods research also is an attempt to legitimate the use of multiple approaches in answering research questions, rather than restricting or constraining researchers' choices (i.e., it rejects dogmatism). It is an expansive and creative form of research, not a limiting form of research. It is inclusive, pluralistic, and complementary, and it suggests that researchers take an eclectic approach to method selection and the thinking about and conduct of research".

# 2.4 Evaluation models

As mentioned above, evaluation is the actual tool for measuring the success or failure of a project. The evaluation methods used are different in one model and vary according to the purpose of the evaluation. Therefore, the process of creating any



evaluation model requires us to know the purpose of the evaluation and what is the method of analysis used in the evaluation. To answer these questions, a number of points of view have to be taken to develop the appropriate model for the situation and to cover all aspects. (Schwandt, 1998)

### 2.4.1 What is a model?

The concepts of the model are varied in terms of species and description. A model is a set of information or data collected, whether verbally or graphically, to describe a particular idea, state or phenomenon. The model may be brief or detailed. (EPIC, 1990)

### 2.4.2 Research model

In this research, a mixed approach -qualitative and quantitative approach. The variables and factors influencing evaluation are identified in Gaza Strip through the municipalities. The quantitative data collected by surveys questionnaires, and review of existing documents and analyzed by statistical analysis such as EXCEL, SPSS and AHP to calculate the relative weight. But the qualitative data are collected through interviews and focus groups and Analyzed by examining, comparing and contrasting.

# 2.4.3 Previous studies using AHP in evaluation

The AHP method provided the decision-makers with the information that is required to specify numerical weights representing the relative importance of each criteria and important factors with respect to the goal (Hwang et al., 2014). Perhaps the greatest strength of the AHP is that, although its foundation lies in complex matrix manipulation, its employment is readily available to those with little knowledge of optimization theory.

# Yaser N. Alsuwehri (2011): Supplier Evaluation and Selection by Using the Analytic Hierarchy Process Approach

The aim of the study is to provide an effective way to select the appropriate supplier based on the evaluation of each standard in order to reduce the time and effort in the selection process.

The methodology used in the study was a multi-criteria decision model as well as AHP model.



- During his study of suppliers, the researcher found that the use of the Internet
  for supplier research was fairly adequate. Especially for small or even
  medium-sized importers because they do not own their own web pages.
- Through his contacts with a group of potential suppliers, the researcher has learned that many of the suppliers of voice are participating in international exhibitions in Germany and Hong Kong. Finding that information is an effective way to find potential suppliers and fly a relationship with them.
- The use of AHP method for suppliers was an excellent idea because it ensures more objective results and minimizes the balancing effects of other standards.

# **Study recommendations:**

- The use of the AHP approach in the selection of suppliers is a reasonable step
  as it provides a way to combine the objective factors and judgments of
  experts in assessing the source of international procurement.
- The AHP approach enables managers to analyze the strengths and weaknesses of supplying companies. Over time, the AHP approach will become an effective tool in selecting suppliers and measuring their current performance.
- As the study shows, the price criterion is not an important criterion when comparing the low cost suppliers with each other. Other criteria such as quality and reliability have to be taken into account

# 2.5 Local government in Palestine

Municipalities are the main actors in controlling key risks. They have in-depth knowledge of the reality in their territory. They are responsible for local planning and development, and play an active role in crisis management before, during, and after major events. In an urban environment, risks are complex, and a wide range of expertise needs to be called on. Municipalities can therefore play their full roles in managing and preventing risks only through a gradual process of which they themselves are in control



The Palestinian local government sector including municipality councils and village councils offer services to local residents that include: Creation and maintenance of roads, water and electricity supplies Planning and controlling of buildings Building permits, and infrastructure; Providing health and environment services and protection, such as solid waste collection and slaughter house operation and control Public entertainments, public parks, environmental protection and others (PNA, 1997)

# 2.6 The Ministry of Local Government (MOLG)

Starting from the period in which the local Palestinian governments were governed by the Palestinian Authority. MOLG was formed on the 25th of February 1994 by a decision of the Palestinian leadership. MOLG consists of municipalities, municipal councils and joint service councils that serve the citizen. The main objectives of MOLG are the following (HDR, 2002):

- 1. Enhance the concepts of local government and decentralized administration, and establish local government institutions that support the national goal of building Palestinian communities that adopt democratic elections.
- 2. Improving the quality of services in the Palestinian rural community to bridge the gap between rural and urban areas.
- 3. Development of the capacities of local councils.
- 4. Review the performance of the local councils established before the establishment of the Palestinian National Authority in order to reach the vision of the local government coinciding with the Palestinian agenda.

# 2.7 The Municipal Development and Lending Fund (MDLF)

The Municipal Development and Lending Fund (MDLF) were established by a decision of the Council of Ministers in 2005 as "an autonomous entity to accelerate Palestine's drive toward self-sustained, decentralized, prosperous, and creditworthy local government". One of the Fund's main objectives is to encourage the flow of financial resources to Local Government Units, assist local authorities in developing their capacities in line with modern management practices to help them provide better services to the public, guide assistance from donor countries and Providing



modern financial services to support and develop services to local authorities and to improve their credit abilities (MDLF, 2016).

Since its establishment, the Fund has overseen and executed over USD 130 million of activities including infrastructure, capacity building, and social initiatives. In order to monitor and the effect of the Fund's activities in enhancing the capacities of the local government units, it is currently developing its own monitoring and evaluation system. This will be utilized at the national and local levels in monitoring their interventions and also to assess the execution of local government units as part of it's newly developed Funding Allocation Mechanism. During the time spent in developing its M&E system, the Fund is faces a various difficulties as imperatives, which is typical in the context of developing countries (MDLF, 2016).

MDLF since its beginnings has been especially associated with municipal capacity building activities in the area of financial management and additionally different issues. Results monitoring of capacity building is particularly difficult as the appraisal of behavioral changes is concerned and data collection can't be completely institutionalized. By working with various stakeholders, the Fund needs to find its way between the amounts of in-house capacity to be offered by a lean and efficient organization and comprehensive surveys, which may be more costly and time consuming. In addition, having multi stakeholders with various levels of capacities and interests represents a significant challenge in developing a balanced M&E system. Developing and monitoring execution incentives for local governments, which operate under a changeable security condition and vague regulatory framework, is another specific challenge for Palestine (MDLF, 2016).

# 2.7.1 MDLF Programs/Projects:

According to MDLF annual report (2016) MDLF has a lot of programs and project including:

- Municipal Development Program Phase II (MDPII)
- Local Development Program Phase III (LDP III)
- Local Government Reform Development Program Phase 1- (LGRDP I)
- Development of Marginalized Communities in West Bank and Gaza



- Development of Area C in the West Bank
- Gaza Solid Waste Management Project (GSWMP)
- Local Government Reform Development Program Phase 2 (LGRDP II)
- Regeneration of Historical Centers (RHC)
- Integrated Cities for Urban Development (ICUD)
- Local Government Services Improvement Program (LGSIP)

This study will shed light on Municipal Development Program – Phase II (MDPII).

# 2.7.2 The Grant Allocation Mechanism:

The Grant Allocation Mechanism is the most important element of the MDP. It based on scientific analysis of real data. It is worth to state that MDLF adopted an extraordinary grant allocation mechanism keeping in mind the end goal to circulate the assets among Palestinian municipalities. The great advantage of the adopted mechanism was that it thought about the municipality performance and accomplishments in building capacity programs. The MDLF and the FPs agreed that the final allocation formula would be half on performance, 30% on population and 20% on needs (as per the updated mechanism 2016). In order to determine the performance degree of each municipality, a ranking system was approved. Municipalities have been ranked according to 16 basic accepted "good practices" (see Table 2.3) (MDLF, 2017).

Table 2.3: Grants allocation performance indicators for MDPII

Rank	Performance Criteria)	Performance Criteria	
A++	5 out of 5	✓ Substantial Operation and Enterprise Account Surplus.  (More than 15 %)	
A+	4 out of 5	<ul> <li>✓ Unqualified External Audit</li> <li>✓ Use of an Integrated Financial Management System IFMIS</li> <li>✓ Satisfactory Service Quality (Timely delivery of building licenses and clearances; Provided public green space per capita)</li> <li>✓ Good Collection Efficiency and own Revenue Generation (Specified own revenues &gt; 100 NIS per capita or 10% above last two years' average)</li> </ul>	
A	3 out of 5		
B++	5 out of 5	✓ Substantial Operation and Enterprise Account Surplus (more than 5%).	



B+ (3 or 4) out of 5		✓ Fixed Assets Register in place and updated.		
		✓ Operation and Maintenance Plan in place and updated.		
		✓ Public disclosure of all municipal investments, SDIP		
		execution, and external audit reports.		
В	2 out of 5	✓ Satisfactory Collection Efficiency and own Revenue		
		Generation(Specified own revenues > 50 NIS per capita or		
		5% above last two years' average).		
G	5 , 65	✓ Municipal Strategic Development and Investment Plan		
C++	5 out of 5	SDIP in place and updated.		
		✓ Financial Accounting Policies, Procedures and Reports in		
C+ (3 or 4) out of 5		place.		
		✓ External Audit according to minimum standards.		
		✓ Public disclosure of budgets, SDIP plan and ranking.		
C	2 out of 5	✓ Basic collection efficiency and own revenue generation		
2 0 000 01 0		(Specified own revenues > 25 NIS per capita or above last		
		two years' average).		
D		✓ Budget forecast and executed properly submitted and		
		approved by MoLG.		
Е		✓ Minimum requirements not fulfilled		

**Source: (MDLF, 2017)** 

# 2.7.3 Municipal Ranking according to MDLF:

Funds are allocated based on the municipal rank from A (high) to E (worst). Municipalities with higher rankings will be eligible for more funding than those with lower rankings. The MDP works closely with municipal leaders to help those in the lower levels move up to a higher ranking. Table 2.4 shows 25 municipalities located in Gaza Strip ordered with respect to the governorates starting from the north governorates to the south ones, the table also showed each municipality rank in MDLF in 2017 and comparing it with 2014.

Table 2.4: List of Municipalities of Gaza Strip.

No.	Municipalities	Governorate	Ranking 2014	Ranking 2017
1	Al Moghraqa		C+	C+
2	Al Zahra	Gaza	C+	C+
3	Gaza	0.12.0	B+	B+
4	Wadi Gaza		C+	C+
5	Abasan Al Jadidah	Khan Younis	C+	C++



No.	Municipalities	Governorate	Ranking 2014	Ranking 2017
6	Abasan Al Kabera		В	B+
7	Al Fohkari		C+	C++
8	Al Qarara		B+	B++
9	Khanyounis		B+	B+
10	Khozaa		C+	B+
11	Bani Suhaila		В	B+
12	Al Buraij		C+	В
13	Al Maghazi		C+	C++
14	Al Musader		C+	С
15	Al Nusirat	Deir Albalah	В	C++
16	Al Zawayda		В	B++
17	Dear AlBalah		B+	B++
18	Wadi Alsalqa		В	B+
19	Rafah		B+	B+
20	Al Nasser	Rafah	C+	C+
21	Al Shoukah		C+	C++
22	Bait Hanoun		C+	B+
23	Bait lahia	North Gaza	В	B++
24	Jabalia	Tiorin Gaza	B+	B+
25	Um Al Nasser		C+	C+

**Source: (MDLF, 2017)** 

# 2.7.4 MDP Description:

The Municipal Development Program is a ground-breaking new exertion in development and change designed by the Municipal Development and Lending Fund (MDLF). Under the guidance of the Palestinian National Authority, the MDP perceives that the initial step towards enhancing municipal services lies in bettermanaged and more accountable local governments. The MDP gave infrastructure grants to Palestinian municipalities and consolidates this with improved performance and improved capacity in operations, planning, and financial capacity. Its foundation was the Grant Allocation Mechanism, a formula- based technique for distributing



funds to municipalities for capital investments in view of needs, population, and good management practices. The MDPII was implemented over the period of 3 years (2013-2016) in two cycles of roughly year and a half each. (MDLF, 2016)

The MDPII has five windows/components this study aims to conduct a technical audit of a sample of MDPII-Cycle 02 -Windows 1 sub-projects and Window 5 sub-projects in the Gaza Strip to ensure compliance with the program guidelines and procedures.

**Window 1:** Municipal Grants for Capital Investments: This window allocated performance-founded grants for (i) capital investment for service provision, as per the command of municipalities that is defined in the Local Councils Law No. 1 of 1997, (ii) for segments that are defined as eligible in the Operations Manual, as well as for (iii) operative expenditures for Municipalities in Gaza.

Window 5: Gaza Municipal Emergency Grants. This component allocated grants to Gaza municipalities for capital investment service provision, per mandate of municipalities defined in the Local Councils Law No. 1 of 1997, for sectors described as eligible in the Operations Manual (OM) as well as for operating expenditures, similar to Component 1. Allocations to municipalities made based on the results of the Municipal Damage Assessment, which determined the share of grants allocated to individual municipalities. Municipalities proposed priority subprojects to be financed and implemented with assistance from the MDLF. Public disclosure of sub-project information ensured transparency and enhanced social accountability between municipalities and citizens. The Component financed the costs of goods, works and consultant services related to capital assets and operating expenditures. Eligible sectors included but not limited to (i) municipal water and wastewater services, if not provided by an utility; (ii) solid waste management services; (iii) roads and sidewalks; (iv) public facilities; (v) street lighting; and (vi) municipal electricity services, if not provided by an utility. (Ziara, 2015).

# 2.7.5 Financial Partners Contributions:

The MDPII is supported by the Palestinian National Authority along with many donors such as the Agence Française de Development (AFD), the Danish International Development Assistance (DANIDA), the Swedish International



Development Cooperation Agency (SIDA), the World Bank (WB)., the German Development Bank (KFW), the German International Technical Cooperation (GIZ), the Netherlands (through VNG International), the Switzerland (through SDC), European Union (EU). In addition to that, the Belgian Development Agency (BTC) has committed to support the MDPII through its ongoing program. (MDLF, 2017)

# 2.7.6 Assessment of Responsibilities:

Based on MDLF (2012) manual the project stakeholder duties were assessed in light of the procurement manual as follows:

# **MDLF** Responsibilities

- 1. Confirming transparency of the procurement procedure and its consistence with the 2012 procurement manual.
- Assist the Municipalities in making a project procurement plan (PPP). MDLF
  will demand the Municipalities to ask for no objection before conducting
  certain steps, especially the contract award.
- 3. Conduct regular prior reviews of the procurement procedure.
- 4. Oversee and monitor the Local Technical Consultant (LTC) as per the agreed-upon procurement arrangements and methodology.
- 5. Procure all goods and consultants' services, except it delegates the authority to the Municipality.
- 6. Maintain adequate documentation of the procurement procedure.

# Municipalities' Responsibilities

- 1. Work closely with the MDLF and give essential documentation its review and clearance.
- 2. Shall not proceed extra until MDLF has provided clearance. Under guidance and supervision of the MDLF the municipality, supported by the LTC, will be responsible for:
  - Making procurement plans.
  - Preparing bidding/quotations/proposals forms.
  - Providing MDLF with a copy of bidding/quotations/proposals forms for its evaluation and approval.



- Advertising for bids, soliciting quotations and inviting proposals.
- Receiving, opening and assessing bids/quotations/proposals.
- Providing MDLF with a duplicate of the evaluation report for its review and endorsement.
- Awarding contracts and issuing buying orders.
- Supervising contract execution.
- Receiving supplied goods.
- Receiving, auditing and approving payments for contractors, suppliers and consultants.
- Evaluating contracts at end.
- Preparing progress reports.
- Maintaining documentation of the procurement procedure for Funding Partners (FP's) ex-post review.
- 3. PPP, to be prepared by every municipality and accepted by the MDLF, will specify the contracts of each procurement technique.
- 4. Communicate their procurement committee, the bid opening committee (BOC) and the Bid evaluation committee (BEC).

# Local Technical Consultant's (LTC) Responsibility

- 1. LTC, employed by the MDLF, will give technical assistance to the municipalities in preparation of Procurement Plan and designate engineers to catch up the procurement procedure by Municipalities.
- 2. LTCs will perform monitoring and evaluation tasks for example:
  - Procurement of equipment and works.
  - Contracting, managing of infrastructure works.
  - Managing consultancy services and technical assistance.
  - Documentation and reporting on growth of the Grant Implementation Agreement, including on Monitoring and Evaluation of indicators involved in the GIA.
- 3. LTCs will support municipalities in the entire procurement procedure including:
  - Review of design, cost estimate, specifications.



- Preparation of bidding documents.
- Invitation to bid.
- Bid opening and evaluation;
- Award of contracts.
- 4. LTCs will be responsible for confirming that sub-projects contracting completed by participating municipalities with following responsibilities:
  - Providing training for joining municipalities (program cycle, the subprojects' procurement and PP procedure).
  - Assisting the various levels of the procurement process, like: planning
    procurement activities, preparing bidding documents, launching the
    procurement processes, evaluating bids, awarding and managing contracts,
    and maintaining suitable filing.
  - Assisting in dealing with complaints and trials.
  - Assisting in assessing work done by service workers.
  - Reporting to MDLF on the review of the procurement procedure at municipalities and counselling on timely corrective measures, if any.
- LTC will be bolstered by the recommendations and decisions of the MDLF senior procurement officer, who will be monitoring procurements done by the MDLF.
- 6. LTCs will prepare monthly development reports and submit to MDLF to provide details regarding their activities and findings.

# 2.8 Previous Studies

Several of studies and articles that talked about projects evaluation with its different aspects were explored and cited within this research. The study audits 6 Palestinian and Arabic studies, in addition to 6 foreign studies, arranged by date from the most up to date to the oldest. The following studies have direct relationship to this research, matching its purpose and objectives, and they helped in setting its measurements taking into consideration its local application and social contrasts.



### 2.8.1 Palestinian and Arabic Studies:

# 2.8.1.1 Ziara (2015): Technical Compliance Audit & Usability Assessment for MDPII-W1 Sub-Projects (end of cycle 01)

The researcher conducted a research on a sample of 12 projects representing the infrastructure. The aim of the project was to conduct the technical audit of the sample mentioned. The researcher evaluated the approaches and processes during the implementation of the projects. The researcher used field visit methodology, focus group, interview and questioners.

# Study results:

- certain areas need further improvements such as environment, social, safety, operation, maintenance, sustainability, planning, role of municipality and LTC and other.
- 2. In general, the project scope of works has been, or is being completely implemented for most of projects and most of the projects are sustainable.
- 3. The document review of auditor showed that procurement plan and procedure have been generally followed the procurement manual.
- 4. There has been no obvious conflict of interest between procurement committee members and contractors.
- 5. The quality assurance plan is too general; MDLF would suggest having more focus on the quality of supervision.

# Study recommendations:

- 1. More attention should be given by MDLF to assist in entering the construction materials and equipment to Gaza.
- 2. Municipalities has lost their management, monitoring and quality assurance role by carrying out all steps related to the projects including the design, preparing bidding documents, contract awarding, construction supervision, project handing over, operation and maintenance, etc. Future projects may be planned by MDLF such that the role of municipalities may concentrate in making sure that the projects are being planned, designed and implemented correctly rather than doing the work themselves.



- 3. The design and construction supervision may be outsources, especially in medium and small size municipalities and for large size projects in large municipalities as well. For this purpose, the allocated budget by MDLF for the projects may include the cost of design and construction supervision by external consultants.
- 4. It is recommended that MDLF should make sure during the procurement stage that the projects should be fully operational upon completion. For example the road projects should include sidewalks, two directions, lights, traffic signs, speed breakers, etc
- 5. Addressing the social and environment safeguard measures during procurement planning phase (before construction) is satisfactory. Commitment of contractor to measures for Environmental Management Plan (ESMP) for MDPII was documented in the procurement documents. On the other hand, the measures during construction and operation need strengthening in most development projects. Mechanism for enforcement of the measures during construction should be developed by MDLF as indicated in this report. Examples: apply penalties; itemize the measures within the BOQs, etc.
- 6. The project document maintained at MDLF should contain samples of work progress reports and documentation to ease post assessments.
- 7. Delay in the implementation of some projects was due to inadequacy and incompliance of contractors. To minimize this problem it is recommended:
  - I. More strict enforcement in the implementation of the penalties on contractors for the unjustified delay as stated in the contracts.
  - II. Limit number of contracts to same contractor considering other projects being implemented by the same contractor and its performance. A maximum of two contracts may be awarded by MDLF in the same period to same contractor.



# 2.8.1.2 Barghouth, (2013): Evaluation of Infrastructure Projects Funded by International Organizations in Gaza strip from Partner's Perspective From 2008 to 2012

The researcher focused his research on evaluating infrastructure projects funded by international organizations in Gaza Strip. The researcher based his research on the descriptive analytical methodology designed to collect data based on the five evaluation criteria (relevance, effectiveness, efficiency, impact and sustainability). The researcher added two other criteria for the special nature of infrastructure projects related to technical designs and flexibility.

# Study results:

- 1. Improve strategies by developing the level of participation between international organizations and partners.
- 2. The process of assigning responsibilities plays an important role in increasing risk expectations before they occur.
- The technical weakness of contractors and the large gap between technical designs and capabilities are why long-term sustainability strategic plans are not integrated

# Study recommendations:

The researcher concluded his research with a set of recommendations, the most important of which are:

- 1. Raise the level of participation between partners and international institutions using techniques and mechanisms to help and build bridges of trust between both parties.
- 2. Improvement of comprehensive national development plans for the infrastructure sector in the Gaza Strip.

# 2.8.1.3 Abu Hamad, (2011): International funding for Palestinian civil institutions and its impact on political development in The Gaza Strip 2000-2010 (Field Study).

The study aimed to evaluate the impact of international funding given for Palestinian civil institutions on political development in Gaza Strip. To attain the main objectives of the research a questionnaire was designed and disseminated to



international institutions and their local partners which have accepted a political development programs.

# Study results:

- International funding does not attain the priorities of development in Palestine because it call for achieve political aims of the donor countries in Palestinian society.
- 2. The assistance delivered by international organizations was According to the development plan to suit their political objectives, not with the needs of the Palestinian people.
- 3. Palestinian civil organizations do not have a clear national plan and responds directly towards the funding priorities programs and donor policies, which reflected harmfully on the reality of political development.

# Study recommendations:

- 1. There is a need to improve a national comprehensive plan for development in Palestine which does not depend on international fund.
- 2. Organizations should take care of the desires and obligations of the donors such as USAID and EU.
- 3. Organizations should adopt programs and projects that tie the priorities of the Palestinians

# 2.8.1.4 Hammad, (2010): "Project Evaluation of the Non-Governmental Organizations in Gaza strip".

Exploring project evaluation in the Non- Governmental Organizations in Gaza Strip from the perspective of project managers was the aim of this study. A descriptive analytical methodology was used where a questionnaire was designed using the international standards for project evaluation (relevance, efficiency, effectiveness, impact and sustainability). The study has been conducted on 160 Palestinian NGOs in the Gaza Strip.

# Study results:



- 1. Projects evaluation in Palestinian NGOs depends on the five standards relevance, efficiency, effectiveness, impact and sustainability with different percentages.
- 2. There are no differences in the responses of the study sample due to the gender, age and academic qualification as well as both age and number of project of the studied organizations,
- 3. There are various in the responses due to the years of experience of the respondents and the location of the organizations for the effectiveness standard.

# Study recommendations:

- 1. The staff working in project management should be trained on project evaluation and part of the project budget should be allocated to evaluation
- 2. Highlighting significantly the relevance, efficiency and effectiveness standard to achieve the project objectives.
- 3. The impact and sustainability criteria must be considered to achieve overall organizational objectives.
- 4. The project evaluation process must be made mandatory in each institution and not at the request of the funding agencies.
- 5. Greater importance should be given to the issue of project evaluation by training a specific staff at the institution and part of the project budget should be allocated to evaluation

# 2.8.1.5 El-Abadi, (2009): Impact of Strategic Factors on Improving "Project Evaluation Administrative Performance Effectiveness"

The study aimed at identifying the impact of strategic factors -which are strategic analysis, function identification, expectations of planning, implementation and evaluation using Scenario methods- on the effectiveness of evaluating administrative performance of projects in relation to the five standards relevance, efficiency, effectiveness, sustainability and impact.



There is a positive impact of strategic factors in improving project evaluation administrative performance effectiveness in relation to relevance, efficiency, effectiveness, sustainability, and impact.

# Study recommendations:

Business institutions should use standards of total quality management as adopted strategy to compete in international markets.

# 2.8.1.6 Besaiso and Abdel Latif, (2009): External Evaluation "Cash for Work Project (CFW)".

The aim of this evaluation is to assess the effectiveness of the project in achieving the stated goal and objectives and to examine the extent to which the projects' inputs have been converted into outputs and results. In addition to extracting lessons learnt which can be taken into consideration in design of future similar projects. The evaluation used mixed methods and instruments including documentation review, interviewing individuals, holding focus group discussions with beneficiaries and conducting one survey.

# Study results:

- 1. CFW project offered greater potential for increasing people's access to essential living items and protecting livelihoods in immediate term. This has been explored with the current IR -CFW project in Gaza strip
- 2. The project appeared to have a very positive impact on direct beneficiaries and community members as follows:
  - Households benefited from the injection of cash, particularly during the
    difficult situation nowadays in Gaza. Community members in project
    areas have also benefited from the creation of community and
    municipal assets that address specific community needs. Many of these
    assets comprise rehabilitation of roads and trees planting.
  - Also, one of the most important aspects achieved in this project is that the CFW project interventions have supported the public infrastructure and enhancing the personnel skills of workers.



# Study recommendations:

Recommendations for future similar projects include:

- 1. Expanding the coverage and beneficiary numbers by increasing the size of targeted beneficiaries and covering other communities.
- 2. Extending the project period up to 6 months, this give the beneficiaries the chance of improving their livelihood for a longer term.
- 3. Increasing the project activities type such as maintenance of schools or work in hospitals or paint the walls or the sidewalk.
- 4. The wage level for CFW should be carefully decided in relation to the prevailing labour market. Every effort should be made to coordinate these decisions with other agencies and with local authorities.
- 5. Maintain coherence of projects with IR strategies, national development priorities and donor's strategies while meeting the needs of target beneficiaries.

### 2.8.2 International Studies:

# 2.8.2.1 Evaluation and Research Team, (2017): Implementation Evaluation of Small Town Rehabilitation Programme report

The objectives of (STR) are aimed at making small towns more attractive for investment as part of Rural Development in line with Government priorities. The programme focuses on the creation of sustainable economies that enhance standards of living. This study employed a non-probability sampling technique called purposive sampling, which meant that the evaluator relied on own experience to find participants and specifies a selection criteria to identify suitable participants for the municipalities. Qualitative methods are used to describe the qualities or characteristics of a phenomenon investigated, and aims to get a better understanding through first-hand experience, truthful reporting, and quotations of actual conversations A sample size of 178 participants was selected for the study, out of 178 participants targeted for the study 171 were interviewed.



There is a positive impact in all areas possible including that of making the town look attractive, attracting investors and reducing unemployment in the municipality. Citizens and businesses also shared a similar perspective with an indication of satisfaction on the projects, their benefits and outcomes. The quality of the projects was satisfactory and projects beneficial in changing the outlook of the town and also attracting more businesses and people receiving employment.

# Study recommendations:

- 1. Improved consultation and public participation
- Consistent project monitoring and follow up by ensuring that feasibility studies are being undertaken prior to the introduction of projects to a specific municipality; participating or observing processes for appointing service providers and provide guidance where necessary
- 3. Project Planning and funding by ensure that they inform project planning where all aspects are taken care of. Approval of projects that lack proper packaging should not be done.

# 2.8.2.2 Holvoet and Inberg, (2012): Sector Monitoring and Evaluation Systems in the context of Changing Aid Modalities: The case of Uganda's Education Sector.

This study focuses in particular on M&E in Uganda's education sector and uses checklist to diagnose, monitor and evaluate the quality of sector M&E systems. In order to counter the criticism that M&E is often narrowed down to a focus on technicalities, this checklist broadens the spectrum and gives a broad overview of the quality of M&E systems alongside six dimensions, including policy, indicators, data collection and methodology, organization structure, and linkages, capacity, participation of actors outside government and use of M&E outputs. The stocktaking draws upon a combination of secondary and primary data and combines quantitative with qualitative assessment.



- 1. The MoES elaborated a sound M&E framework, but it needs to be updated and implemented.
- 2. The weakest components with respect to the 'indicators, data collection and methodology' dimension are selection criteria and methodologies used.
- 3. Incentives for monitoring and reporting are considered satisfactory and are currently especially related to formal reporting requirements.
- 4. The analytical quality, however, is still poor, as performance and expenditure are not systematically linked, results and outcomes are hardly compared to targets and the analysis of causes of (non) performance is lacking or shallow.
- 5. The use of M&E outputs by education development partners is considered to be good.

# Study recommendations:

- 1. The M&E framework needs to be updated and should include a monitoring strategy and five-year evaluation plan, which would be in line with the National Policy on Public M&E of the Office of the Prime Minister.
- 2. It is advised to put systemic issues more prominently on the agenda of the M&E working group. As these underlying systemic issues often strongly affect (lack of) progress in education sector outcomes, it would also be logical to include them (or actions related to these systemic factors) in Joint Position Paper (process) undertakings.
- 3. Capacity building in data production and quality should preferably be focused on the full data chain, from collection of data at schools to the elaboration of progress reports at MoES level, as a focus on only parts of the data chain.

# 2.8.2.3 Henriksen & Røstad (2010): Evaluating and prioritizing projects – setting targets: The business effect evaluation methodology (BEEM).

The purpose of this study is to develop a methodology aiming to improve the process of prioritizing among projects, focusing on the strategic impacts. The methodology has been developed with ten applications and eight corresponding companies (application owners) in France, Italy, Greece, Germany, and Suisse represent the cases where the methodology has been developed and tested.



- There is a need for a methodology that links projects and initiatives to overall
  company strategies, where the study presents this methodology which proven
  relevant in different contexts when projects and units need to be evaluated,
  compared, prioritized and coordinated according to strategies and key
  business drivers.
- 2. The methodology that could guide projects and units in a distributed organizational environment according to overall strategies. Thus, the methodology might also be used by projects and units to improve the strategic position and/or business development.

# Study recommendations:

- 1. Improvement projects, e.g. R&D projects, should be initiated and run not only from the centralized units, but also from units that could be quite small, and may be located far from the company headquarter.
- 2. It is recommended to enhance the development process that ensure some kind of strategic coherence, and a process where the projects could be described and evaluated in an intuitive and confidence-inspiring way. There is a need to a commonly understood R&D model, with relevant decision gates; methods and tools to help in the decision gates; and approaches and methods that helps people to initiate and run the projects according to overall company objectives.

# 2.8.2.4 Klakegg (2009): Pursuing relevance and sustainability: Improvement strategies for major public projects

The purpose of this paper is to identify effective strategies to improve the governance of public projects. This paper investigates the challenges in the front end of major public investment projects and identifies problems leading to lack of relevance and sustainability.

# Study results:



- 1. In the strategic perspective achieving relevance and sustainability is considered to be more important than any other criteria of the OECD integrated evaluation model (other include impact, effectiveness, and efficiency).
- 2. Lack of relevance comes from projects not linking to users' needs and from unclear objectives.
- 3. Lack of sustainability comes from unsolved conflict over objectives, lack of commitment, and faulty economic assumptions.

# Study recommendations:

This knowledge leads to identification of effective improvement strategies for existing governance frameworks:

- 1. First priority should be ensuring relevant concepts are chosen. Only then will a sustainable effect be possible.
- Strategies to improve the basis for relevant projects include design of a decision-making process based on participation and involvement of relevant stakeholders.
- 3. A logical fundament for the project must be defined and the objectives and goals clearly formulated. This will help ensure that all parties have a common understanding of the objectives and project goals.

# 2.8.2.5 Ramstad, (2009): Developmental evaluation framework for innovation and learning networks: Integration of the structure, process and outcomes.

This study seeks to present a developmental evaluation framework for innovation and learning networks. The evaluation framework is based on a systemic and complementarily views on knowledge sources and innovation activities. The framework integrates three different elements of network: structure, learning processes, and the outcomes for different actors. The basic assumption is that networks with several actors based on an expanded triple helix model (workplaces, R&D infrastructure, and policy makers) and several learning processes enable better innovation potential and broader outcomes.



The created evaluation framework offers a useful tool to point out the networks with a best potential to broader outcomes for diverse actors. It can provide a tool for policy makers, but also for involving participants, in order to direct and coordinate innovation and generative learning more effectively. However, there is not, and cannot be, a common and strict pattern for an innovation and learning network, as one of their main goals is to create and experiment with new forms of development cooperation.

# **Study recommendations:**

- 1. Attention needs to be paid in the future to the network structure and the use of diverse learning methods and tools used in innovation and learning networks.
- 2. In order to promote innovation, policy makers should identify the diverse networks and coordinate the complementary competences required in networks to foster innovation and learning more effectively. To do so, they first need to explore which kinds of interactions, among which kinds of organizations and which kinds of activities are being used. Based on the analysis they should decide whether more coordination is required, e.g. with other policy fields (education, social, industrial policies) in order to design more effective innovation and learning networks.



# CHAPTER 3 RESEARCH DESIGN AND METHODOLOGY



### 3.1 Introduction

This chapter discusses the methodology which is used in this research. The methodology includes information about the research design, population, sample size, data collection, questionnaire design, questionnaire content, instrument validity, pilot study, and the method of data processing and analysis. The questionnaire will be the main approach to collect the data and perspectives of the respondents as well as interviews with project managers

The aim of any research is to solve some problems using a scientific method and systematic study. The main purpose of this research is to present a new method for assessing the municipal development projects based on developing a quantifiable model to measure the extent to which municipalities complies with MDLF guidelines and standards as a case study.

# 3.2 Research Design

The research design relates to the process of arranging the data in a clear format by collecting and analyzing it (Poilt and Hungler, 1985). This research consists of several phases represented in this;

- 1. The first phase involves the stage of processing the proposal and its content of identifying the main and secondary research objectives and then continuously developing them.
- 2. The second phase involves reviewing the literature on the subject of evaluation of municipal development projects.
- 3. The third phase included the review of the mechanism of research followed. The identification of the sample consisting of 40 projects out of 504 and the development of quantitative research model.
- 4. The fourth phase consists in the process of filling out the questionnaire by the researcher and conducting interviews with municipal managers and engineering departments as well as field visits to the project.
- 5. The fifth phases focused on the analysis of the questionnaire using a statistical package of programs such as Excel and SPSS program and using the AHP method and study the polarized results of the analysis and its representation for easy comparison.



6. Phase 6, which included the most important conclusions from the evaluation process and recommendations for the future.

Figure 3.1illustrates the methodology flow chart which includes the objectives of the thesis.

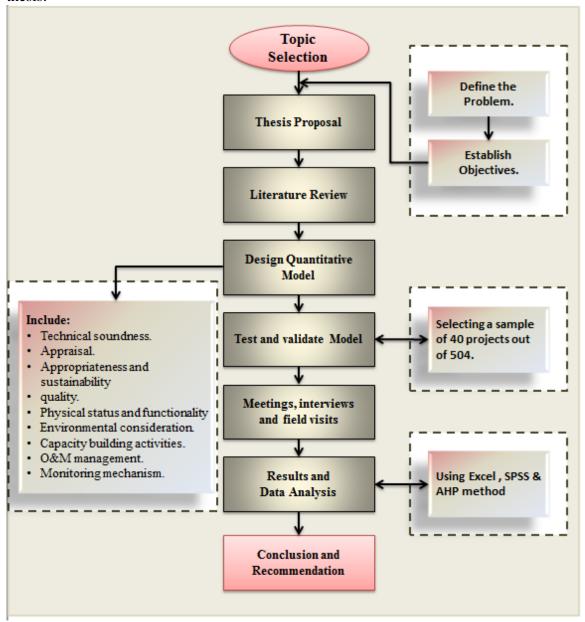


Figure 3.1: Flow Chart of Research Methodology

# 3.3 Data Resources

# 3.3.1 Primary Resources

The data collection process was developed and implemented considering the sample of 40 projects. The documents of each single project of the 40 sample projects were



reviewed and assessed thoroughly. The templates of the data collection, interviews, focus groups and site visits targeted the 40 projects.

According to understanding the project objectives and intended results, the researcher helped by consultant (Dr. Rifat Rustom) developed the following main surveying tools:

- Project Information Sheet and Office Technical Review of drawings, BOQ, and specifications. It also included the key conclusions and recommended actions for the site visit
- 2. Interviews Template for the Key Municipal Staff. It includes questions about their involvement, responsibilities, satisfaction, and recommendations.
- Focus Groups Discussion Template with selected municipal team and selected contractors to collect feedback about coordination and implementation methodologies.
- 4. Site Visit and Technical Auditing Template. The researcher coordinated with MDLF and municipalities concerning the list of projects that need to be visited. The sample of 40 projects were reviewed and visited. The visits included the municipalities to meet with the responsible team/engineers, review the detailed documents, collect additional reports and conduct field visit to the project site. This template includes questions concerning: the appropriateness and soundness of technical issues, quality control procedures, safety measures and procedures, procurement procedures, environmental and social compliance, institutional issues, feasibility and cost effectiveness, and objectives and outcomes verification.

# 3.3.2 Secondary Resources

The review entailed reviewing available documents and procedures, which included but were not limited to the:

- Project appraisal documents for MDPII, which includes: (application, drawings,
   BOQ, specifications, cost benefit analysis, and operation and maintenance plan),
- MDLF operation manual,



- MDLF Energy Efficiency Procurement Manual
- Procurement Manual
- Technical Manual
- ESIA & ESMF

# 3.4 Research period

The study started on April 2018 after the initial approval of proposal. The literature on project evaluation was completed in May of the same year. At the beginning of July, the process of designing, testing, filling and collecting the questionnaire was completed. At the beginning of August, the analysis and discussion of the data were finalized and conclusions and recommendations were finalized in mid-August 2018.

# 3.5 Eligible Projects

The eligible projects for financing under W01 and W05 would be projects that coincide with the positive list of projects. The total allocated budget of the implemented 504 sub-projects is 37,465,012 Euros (€20,226,964 under W01 and €17,238,048.20 under W05). Figure 3.2 classifies the budget for the eligible sectors

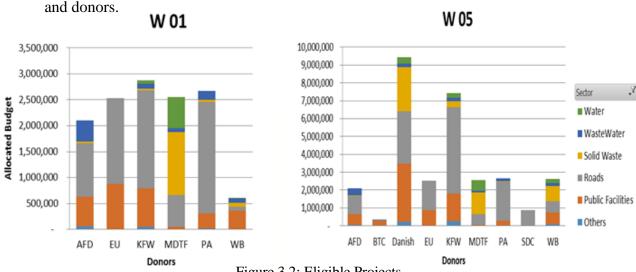


Figure 3.2: Eligible Projects

Eligible projects included the two types; development and expenditure projects. The development projects aim to develop the infrastructure projects through construction, rehabilitation, and maintenance activities. The expenditure projects aim to support the operation of the municipal services which provided to beneficiaries such as: maintenance of service vehicles, tools supply, materials supply, and other supplies or



budgetary support by ensuring the provision of key municipal services such as the coverage of charges for solid waste common councils.

# 3.5.1 Project Types and Sectors

The projects are classified in two types; development and expenditure projects, and both should comply with Environmental and Social Safeguard referred in ESMF. According to the Technical Manual of MDLF (2013), the grants cover investments or activities that are within the legal mandate of municipalities as per the Local Authorities Law of 1997 or revision thereof. The eligible sectors include shown in Figure 3.3.



Figure 3.3: Eligible Sectors

# 3.6 Sample Size

The sample of the research consisted of 40 subprojects to be selected from 504 projects (207 projects of Window 01 and 297 projects of window 05). The sampling method for this research is the "Clustering Sampling".



Table 3.1: Sample Clusters and Criteria

Criteria	Description	Target
Geographical distribution	one project at least will be selected from each municipality (25 municipalities with 25 projects)	<ul> <li>25 projects – one at least per municipality.</li> <li>2 projects at least per each central municipality.</li> </ul>
Sectors distribution	The selected sample will represent all sectors. The sectors are; public facilities, roads, lighting, water, wastewater, solid waste and others. More focus will be on road projects and other infrastructure projects.	<ul> <li>14 roads</li> <li>9 water and wastewater</li> <li>4 solid waste</li> <li>6 Public facilities</li> <li>3 lighting</li> <li>4 other</li> </ul>
Project phases/ windows.	Window 01 and Window 05	30 projects of Window 01     10 projects of Window 05
Project type	Development or expenditures.	<ul><li> 31 development projects</li><li> 09 expenditure projects</li></ul>
Project size	Classify the projects according to their allocated / actual budgets.	<ul> <li>7 projects (less than 25,000 Euros)</li> <li>5 projects (25,000 – 50,000 euros)</li> <li>11 projects (50,000 – 100,000 euros)</li> <li>17 projects (more than 100,000 euros)</li> </ul>
Type of intervention	New development project, rehabilitation with limited repairs, rehabilitation.	<ul><li> 16 new projects</li><li> 6 limited repairs</li><li> 8 rehabilitation</li><li> 10 others</li></ul>
Donor;	WB, KFW, AFD, or Danish	<ul> <li>6 Danish</li> <li>10 MDTF</li> <li>9 KFW</li> <li>4 WB</li> <li>5 AFD</li> <li>1 EU</li> <li>2 PA</li> <li>2 SDC</li> <li>1 BTC</li> </ul>
Procurement method	Procurement methods: NCB, NS.	<ul><li>NCB = 9 projects</li><li>NS = 31 projects</li></ul>
Municipality size	% of population, mainly for the central 5 municipalities.	<ul> <li>5 projects - Gaza</li> <li>3 projects - Rafah</li> <li>2 projects - Jabalia</li> <li>2 projects - Khan Younis</li> <li>2 projects - Abasan Al Jadidah</li> <li>2 projects - Abasan Al Kabera</li> <li>2 projects - Al Shoukah</li> <li>2 projects - Bait Hanoun</li> </ul>



Criteria	Description	Target
		• 2 projects - Deir-Elbalah
		• 2 projects - Bani Suhaila
		• 2 projects -Khozaa
		• 14 projects for the other municipalities
Project status	C, O	• 37 completed projects
		• 3 ongoing projects

Figure 3.4 illustrates the methodology of sample selection considering the key selection criteria to select 40 projects from 504 projects.

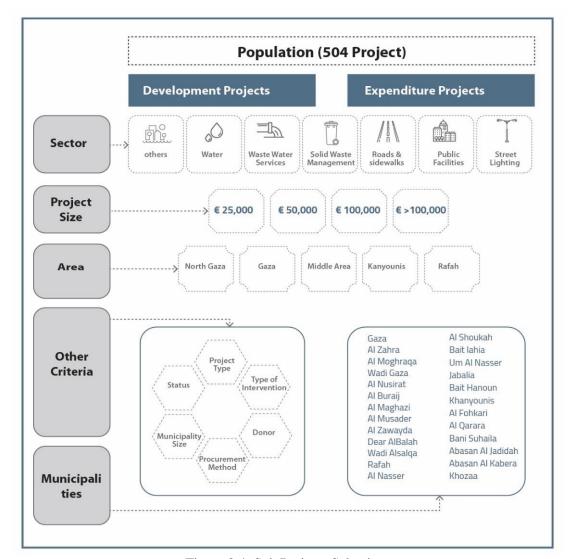


Figure 3.4: Sub Projects Selection

The selection of sub-projects considered the number of projects that satisfy the key selection criteria. The final selection was based on project type, project phase, and limitations for each municipality. Some minor modifications were made to meet some restrictions for specific projects in order to meet the proper distribution and



meet other selection criteria. The following matrix presents the results of the sample selection according to the key criteria of sector, project size and municipality. The percent of projects that satisfies the listed criteria was calculated to distribute the sample. The final selection also considered the other criteria that are listed below as shown

Table 3.2: Selection Criteria Matrix

Castan	Project	Geog	graphical D	istribution Municipali	(Governorate ty)	e and
Sector	Size	North	Gaza	Middle	Khan Younis	Rafah
	<25,000			1		
Roads	50,000				1	1
Noaus	100,000		2	2	1	
	>100,000	1	1	1	2	1
	25,000	1				1
Water and	50,000				1	
Wastewater	100,000		1	1		
	>100,000	1	1	1		1
	25,000				1	
Colid Wasta	50,000					
Solid Waste	100,000	1		1		
	>100,000		1			
	25,000					
Public	50,000					
Facilities	100,000				1	
	>100,000	1	1	1	1	1
	25,000				1	
Liabtina	50,000					
Lighting	100,000	1				
	>100,000		1			
	25,000				2	1
Othor	50,000				1	
Other	100,000					
	>100,000					
Total Sample				40		

According to the preceding discussion of sampling method, criteria and selection limitations, the following are the selected sample of 40 sub-projects.



Table 3.3: Selected Sample of 40 Sub-projects

N				Allocated		
No ·	Municipality	Project Name	Sector	Budget - Euro	Project Type	Donor
1	Abasan Al Jadidah	Supply of Car	Others	28,336	Development	AFD
2	Abasan Al Jadidah	Maintenance of Internal Streets	Roads	112,799.00	Development	Danish
3	Abasan Al Kabera	Rehabilitation of main st	Roads	35,950	Development	AFD
4	Abasan Al Kabera	Material for Maintenance of Streets Lighting Network	Lighting	21,638.00	Development	Danish
5	Al Buraij	Construction of Storm Water Line In Block 12	Water	51,870.00	Development	KFW
6	Al Fohkari	Maintenance of service vehicles	Others	6,500	Expenditure	MDTF
7	Al Maghazi	Development of Al Zaafran and block 1 (phase 3 )	Roads	88,040	Development	KFW
8	Al Moghraqa	Construction of Waste Water Network in Street No. 14 (Al Malahe Street)	Wastewater	85,000.00	Development	WB
9	Al Musader	Maintenance of Different Streets	Roads	18,341	Development	MDTF
10	Al Nasser	Development of Interior Streets - Phase I	Roads	117,823.00	Development	AFD
11	Al Nusirat	Development of Jenin Area (Phase 2)	Wastewater	168,661	Development	PA
12	Al Qarara	Supply of Materials for health and environment department	Solid Waste	5,000	Expenditure	MDTF
13	Al Shoukah	Supply of Materials and Tools for Health and Environment Department	Others	13,793	Expenditure	Danish
14	Al Shoukah	Supply of Fuel for service vehicles and water facilities	Water	20,000.00	Expenditure	MDTF
15	Al Zahra	Development of Streets No. 14, 22 and 28	Roads	68,839.00	Development	WB
16	Al Zawayda	Tilling of Al Faroq Area	Roads	267,563	Development	KFW
17	Bait Hanoun	Construction of Waste Water Station in Al Zytoon Area	Wastewater	402,909	Development	AFD
18	Bait Hanoun	Supply of Materials for Streets Lighting Network	Lighting	80,705.00	Development	WB
19	Bait lahia	Development of Al Berka Street (Phase I)	Roads	252,287	Development	PA
20	Bani Suhaila	Construction of Central Market	Public Facilities	75,373	Development	AFD
21	Bani Suhaila	Rehabilitation and maintenance of st in diffirant area	Roads	75,000	Development	SDC
22	Dear AlBalah	Maintenance of municipal service vehicles	Solid Waste	53,330	Expenditure	MDTF
23	Dear AlBalah	Construction of Additional Floors in the Commercial Center-Phase-I	Public Facilities	560,000.00	Development	KFW-EU
24	Gaza	Enhancing and Supporting Solid Waste Service in Gaza City - Hiring of Labor - Phase II	Solid Waste	1 356,022 I	Expenditure	MDTF
25	Gaza	Development of the Area between Khalil Al Wazir and Shokry Al Kowatly Streets and Al Nasser and Saed Al Aas Streets	Roads	364,198	Development	KFW
26	Gaza	Supply of Materials for Repair and Maintenance of Street Lighting	Lighting	142,742	Development	Danish



No ·	Municipality	Project Name	Sector	Allocated Budget - Euro	Project Type	Donor
		Network - Phase II				
27	Gaza	Supply of Oil for Generators	Water	133,875.00	Expenditure	Danish
28	Gaza	Development of the Vegetables Market	Public Facilities	356,106.00	Development	WB
29	Jabalia	Transport of Solid Waste to the Land Fill	Solid Waste	90,000	Expenditure	MDTF
30	Jabalia	Maintenance of Damaged Municipal Facilities stage III	Public facilities	109,626.00	Development	втс
31	Khanyounis	Material for water network	Water	47,037	Development	MDTF
32	Khanyounis	Maintenance of Municipal Facilities (Citezen Service center)	Public Facilities	137,780	Development	KFW
33	Khozaa	Supply of Materials for Municipality Workshop	Others	4500	Development	MDTF
34	Khozaa	Rehabilitation of salah el dain st	Roads	110,000.00	Development	SDC
35	Rafah	Supply of Fuel of Service Vehicles and Water & Waste Water Facilities	Water	150,000	Expenditure	MDTF
36	Rafah	Supply of material for road maintnence	Roads	25,585	Development	MDTF
37	Rafah	Constructing the Commercial Center Phase I	Public facilities	481,735	Development	Danish
38	Um Al Nasser	Supply of Water Pump	Water	5,729	Development	KFW
39	Wadi Alsalqa	Development of Street No.24/1	Roads	97,445.00	Development	KFW
40	Wadi Gaza	Development of internal roads	Roads	66,705	Development	KFW

# 3.7 Methodology Implemented in this Research

After reviewing the previous studies and literature on scientific research and after questionnaires by the researcher and conducting interviews with experts at different levels. All data and information that would assist in achieving the objectives of the study were obtained and formalized to be suitable for the survey and after several stages of brainstorming, consultations, amendments and review. Interviews and Field Visit Template and Questioners with experts were developed.

#### 3.7.1 Interviews Template

Municipality Team (Mayors and Engineers) was the target group in this template, the interview template include several question about Needs assessment, the implementation of the activities, further activities would like to implement, the collaboration & coordination among team, complaints from beneficiaries, main challenges, project period and sustainability of implemented activities.



#### 3.7.2 Field Visit

Municipality Team (Mayors and Engineers) and contractors was the target group in this template, this template consists of 9 parts and sub parts as illustrate below:

- 1. **Part A:** Feasibility and Cost Effectiveness.
- 2. **Part B**: Appropriateness and soundness.
- 3. Part C: Objectives and Outcomes verification.
- 4. **Part D:** Documents Availability.
- 5. Part E: Documents Readiness.
- 6. **Part F:** Documents Quality.
- 7. **Part G:** Institutional Issues.
- 8. **Part H:** Procurement Procedures.
- 9. Part I: Quality Control Procedures.
- 10. Part J: Safety Measures and Procedures.
- 11. **Part K:** Environmental and Social Compliance.
- 12. Part L: Operation and Maintenance.
- 13. **Part M:** Supplies handling and Storage.

# 3.7.3 Questioners with experts

The study included two types of questionnaire: The first was filled out by the researcher and included multiple questions covering all aspects of the evaluation. All data on the weighting of the factors affecting the evaluation of the Gaza Municipal Development Project were collected. This template consists of 4 sections as follows:

- 1. **First section:** Personal data consist of 5 sentences.
- 2. **Second section:** Organization Profile consists of 3 sentences.
- 3. **Third section:** related to rank the Main Factors for Assessing Gaza Municipalities' Development Projects. The Analytical Hierarchy Process (AHP) is used. Each factor is tested against all other factors to see the relative importance (pairwise analysis). The pairwise comparison is judged based on a relative scale from 1 to 5 where higher number means greater degree than the other factor being compared with.
- 4. **Forth section:** related to assess the minimum acceptable percentage of each evaluating factor (bench mark) over which each project will be tested and



will also be used to measure the minimum threshold for success of the whole program at the end.

In summary there are 13 items describe the main areas of assessment which weights will be calculated to measure the success or failure of the whole program summarized in the following table.

Table 3.4: main areas of assessment

ID	Description
A	Feasibility and Cost Effectiveness.
В	Appropriateness and soundness
С	Objectives and Outcomes verification
D	Documents Availability
Е	Documents Readiness
F	Documents Quality
G	Institutional Issues.
Н	Procurement Procedures
I	Quality Control Procedures
J	Safety Measures and Procedures
K	Environmental and Social Compliance.
L	Operation and Maintenance.
M	Supplies handling and Storage

The second type is a questionnaire directed at experts to measure the relative weights of each criterion using the AHP method. The questionnaire initially contains an explanatory message explaining the purpose and purpose of the study as well as the confidentiality of information to encourage response,

#### 3.8 Pilot study

Before the process of distributing the questionnaire in a formal manner, it is necessary to conduct a pilot process to a group of experts to measure the validity of the questionnaire and its reliability as well as testing the data by choosing the question formats and clarify the mysterious and then analyze the questionnaire using the techniques mentioned in the researcher's research. (Naoum, 1998).

The researcher selected a representative sample of the pilot study, represented by two MDLF engineers, three EMCC engineers and three consultants. The sample was selected based on past experience in the field of project evaluation to ensure that the technical value of the study is added.



A sample of 8 individuals (engineers, experts and consultants) reviewed the models and questionnaires, verified the language, subject validity and ability to achieve the objectives indicated in the first chapter. All agreed that the models are correct and appropriate for the research purpose with a number of comments on correcting the use of some words in the first questionnaire in addition to the clarification of some items to facilitate the filling of the questionnaire without ambiguity. Based on all observations, the final forms were prepared as listed in the annexes at the end of the research.

### 3.9 Difficulties and Limitations of the Research

The researcher initially faced a number of problems and obstacles that would enhance the research and increase its importance. One of the most important problems faced by the researcher is the sensitivity of the research topic, which led to a longer time in the collection of data and coordination of interviews and despite the extreme caution in the development of the models of the study, but some municipalities were initially reluctant to cooperate for fear of the impact on the opportunity of funding their projects, in addition to the municipal time limit. Municipalities end their work within 1 pm. As well as there are difficulties related to selected project sample such as some projects were completed in 2014, it is expected that there will be some difficulty to get the documents from the archives also Some municipal staff who were responsible for implementing the projects or following up the program might be changed or assigned other responsibilities. It is expected that their replacements might not be fully aware of the projects.

#### 3.10 Date Analysis Tools

The research model covered all aspects of the evaluation and covered a large area. The researcher used a number of statistical programs such as Excel and SPSS as a good background in the use of these programs in his working life. In addition, the researcher used an expert in the SPSS program to review the data entered for fear of finding unexpected errors during the input process. The researcher then re-analyzed the data to verify the validity of the results to be adopted for the full analysis of the study and to reach conclusions and recommendations. Then the researcher used the data obtained from the first questionnaire and analyzed using the AHP method to reach a percentage to judge the extent of success or failure Municipal Projects.



The researcher utilized the five points-scales for rating the level of satisfaction" a **qualitative performance indicator**". Figure 3.5 presents the rating scale.

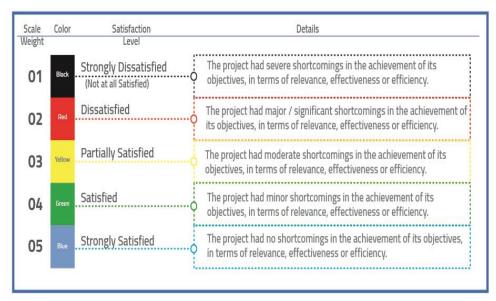


Figure 3.5: Traffic Lights and Five Points-Scale of Satisfaction Rating

# 3.11 Summary

For conducting this research, a combination of primary and secondary data sources were used at the beginning and all of that was done in the natural environment of Gaza strip municipalities'. A big model includes Project Information and Office Review Template, Interviews Template, Field Visit and Questioners with experts was the main data collection tool, and after developing it, a pilot testing was implemented. The researcher selected Mayors, Engineers and experts as the elements of the survey, and due to some limitation only Gaza Strip municipalities' were chosen. She filled a total of one hundred and twenty templets at twenty five municipalities in the Gaza strip.

The next chapter provides the results and analysis of filled templets and questionnaires. The data is presented using the SPSS and Excel through a variety of statistical and analytical techniques



# CHAPTER 4 RESEARCH FINDINGS AND ANALYSIS



#### 4.1 Introduction:

The aim of this chapter is to analyze the empirical data which was collected through the questionnaires in order to provide a real picture about development project evaluation in municipality in Gaza Strip. The first section is about Data analysis (total satisfaction for each field). The second is about descriptive analysis (the organizational and personal characteristics) which will be presented and discussed. The third is about Data analysis (calculating the relative weight for 13 items). The findings that respond to these questions and objectives will be discussed and compared to previous findings in other studies.

# 4.2 Planning Framework

# 4.2.1 Feasibility and Cost Effectiveness

The municipalities performed the Cost-Benefit Analysis utilizing a unified template for the sectors as a necessary document that should be prepared and submitted with the application. Table 4.1 shows the results of the key questions of feasibility and cost effectiveness according to the municipalities' opinions through reviewing the documents and field visits. The total evaluation of these items is 86.0% which is satisfactory.

Table 4.1: The Results of the Key Questions of Feasibility and Cost Effectiveness.

A	Questions	Total Satisfaction
A01	The project is feasible	96%
A02	The project is cost – effective	89%
A03	The final benefits are in line with estimated benefits	92%
A04	Has the cost effectiveness of the project been measured and coagainst estimates in the application?	67%
	Overall satisfaction level of feasibility and cost effectiveness	86%

By comparing the estimated and final benefits of the project (before vs after implementation) the cost efficiency and the value of money were evaluated and the results are satisfactory, but the actual benefits after implementation and compare the actual results with the planned indicators should be introduced and developed automatically by municipalities.



### 4.2.2 Appropriateness and Soundness Procedures

The Appropriateness and Soundness related to the 25 municipalities, not to the 40 projects. The satisfactory level of the municipal technical issues in terms of appropriateness and soundness is 82%.

Table 4.2: Satisfaction Level of Appropriateness and Soundness of Municipal Systems and Procedures

В	Questions	Total
В	Questions	Satisfaction
	Have the scope, objectives, costs, benefits and impacts been	
B01	communicated to all involved and/or impacted stakeholders and work	87%
	groups?	
B02	Are the standards adopted according to the best practices	88%
B03	Are the municipal team Qualified	85%
B04	Have all necessary approvals been obtained?	88%
B05	Are milestone deliverables effectively tracked and compared to plan?	82%
B06	Was an original risk assessment completed?	60%
(	Overall Satisfaction Level of Appropriateness and Soundness of	82%
	Technical Issues	0470

Most of the municipalities adopted the standards according to the best practices and all necessary approvals been obtained with total satisfactions 88%, which is strongly satisfaction. 60% of the municipalities have completed the original risk assessment which related to analyze all the risk (Environment, social or political) around the project. The municipalities evaluated the qualifications of their team members as strongly satisfactory, 85%. The following table details the areas of prioritized development interventions.

Table 4.3: The Areas of Prioritized Development Interventions

B2	Questions	Answers			%		
D2	Questions	Yes	No	Total	Yes	No	Total
B21	Additional Team Members	14	11	25	56%	44%	100%
B22	Advanced Training	19	6	25	76%	24%	100%
B23	Supporting Tools	15	10	25	60%	40%	100%
B24	Additional Facilities	9	16	25	36%	64%	100%



B2 Questions		Answers			%		
D2	Questions	Yes	No	Total	Yes	No	Total
B25	Comprehensive Change	2	23	25	8%	92%	100%

There is only two municipalities (8%) indicated that a comprehensive change is required. 56% of the municipalities need additional team members in different field such as: (Design Field, supervision Field, Quality and Assurance Field, etc....) and 15 over 25 of municipalities needs supporting tools include:

- Uniforms, safety tools, and traffic signs, municipality of Bait Lahia said they are available but limited.
- Computers and printers.
- Surveying tools and instruments such as GPS, GIS and total station.

76% of the municipalities (about the Most) need advanced training in different area such as:

- Occupational health and safety training.
- One engineer is necessary for supervision for each project.
- Stores management.
- Maintenance (planning, implementation and follow up).
- Design and supervision skills.

#### 4.2.3 Objectives and Outcomes Verification

This part investigated the functionality and usability of the projects. The overall verification level is strongly satisfactory, 90%.

Table 4.4: The Satisfaction Level of Objectives and Outcomes Verification

Н	Questions	Total Satisfaction
H1	The project is functioning and utilized well.	92%
H2	Usability is high and appreciated by beneficiaries	86%
НЗ	The intended outcomes are achieved	92%
H4	The project included some positive unintended results	89%
Н5	The project included some negative unintended results (high percentage means low negative unintended results)	91%



Satisfaction Level of Objectives and Outcomes Verification	90%
(Functionality and Usability)	90%

The unintended positive impacts that were reported included:

- Improvement of the value of real estates in the developed areas as well as starting new investments in the vicinities.
- Improvement of the accessibility to the neighboring areas.
- Encourage the economic development especially with street development project.

The local communities reported some observations and concerns that minimized the level of project efficiency and resulted in some negative impacts such as collection of flooded rains in some low areas after pavement.

# **4.2.4** Appropriateness and Soundness of Project Documents

Most of the project documents were available. Their rate of readiness and quality was strongly satisfactory and satisfactory respectively. The following paragraphs detail the review of the documents in terms of availability, readiness and quality. Documents Availability

Table 4.5: The percent of documents availability

	Availability%		
Criterion	Yes	No	
Project Appraisal	92.5%	7.5%	
Design Documents	84.2%	15.8%	
Drawings	100.0%	0.0%	
Shop Drawings	100.0%	0.0%	
Contract	100.0%	0.0%	
Specifications	100.0%	0.0%	
BoQ	100.0%	0.0%	
As Built Drawing	100.0%	0.0%	
Monthly Progress Reports	73.1%	26.9%	
V.O Documents if Applicable	100.0%	0.0%	
Final Report	51.4%	48.6%	
Tests Reports	92.3%	7.7%	
	Design Documents  Drawings  Shop Drawings  Contract  Specifications  BoQ  As Built Drawing  Monthly Progress Reports  V.O Documents if Applicable  Final Report	Project Appraisal       92.5%         Design Documents       84.2%         Drawings       100.0%         Shop Drawings       100.0%         Contract       100.0%         Specifications       100.0%         BoQ       100.0%         As Built Drawing       100.0%         Monthly Progress Reports       73.1%         V.O Documents if Applicable       100.0%         Final Report       51.4%	



D	Criterion	Availabi	ility%	
	Criterion	Yes	No	
D13	Project Schedule (Gantt Chart)	80.0%	20.0%	
D14	Payment Records	100.0%	0.0%	
D15	Correspondences	100.0%	0.0%	
D16	Payment certificates	17.9%	82.1%	
D17	Cost-Benefit Analysis	91.3%	8.7%	
D18	ESMP Document / measures	100.0%	0.0%	
D19	Soft Copy Availability	100.0%	0.0%	
	88.6%			

The average evaluation score of the documents availability is 88.6% which reflects high compliance to this requirement. This is attributed to the practice of the municipalities in enforcing keeping records and making them available for future use. It's worth to mention that the drawings, shop drawings, contracts, specifications, BoQs, and as built drawings were available for all applicable projects. According to the percentage related to final report (51.4%) this is not reflect that the municipalities doesn't matter about it but it reflect that some project still ongoing and uncompleted yet

### 4.2.4.1 Documents Readiness

Readiness here means that the documents are ready for application or use by responsible entities. The readiness of documents in terms of completeness, standards adopted, design team capacity, tools, and facilities were assessed. The readiness level of the documents is strongly satisfactory with score of 91.7%. Table 4.6 presents a summary of the readiness assessment.

Table 4.6: The percent of documents readiness

		Readiness					
D	Criterion	Poor	Mid.	High	Total	Total	
		1	2	3	Total	Satisfaction	
D1	Project Appraisal	0	0	37	37	100%	
D2	Design Documents	0	7	9	16	85%	
D3	Drawings	1	5	17	23	90%	
D4	Shop Drawings	1	5	17	23	90%	



		diness					
D	Criterion	Poor	Mid.	High	Total	Total	
		1	2	3	Total	Satisfaction	
D5	Contract	0	1	39	40	99%	
D6	Specifications	0	1	24	25	99%	
D7	BoQ	0	1	38	39	99%	
D8	As Built Drawing	2	6	12	20	83%	
D9	Monthly Progress Reports	0	11	8	19	81%	
D10	V.O Documents if Applicable	0	0	9	9	100%	
D11	Final Report	1	5	12	18	87%	
D12	Tests Reports	0	2	22	24	97%	
D13	Project Schedule (Gantt Chart)	2	12	6	20	73%	
D14	Payment Records	0	2	38	40	98%	
D15	Correspondences	0	4	28	32	96%	
D16	Payment certificates	0	0	4	4	100%	
D17	Cost-Benefit Analysis	0	0	21	21	100%	
D18	ESMP Document / measures	0	0	24	24	100%	
D19	Soft Copy Availability	9	25	6	40	64%	
	Satisfaction Level of Documents Availability						

# **4.2.4.2 Quality of Documents**

The overall evaluation of the quality of the documents was satisfactory with score of 79.3% as shown in Table 4.6 there were no major differences in the overall evaluation of development projects compared to expenditure projects concerning the quality of documents. The quality of development projects and expenditure projects were 79% and 82% respectively.

Table 4.7: The percent of documents quality.

		Quality						
D	Criterion	Poor	Fair	Good	v.good	Excellent	Total	Total
		1	2	3	4	5	Total	Satisfaction
D1	Project Appraisal	0	0	1	13	23	37	92%
D2	Design Documents	0	1	8	4	3	16	70%
D3	Drawings	1	1	5	10	6	23	76%



					Qua	ality		
D	Criterion	Poor	Fair	Good	v.good	Excellent	Total	Total
		1	2	3	4	5	Total	Satisfaction
D4	Shop Drawings	0	1	6	14	2	23	74%
D5	Contract	0	0	1	5	34	40	97%
D6	Specifications	0	1	3	14	7	25	81%
D7	BoQ	0	0	4	20	15	39	86%
D8	As Built Drawing	0	4	5	9	2	20	65%
D9	Monthly Progress Reports	1	1	9	6	2	19	66%
D10	V.O Documents if Applicable	0	0	0	8	1	9	82%
D11	Final Report	0	2	6	8	2	18	69%
D12	Tests Reports	0	0	2	3	19	24	94%
D13	Project Schedule (Gantt Chart)	0	4	12	4	0	20	56%
D14	Payment Records	0	0	2	26	12	40	85%
D15	Correspondences	0	0	4	14	14	32	86%
D16	Payment certificates	0	0	0	2	2	4	90%
D17	Cost-Benefit Analysis	0	0	0	10	11	21	90%
D18	ESMP Document / measures	0	0	0	4	20	24	97%
D19	Soft Copy Availability	3	10	19	7	1	40	52%
	Satisfac	ction Le	vel of I	Oocumen	ts Quality			79.3%

Table 4.8 summarizes the detailed results of all assessed sub-items of documents availability, readiness and quality.

Table 4.8::Detailed Assessment of Sub-items of Documents Availability, Readiness and Quality.

Criterion			Documents Availability	Documents Readiness	Documents Quality
D1	Planning And	Project	92.5%	100.0%	91.9%



Criterion			<b>Documents</b>	Documents	Documents
	Criterio	1	Availability	Readiness	Quality
	Design Phase	Appraisal			
D2		Design Documents	84.2%	85.4%	70.0%
D3		Drawings	100.0%	89.9%	75.7%
D4		Shop Drawings	100.0%	89.9%	73.9%
D5		Contract	100.0%	99.2%	96.5%
D6		Specifications	100.0%	98.7%	80.8%
D7		BoQ	100.0%	99.1%	85.6%
D8		As Built Drawing	100.0%	83.3%	65.0%
D9	Implementation phase Documents	Monthly Progress Reports	73.1%	80.7%	66.3%
D10		V.O Documents if Applicable	100.0%	100.0%	82.2%
D11		Final Report	51.4%	87.0%	68.9%
D12		Tests Reports	92.3%	97.2%	94.2%
D13		Project Schedule (Gantt Chart)	80.0%	73.3%	56.0%
D14	Financial	Payment Records	100.0%	98.3%	85.0%
D15		Correspondences	100.0%	95.8%	86.3%
D16	Documents	Payment certificates	17.9%	100.0%	90.0%
D17	Planning and Guidance tools	Cost-Benefit Analysis	91.3%	100.0%	90.5%
D18		ESMP Document / measures	100.0%	100.0%	96.7%
D19	Soft Copies	Soft Copy	100.0%	64.2%	51.5%



Criterion			Documents	Documents	Documents
			Availability	Readiness	Quality
		Availability			

#### 4.2.5 Institutional Issues

The overall evaluation of the institutional issues; challenges faced by stakeholders, responsibilities, involvement level, involvement influence, LGUs staff needs to build up their capacity, and utilization level of current capacity, were satisfactory to some extent, 82%. Table 4.9 below summarizes the key findings.

Table 4.9: The satisfaction Level of Institutional Issues

E	Question	Level of Satisfaction
E01	Have all roles and responsibilities been identified?	94%
E02	Have all stakeholders been identified? "Municipality, contractor, MDLF, LTCs, Beneficiariesetc."	91%
E03	Have all involved stakeholders committed to the project?	79%
E04	Evaluate level of involvement of stakeholders	
E41	Level of involvement of stakeholders (LGU)	100%
E42	Level of involvement of stakeholders (LTC)	79%
E43	Level of involvement of stakeholders (MDLF)	91%
E44	Level of involvement of stakeholders (MoLG)	52%
E05	Relationships between municipality's and contractor's staff	85%
E06	Relationships between consultant's and municipality's staff	82%
E07	Relationships between consultant's and contractor's staff	65%
E08	Are there problems /challenges faced by the stakeholders	88%
	Level of Satisfaction of Institutional Issues	82%

The key observations concerning the institutional arrangements are:

- In principle, the roles of stakeholders are clear (94%). But there is a Low level of involvement of some stakeholders (LTC and MOLG). MOLG by law has a vital role in development. Activation of MOLG role would improve the overall institutional arrangement and follow up.
- The payments processing mechanism is well known for the stakeholders.
   Limited delays cases were reported. Most of the payments were processed within 45 days or less, this limited the delays. The municipalities reported



- that they cannot track the contractor's payments as they are paid directly to the contractor by MDLF.
- The municipal engineers in general have experience in projects design and
  projects management. Advanced training programs would provide an
  opportunity
  for
  project staff to gain state of the art knowledge in infrastructure projects and
  share ideas and best practices.
- The consultant role (LTC) was very important and essential in supporting the municipalities in preparing the specifications of some items (i.e. base-coarse layers) and supporting the municipalities in conflict resolutions.

#### **4.2.6** Procurement Procedures

Compliance to procurement procedures and responding to emerging conditions during implementation is a key area of interest. MDLF developed a procurement manual and organized several workshops and sessions to improve the capacity of the municipal team members in this regard. The satisfaction level of procurement procedures and compliance to procurement manual was 84.0%.

Table 4.10: Satisfaction Level of Procurement Procedures

F	Question	Level of Satisfaction
F01	The project procurement process was implemented according to the time plan.	82%
F02	Materials procured were properly recorded in the accounts of municipalities and/or MDLF.	90%
F03	Materials procured were properly delivered to the site and properly installed on site.	81%
Т	The overall satisfaction level of Procurement Procedures	84%

One of the key problems in the procurement process was the supply of construction materials and other materials and equipment in general Due to GRM system, and causing delay in projects implementation. Considering the high demand for construction materials in such projects, the project partners and stakeholders should develop and establish alternatives to avoid any obstacles or delays. In some cases, the lack of adequate planning for construction materials resulted in a protracted procurement process.



### **4.2.7 Quality Control Procedures**

Quality control procedures mean that the management procedures adopted throughout the implementation. In spite of the overall evaluation of quality control procedures which was satisfactory (77%) as shown in the table below, specific items related to quality show an unsatisfactory level or low level of satisfaction, mainly availability of quality plans and quality procedures on sites.

Table 4.11: The Satisfaction Level of Quality Control Procedures

G	Question	Level of
J	Question	Satisfaction
G01	Were there management procedures adopted during implementation?	84%
G02	Is there a Quality Plan (QCQA) covering all Policies, Guidelines and	49%
	Procedures?	
G03	Quality control measures adopted on site	61%
G04	Good workmanship	80%
G05	Delays (no delays)	85%
G06	Claims (no claims)	100%
G07	Physical progress was in line with the financial progress	73%
G08	Contractor's attitude during the contract	81%
G09	Are internal project status meetings held at reasonable intervals?	77%
	Overall Satisfaction Level of Quality Control Procedures	77%

Most of municipalities have not contained a Quality Plan (QCQA) covering all Policies, Guidelines and Procedures or manuals related to the municipalities it selves. The responsible teams members adopted or enforced measures depend on the experience. According to Physical progress was in line with the financial progress (73%) this was according to unexpected delay in procurement process or in implementation the works. In general, most of the reported cases of delay were justified by reasons out of the responsibility of the municipality or contractor and the most cases were related to materials supply restriction by the GRM system, limited cases by poor management procedures of the contractors,

According to the Contractor's attitude during the contract (81%). the contractors are enforced to follow ONEPS specifications, which resulted in over-capacity-results. This resulted in over-strength results of concrete and interlock.



There were no claims reported for the selected sample projects, which indicates that the projects were managed smoothly. This conclusion is enhanced by the responses to the management procedures that were adopted during implementation which was 84%.

#### **4.2.8** Safety Measures and Procedures

Compliance to safety measures and procedures is a very critical issue. The evaluation showed a low level of satisfaction with the adopted safety procedures and measures based on direct observation during the site visits. (77%) see the Table 4.12 below:

Table 4.12: The Satisfaction Level of Safety Measures and Procedures

Н	Question	Level of Satisfaction
	Assess safety provisions in contract documents and field practices	
H01	during construction (based on municipal site engineers and MDLF	86%
	regional supervisors).	
H02	The contractor provided the necessary safety measures and tools as per	70%
1102	contract requirements.	7070
H03	Quality of Safety Measures	75%
	Level of satisfaction of safety measures and procedures	77%

The result show the Unsatisfactory level of compliance to safety procedures during implementation (86%). and show also low quality safety tools provided by the contractor (70%) as well as the level of enforcement (resistance by workers to wear safety cloth and shoes) is weak (75%). However, no accidents were reported during the projects implementation.

#### 4.2.9 Environmental and Social Compliance

The overall evaluation of the environmental and social compliance is 83% as shown in Table 4.13. The familiarity level and interest of the municipal staff is high (87%). In spite of the level of community satisfaction of implementing the projects was 58%.

Table 4.13: The satisfaction Level of Environmental and Social Compliance.



I	Question	Level of		
		Satisfaction		
I01	The Environmental and Social measures are listed in the contract	99%		
I02	Has the EMSP understandable	90%		
I03	Have the issues of the EMSP followed / enforced during	77%		
103	implementation	7770		
I04	The municipal staff is familiar with EMSP and has the capacity to	87%		
104	follow up.	0 / 70		
I05	The community participated in all phases (planning, construction and	58%		
103	operation).	3670		
I06	The project caused impacts for environmental resources during	82%		
100	implementation, (higher score means lower impacts)	0270		
I07	The project caused impacts for environmental resources during	84%		
107	operation, (higher score means lower impacts)	0470		
108	The project caused impacts for socioeconomic conditions during	78%		
100	implementation, (higher score means lower impacts)	7070		
I9	The project caused impacts for socioeconomic conditions during	80%		
1)	operation, (higher score means lower impacts)	80%		
	Level of satisfaction of environmental and social compliance	83%		

The evaluation shows the Low level of community participation during construction.

After site visits it was noted that the citizen arranged the local community committees to submit their complaints and feedback to the municipality such as: Shortage of some services (water, accessibility, traffic, etc.) for some period and Shortage of solid waste collection services during road construction projects but the local community committees are highly satisfied with projects that consider their needs and improve their living conditions, minimize wastes, minimize dust, minimize spread of rodents and improve accessibility. The neighborhood development projects added economic impacts for the owners of real states in the developed areas

The municipality responded to special requirements of some citizens, which were acceptable from engineering point of view. These requirements included changing location of some electricity poles



### 4.2.10 Operation and Maintenance

The Operation and Maintenance (O&M) components were the most problematic issue. The average evaluation of the operation and maintenance items is 56% as shown in Table 4.14 this is indicate that the whole system of O&M in terms of staff capacity, requirements, measurement metrics, and records is fragile and needs attention. After the meeting with municipal staff it was noted that the low level of this item related to the low financial capacity of the municipalities that have direct impacts on O&M. The limited municipal resources, financial and human, barely enable the municipalities to perform routine activities and contingency maintenance. The necessary spare parts and tools necessary for O&M activities are very limited and sometimes not available; the availability in the municipalities was 35% only.

Table 4.14: The Satisfaction Level of Operation and Maintenance

J	Question	Level of Satisfaction		
J01	Are the following types of maintenance carried out on a plann	ed basis:		
J01-a	Preventative maintenance is carried out on planned basis	65%		
J01-b	Corrective maintenance is carried out on planned basis	62%		
Ј01-с	Periodic maintenance is carried out on planned basis	68%		
	Are Maintenance Metrics defined and in place? (defect rates; prob			
J02	J02 of users; defects per area; defects per Function; mean time to repair			
	mean cost to repair defect)			
J03	Is the facility adequately staffed with certified O&M staff	55%		
J04	Does the facility maintain records for O&M	51%		
J05	Are the necessary spare parts and tools for O&M available?	35%		
]	Level of Satisfaction of Operation and Maintenance	56%		

The availability of Operation and maintenance (O&M) means sustainable the projects and avoid frequent cause of failure of services and facilities. Standardizing the O&M processes and developing manuals and procedures for O&M that includes equipment, parts, designs, construction methods, etc., has many benefits. This will also reduce the number of skills required to install and maintain the piece of equipment, thus increasing the probability of municipal craftsmen being able to carry out the work.



O&M Manuals: The accuracy, relevancy, and timeliness of well-developed, user-friendly O&M manuals cannot be overstated. Hence, it is becoming more common for detailed, facility-specific O&M manuals to be required.

# **4.2.11 Supplies Handling and Storage**

This part is related only to Supplies Projects, 14 projects of the selected sample. The overall satisfaction of issues related to supplies handling and storage is 85%. As shown in Table 4.15, the main concerns of this area were related to expiry date, certificate of origin, and safety information. They are expected to be highly improved by conducting on-job-training sessions and development of infographic manuals on proper handling and storage procedures. The municipal staff raised a concern regarding quality assurance measures and availability of competent local labs to test some supplies like fuel and oil.

Table 4.15: The Satisfaction Level of Supplies Handling and Storage

K	Question	Level of	
		Satisfaction	
K01	The supplies are of high priority	99%	
K02	The supplies ensure the sustainability of services	96%	
K03	The supplies are of high quality	97%	
K04	The supplies agreed with safety manuals, storage and handling with	89%	
1101	hazard materials	0770	
K05	Is the certificate of origin provided by the supplier	58%	
K06	The supplies have the safety and information labels, and visible for	69%	
1100	concerned staff	07/0	
K07	In general, the supplies are stored according to EMSP	87%	
	Satisfaction level of supplies handling and storage	85%	

### 4.3 Municipal Team Feedback on Overall Projects Management

In-depth interviews were arranged with the municipal officials and related team members in order to evaluate some key issues such as; Identification of needs, Implementation Process, Desire and willingness for other activities, Collaboration and coordination, Complaints from beneficiaries, challenges and Sustainability and maintenance plans. The key findings are summarized in the following:



#### 4.3.1 Identification of needs

- For W05, the projects were urgent (emergency situation).
- Some services are considered as key areas of support to the municipalities, such as the transfer of solid waste components, which should be continued and developed technically, socially, and environmentally to better fit the purpose.

# **4.3.2** Implementation Process

- All the activities have been implemented smoothly in general.
- The municipal staff is familiar with MDLF procedures and concerns.
- There were no financial claims and very limited variation orders.
- The municipalities are familiar with environmental and social compliance measures according to number of training that the staffs were obtained.

#### 4.3.3 Desire and willingness for other activities

- The allocations for operation and maintenance are very limited or neglected sometimes, which reflect itself negatively on the overall evaluation of compliance to maintenance procedures and requirements.
- Replacement of street lighting lanterns (lamps) with new LED types because of saving energy

#### 4.3.4 Collaboration and coordination

The level of coordination between the municipalities and consultant (LTC) and other stakeholders was satisfactory as well as with MDLF.

# 4.3.5 Complaints from beneficiaries

- The level of community satisfaction is acceptable.
- Some complaints were reported during implementation which included; shortage of water supply, delay of wastes collection, and inaccessibility to houses.
- Other specific complaints were reported in some projects, such as,
   Development of the Vegetables Market in Gaza City. The complaints included the illegal ownership of shops, size of shops, construction of additional offices, outside bathrooms and a praying area.



 Contractors were not sensitive to people requirements, by leaving the construction wastes and other raw construction materials randomly in the working area.

# 4.3.6 Main challenges

- Unavailability of construction materials in the local market.
- The delay of most of projects (most notably due to Israeli restrictions and the GRM mechanism) was justifiable.
- There are no labs specialized to check the specifications and qualities of supplies (i.e. oil for equipment and vehicles.)
- Management of implementation of some projects which are located in city centers or near sensitive institutions such as schools (commercial center project of Rafah).
- The problem of underestimated bids by the contractors and enforcing the municipalities to contract with the lowest price. This mechanism should be changed.

# 4.3.7 Sustainability & maintenance plans

- Periodic visits to the projects.
- Continuous follow up with beneficiaries.

The Overall Results of the Main Areas of Assessment shown in Figure 4.1



Figure 4.1: The Overall Results of the Main Areas of Assessment



# 4.4 Descriptive analysis of the Sample Statistics

#### 4.4.1 Sex

Table 4.16: Sex distribution

Sex	Frequency	Percentages
Male	10	90.9%
Female	1	9.1%
Total	11	100%

Table 4.16 shows that 90.9% of the sample are "male", and 9.1% of the sample are "female", which reflects that a little number of women have an experience in evaluation section when comparing with male.

#### 4.4.2 Age

Table 4.17: Age distribution

Age	Frequency	Percentages
Less than 30 years	0	0%
30-40 years	4	36.4%
40-50 years	4	36.4%
Older than 50 years	3	27.3%
Total	11	100%

Table 4.17 shows that none of the sample of age "Less than 30 years", and 27.3% of the sample of age "older than 40 years". This indicates that the majority of the employees in evaluation department are not young professionals (from 30 - 50 years) to benefit from their enthusiasm and skills, and because this department especially needs a long experience and advanced skills.

#### 4.4.3 Educational qualifications

Table 4.18: Educational qualifications

Educational qualifications	Frequency	Percentages
Diploma	0	0%
Bachelor	0	0%
Master	9	81.8%
PHD	2	18.2%
Total	11	100%



Table 4.18 shows that 81.8% of the sample has Master certificates while 18.2% of the sample has PHD certificates. This indicates that the examined experts have advanced educational qualifications. These mean that the analysis will be more confident and acceptable.

# 4.4.4 Years of experience related to evaluation

Table 4.19: Years of experience related to Evaluation

Years of experience related to Evaluation	Frequency	Percentages
Less than 5 years	0	0.0%
5- Less than 10 years	2	18.2%
10- Less than 15 years	2	18.2%
15 years and higher	7	63.6%
Total	11	100%

Table 4.19 shows that the majority of the experts in evaluation department have higher experience related to evaluation 63.6% and this complies with the age of respondents. And 18.2% have moderate experience related to evaluation (from 5 to 15 years).

#### 4.4.5 Training related to evaluation

Table 4.20: getting any training related to evaluation

Did you get any training related to evaluation?	Frequency	Percentages
Yes	9	81.8%
No	2	18.2%
Total	11	100%

Table 4.20 shows that 81.8% of the sample got training related to evaluation, but 18.2% of the sample did not get training related to evaluation. This means that three quarters of the sample got training related to evaluation because most of the expert worked at NGOs, which build the capacities of their staff. Also donors play significant role in training NGOs staffs related to project management and evaluation.



### 4.4.6 Age of organization

Table 4.21: Age of organization

Age of organization	Frequency	Percentages
Less than 5 years	0	0.0%
5-10 years	1	9.1%
10-15 years	4	36.4%
15 years and higher	6	54.5%
Total	11	100%

Table 4.21 shows that 36.4 % of the Age of organization is "10-15 years ", and 54.5% of the Age of organization is higher than 15 years. This indicates that most of the experts worked at old organizations which are very important and vital organizations in the past and present.

# 4.4.7 Number of projects implemented during the last five years

Table 4.22: Number of projects implemented during the last five years

Number of projects implemented during the last five years	Frequency	Percentages
Less than 10 projects	1	9.1%
10-Less than 15projects	0	0.0%
15-Less than 20 projects	2	18.2%
20 projects and higher	8	72.7%
Total	11	100%

Table 4.22 shows that 9.1% of the organizations implemented less than 10 projects during the last five years, and 72.7% of the organizations implemented more than 20 projects during the last five years. This means that most of organizations implemented higher number of projects during the last five years.

# 4.4.8 Number of projects implemented related to evaluation during the last five years

Table 4.23: Number of projects implemented related to evaluation during the last five years

Number of projects implemented related to evaluation during the last five years	Frequency	Percentages
Less than 10 projects	1	9.1%
10-Less than 15projects	2	18.2%
15-Less than 20 projects	2	18.2%
20 projects and higher	6	54.5%
Total	11	100%

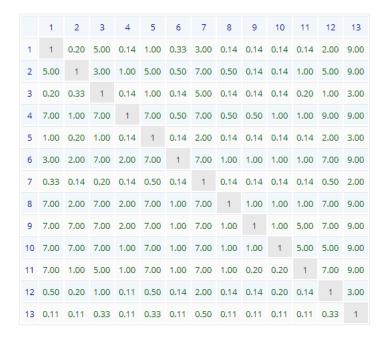
Table 4.23 shows that 9.1% of the organizations implemented less than 10 projects during the last five years, and 54.5% of the organizations implemented more than 20 projects during the last five years. This means that there is an essential need to monitoring and evaluation in the projects, and also this indicates that there is donors' interest with this issues and needs in Palestine.

# 4.5 Data Analysis

#### **4.5.1** Decision Matrix

The resulting weights are based on the principal eigenvector of the decision matrix.

Table 4.24: Pair-Wise Comparison Matrix Regarding the Selected Criteria





#### 4.5.2 Priorities

These are the resulting weights for the criteria based on the researcher pairwise comparisons

Table 4.25: Relative weight and rank for each criterion

	Criteria	Relative weight	Rank
A	Feasibility and Cost Effectiveness.	3.3%	8
В	Appropriateness and soundness	7.3%	7
С	Objectives and Outcomes verification	2.1%	9
D	Documents Availability	10.6%	5
Е	Documents Readiness	2.1%	10
F	Documents Quality	12.2%	4
G	Institutional Issues.	1.3%	12
Н	Procurement Procedures	13.1%	3
Ι	Quality Control Procedures	18.3%	1
J	Safety Measures and Procedures	17.3%	2
K	Environmental and Social Compliance.	9.6%	6
L	Operation and Maintenance.	1.8%	11
M	Supplies handling and Storage	1.0%	13
	Total	100%	

Moreover, as stated in AHP theory, checking the consistency ratio (CR) is an essential step to determine the acceptance of the priority weighting

$$CR = 7.7\%$$

As CR value is less than 10%, the pair-wise comparison evaluations are consistent, and thus acceptable. For each criteria the researcher multiplied the result that obtain from Figure 4.1 to the relative weight that calculated in Table 4.25



Table 4.26: The Overall evaluation

		Level of	Relative	
	Criteria	Satisfaction	weight	1*2
		1	2	
A	Feasibility and Cost Effectiveness.	86%	3.3%	2.84%
В	Appropriateness and soundness	82%	7.3%	5.99%
С	Objectives and Outcomes verification	90%	2.1%	1.89%
D	Documents Availability	89%	10.6%	9.39%
Е	Documents Readiness	92%	2.1%	1.93%
F	Documents Quality	79%	12.2%	9.67%
G	Institutional Issues.	82%	1.3%	1.07%
Н	Procurement Procedures	84%	13.1%	11.00%
I	Quality Control Procedures	77%	18.3%	14.09%
J	Safety Measures and Procedures	77%	17.3%	13.32%
K	Environmental and Social Compliance.	83%	9.6%	7.97%
L	Operation and Maintenance.	56%	1.8%	1.01%
M	Supplies handling and Storage	85%	1.0%	0.85%
	Total			81.014%

The second part of the questioner used to make a confident judgment about the overall evaluation result as shown in

Table 4.26. According to experts judgment and skills, the results show that the overall evaluation will be poor and not acceptable if the all area assessment were equal or below 65.81% but if the result was 75.17% then the overall evaluation will be mid. Mid mean (good if the overall evaluation was above 65.81% and below 75.17%, otherwise be very good). Finally the result will be excellent if main area assessment was above than 87.74%.

Table 4.27: the successful and failure of the overall evaluation



Poor	IF	Less Than	65.81			
Good	IF	More than	65.81	&	Less Than	75.17
Very good	IF	More than	75.17	&	Less Than	87.74
High	IF	More than			87.74	

The extensive results of analyzing the qualitative and quantitative data collected for the 40 sample projects show that the overall evaluation rate is about 81.014% this rate indicates a very good level. The results were strongly satisfactory in some areas such as readiness of project documents, documents availability, effectiveness, and the environmental and social compliance. The rate satisfactory is dominant in most of the audited items. Only the operation and maintenance level was less satisfactory compared to other items.



# CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS



#### 5.1 Introduction

This chapter introduces the whole work that was carried out through conclusion and recommendations for Quantifiable Model for Assessing Gaza Municipalities' Development Projects towards MDLF Quality Requirement. This chapter clarifies where research objectives are met over the final findings of this study, in addition to some future researches as results of findings are suggested.

# 5.2 Conclusion of the research aim and objectives

In attaining the aim of the research, four main objectives have been outlined and achieved through the findings of the analyzed collected data. The key findings are found as the following:

# 5.2.1 Key findings related to objective one

It is stated "To evaluate a representative sample of infrastructure sub-projects implemented in MDPII-Cycle 02. The assessment will focus on the technical quality and structural soundness, and the compliance of implemented sub-projects with technical specifications."

This objective is achieved during the interviews and site visits as well as during piloting study that performed. Findings show that the extensive results of analyzing the qualitative and quantitative data collected for the 40 sample projects show that the overall evaluation rate is about 81.1%. This rate indicates a very good level. The results were strongly satisfactory in some areas such as readiness of project documents, documents availability, effectiveness, and the environmental and social compliance and the collecting process of the documents from MDLF and municipalities for the technical auditing was a time and effort consuming process due to the current practice of archiving, which makes the development of an e-archiving system is a key requirement.

### 5.2.2 Key findings related to objective two

It is stated "To assess the approaches and processes during the implementation of the sub-projects and provide recommendations for future improvements."

Findings show that the process of procurement and projects selection are transparent and followed the manuals and procedures that issued by MDLF and agreed upon by



the municipalities and the municipal capacities are remarkably developed during the last years and the team members are familiar with MDLF procedures and concerns.

# **5.2.3** Key findings related to objective three

It is stated "To assess the compliance with safeguarding measures in the Environmental Management Plan (EMP)."

Findings show that unsatisfactory level of compliance to safety procedures during implementation, as well as provision of low quality safety tools and also show the low level of enforcement (resistance by workers to wear safety cloth and shoes).

# 5.2.4 Key findings related to objective four

It is stated "To assess the effectiveness of the implementation from institutional, social, technical, and operational dimensions."

The relevancy and effectiveness, as well as the efficiency of procedures, processes, systems, staff and tools were in-depth evaluated through meetings and field visits. Findings show that the level of experience with the environmental and social compliance measures and understanding of these measures is remarkably improved. However, more efforts are needed in this regard.

### **5.3** General Conclusions

- The level of community satisfaction is acceptable.
- The level of coordination between the municipalities and the consultant (LTC) is satisfactory.
- The project documents are available, and their rate of readiness and quality was strongly satisfactory and satisfactory respectively.
- The consultant reported that there were no financial claims and very limited variation orders. This is a positive indication of the level of good administration of the contracts.
- The delay of most of the projects was justifiable. The main cause of the delay was due to Israeli restrictions and the GRM mechanism.
- Limited qualifications of the municipal team members in design and preparing calculation sheets and design documents.



- Project management skills for many of the municipal team members are not adequate.
- There is no payment tracking system at the municipalities to follow up the financial progress.
- Low level of involvement of some stakeholders (LTC and MOLG)
- Neglecting the systematic Operation and Maintenance (O&M) or delay in applying proper O&M has adversely affected the functioning of the services.

#### 5.4 Recommendations

The recommendations include both long-term and short-term interventions.

#### **5.4.1** Short-term Recommendations:

- Considering the technical comments on the quality and comprehensiveness of the project documents, drawings, cost estimates, time schedules and other items.
- The allocations for operation and maintenance are very limited / neglected, which reflect itself on the overall negative evaluation of compliance to maintenance procedures and requirements. It is proposed to add items in the project documents to cover the main operation and maintenance activities.
- Development of a standard local manual of design, mainly for roads.
- Develop the level of involvement and responsibilities of the consultant in order to support the municipalities, mainly during the inception phase (preparing the documents and field visits).
- Pay more attention to the community complaints concerning the performance of contractors during implementation
- Improve the level of community participation in all project phases.
- Underestimates of prices and selection of low bid contractors should be revised to the best interest of the project delivery. Performance tool could be adopted and enforced.
- Advance Payments to the contractors is worthy to be considered (mandatory) in large projects.



- Conducting Capacity building and advanced training to the municipal staff (not classical training, but orientation and discussion workshops) on the following subjects:
  - Effective project management.
  - Project evaluation.
  - Management of handling and storage of supplies.
  - Energy efficiency manual.
  - O&M procedures, tools, monitoring and reporting.
- Update the cost-benefit analysis tool, and development of a mechanism to compare the indicators (base-line and end-line measurements).
- Develop a standardized O&M system and manuals.
- Include the safety tools and measures in the BOQ. Conduct review and development of the contract conditions to include strict items and penalties to ensure compliance to safety measures and EMSP.

#### **5.4.2** Long-term Recommendations:

- Conducting final evaluation for each project is very important.
- Development of QCQA plans and conducting training in QCQA practices and procedures.
- Development of a unified comprehensive project control and monitoring tools and procedures to be adopted by the municipal supervision team.



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# Appendix 1 (Interviews Template and Questionnaires with Engineers #1) English version



# Interviews Template and Questionnaires Engineers



# The Islamic University of Gaza -IUG

Municipality	Municipality	
	Representative	
Day	Date and Time	
Evaluator		

1.	Could you please briefly introduce yourself?
2.	Detail your role in MDLF Project. (Needs assessment, implementation, follow
_,	up, etc.)
3.	How are/ were the needs identified and addressed by the project?
4.	How do you perceive the implementation of the activities?
<del>7</del> .	now do you perceive the implementation of the activities:
<b>E</b>	Are there further activities you would like to implement? If you please specify
Э.	Are there further activities you would like to implement? If yes, please specify.



6. How do you assess the collaboration & coordination among team?					
7. Did you receive any complaints from beneficiaries? If yes, how did you deal with it?					
8. Is the implemented intervention comprehensive or there are missing important items?					
·					
9. What are the main challenges that faced you?					
10. Is the project period suitable to implement activities as planned?					
11. How do you assess the sustainability of implemented activities?					
Please rate the following questions in regards to the site visits of projects, scale					
of 1 – 5: (1) poor, (2) fair, (3) good, (4) very good and (5) excellent.					
(1) poor, (2) rair, (3) good, (4) very good and (3) excenent.					
Part A: Feasibility and Cost Effectiveness					
1 The project is feasible 1 2 3 1 5					

Part	Part A: Feasibility and Cost Effectiveness							
1	The project is feasible	1	2	<u></u> 3	4	<u></u>		
2	The project is cost – effective		2	3	4	<u> </u>		
3	The final benefits are in line with estimated benefits		_ 2	3	4	5		
4	Has the cost effectiveness of project been measured & compared against estimates in the application?	1	_ 2	3	4	5		



Part	B: The appropriateness and Soun	dness o	f Techni	cal Issues	3	
1	Are the standards adopted		2	3	4	<u> </u>
	according to the best practices					
2	Are the municipal team Qualified	<u> </u>	2	<u></u> 3	4	<u> </u>
		Identify	their need	ls:		
					_	_
			onal Team		: <u></u> Үе	
			ced Trainin	_	: ∐Ye	
			rting Tools		: ∐Ye	_
			onal Faciliti rehensive (		:	_
3	Have all necessary approvals					5
3	been obtained?		L 2		□ 4	
4						
4	Are milestone deliverables	1	<u> </u>	<u></u> 3	<u> </u>	<u></u>
	effectively tracked and compared					
	to project plan?					
5	Was an original risk assessment	1		<u></u>	<u></u> 4	<u></u> 5
	completed?					
Part	C: Objectives and Outcomes verif	fication	(for Dev	elopmen	t Project	ts Only)
1	The project is functioning and	<u> </u>	2	<u>3</u>	<b>4</b>	<u>5</u>
	utilized well.					
2	Usability is high and appreciated		<u> </u>	<b>3</b>	<b>4</b>	<u></u>
	by beneficiaries					
3	The intended outcomes are	□ 1	□ 2	<b>3</b>	<b>4</b>	<u></u>
	achieved					
4	The project included some		<b>2</b>	<u>3</u>	<b>4</b>	<u></u>
	positive unintended results					
5	The project included some		<u> </u>	<u>3</u>	<b>4</b>	<u> </u>
	negative unintended results					



No.   Document	Part	Part D,E,F: Available Documents							
Design Documents   Yes   No   NA   Door   Mid.   High   1   2   3   4   5	No.	Document	Availability	Readiness	Quality				
Shop Drawings	1	Project Appraisal	☐Yes ☐No ☐NA	poor Mid. High					
Shop Drawings	2	Design Documents	☐Yes ☐No ☐NA	poor Mid. High					
S	3	Drawings	☐Yes ☐No ☐NA	poor Mid. High					
Specifications	4	Shop Drawings	☐Yes ☐No ☐NA	poor Mid. High					
Part G: Institutional Issues   Part G: Institutional Issues	5	Contract	☐Yes ☐No ☐NA	poor Mid. High					
8         As Built Drawing         Yes No NA         poor Mid. High         1 2 3 4 5           9         Monthly Progress Reports         Yes No NA         poor Mid. High         1 2 3 4 5           10         V.O Documents if Applicable         Yes No NA         poor Mid. High         1 2 3 4 5           11         Final Report         Yes No NA         poor Mid. High         1 2 3 4 5           12         Tests Reports         Yes No NA         poor Mid. High         1 2 3 4 5           13         Project Schedule (Gantt Chart)         Yes No NA         poor Mid. High         1 2 3 4 5           14         Payment Records         Yes No NA         poor Mid. High         1 2 3 4 5           15         Correspondences         Yes No NA         poor Mid. High         1 2 3 4 5           16         Payment         Yes No NA         poor Mid. High         1 2 3 4 5           16         Payment         Yes No NA         poor Mid. High         1 2 3 4 5           17         Cost-Benefit         Yes No NA         poor Mid. High         1 2 3 4 5           18         ESMP Document / measures         Yes No NA         poor Mid. High         1 2 3 4 5           19         Soft Copy         Yes No NA         Poor Mid. High         1	6	Specifications	☐Yes ☐No ☐NA	poor Mid. High					
Monthly Progress   Yes   No   NA     poor   Mid.   High     1   2   3   4   5	7	BoQ	☐Yes ☐No ☐NA	poor Mid. High					
Reports	8	As Built Drawing	☐Yes ☐No ☐NA	poor Mid. High					
10	9	Monthly Progress	☐Yes ☐No ☐NA	poor Mid. High					
Applicable		Reports							
Final Report	10	V.O Documents if	☐Yes ☐No ☐NA	poor Mid. High					
Tests Reports		Applicable							
Project Schedule	11	Final Report	☐Yes ☐No ☐NA	poor Mid. High					
Gantt Chart	12	Tests Reports	☐Yes ☐No ☐NA	poor Mid. High					
Payment Records	13	Project Schedule	☐Yes ☐No ☐NA	poor Mid. High					
15         Correspondences         Yes No NA         poor Mid. High         1 2 3 4 5           16         Payment certificates         Yes No NA         poor Mid. High         1 2 3 4 5           17         Cost-Benefit Analysis         Yes No NA         poor Mid. High         1 2 3 4 5           18         ESMP Document / measures         Yes No NA         poor Mid. High         1 2 3 4 5           19         Soft Copy Availability         Yes No NA         poor Mid. High         1 2 3 4 5		(Gantt Chart)							
Payment	14	Payment Records	☐Yes ☐No ☐NA	poor Mid. High					
certificates  17  Cost-Benefit	15	Correspondences	☐Yes ☐No ☐NA	poor Mid. High					
17 Cost-Benefit	16	Payment	☐Yes ☐No ☐NA	poor Mid. High					
Analysis    ESMP Document /		certificates							
18 ESMP Document /	17	Cost-Benefit	☐Yes ☐No ☐NA	poor Mid. High					
measures  19 Soft Copy Availability  Part G: Institutional Issues		Analysis							
19 Soft Copy Availability  Part G: Institutional Issues	18	ESMP Document /	☐Yes ☐No ☐NA	poor Mid. High					
Availability  Part G: Institutional Issues		measures							
Part G: Institutional Issues	19	Soft Copy	☐Yes ☐No ☐NA	poor Mid. High					
		Availability							
		Part C. Institut	ional Issues						
1 Trave an roles and responsibilities been 1 1 2 5 4 5				oon 1 2					
identified?			s and responsibilities b		343				



2	"Municipality, contractor, MDLF, LTCs, Beneficiariesetc."			<u> </u>	3	<u> </u>	□ 2
3	Have all involved stakeholders and groups committed to the project?	l work		<u></u>	<u></u> 3	<u> </u>	<u></u>
4	Evaluate level of involvement of	LGU	<u> </u>	<u> </u>	<u></u> 3	4	<u></u>
	stakeholders	LTC	<u> </u>	2	<u>3</u>	4	<u></u>
		MDLF	<u> </u>	2	<u>3</u>	4	<u></u>
		MoLG	<u> </u>	<u> </u>	<u>3</u>	<u> </u>	<u></u>
5	Relationships between municipality	y's and		<u> </u>	<u>3</u>	<u> </u>	<u></u>
	contractor's staff						
6	Relationships between consultant's	s and		<u> </u>	<u>3</u>	<u> </u>	<u></u>
	municipality's staff						
7	Relationships between consultant's	s and		<u> </u>	<u>3</u>	<u> </u>	<u></u>
	contractor's staff						
8	Are there problems /challenges fac	ed by		<u> </u>	<u>3</u>	<u> </u>	<u>5</u>
	stakeholder	·	Descri	be:			
	starcholder						
Par	t H: Procurement Procedures						
Part 1	t H: Procurement Procedures  The project procurement process v	was					
					□ 3	4	□ 5
	The project procurement process v	e plan.			3	4	<u>5</u>
1	The project procurement process vimplemented according to the time	e plan.	1		3	4	<u>5</u>
1	The project procurement process vimplemented according to the time.  Materials procured were properly	e plan.				4	5
1	The project procurement process verification implemented according to the time.  Materials procured were properly in the accounts of municipalities a	e plan. recorded nd/or				4	
2	The project procurement process vimplemented according to the time.  Materials procured were properly in the accounts of municipalities a MDLF.	e plan. recorded nd/or delivered				4 4	
2	The project procurement process vimplemented according to the time.  Materials procured were properly in the accounts of municipalities a MDLF.  Materials procured were properly	e plan. recorded nd/or delivered n site.		2	3		<u>5</u>
2 3	The project procurement process vimplemented according to the time.  Materials procured were properly in the accounts of municipalities a MDLF.  Materials procured were properly to the site and properly installed o	recorded nd/or delivered n site.		2	3		<u>5</u>
2 3	The project procurement process we implemented according to the time.  Materials procured were properly in the accounts of municipalities a MDLF.  Materials procured were properly to the site and properly installed of Assess the effectiveness of the procured.	recorded nd/or delivered n site.		2	3		<u>5</u>
3	The project procurement process we implemented according to the time.  Materials procured were properly in the accounts of municipalities a MDLF.  Materials procured were properly to the site and properly installed of Assess the effectiveness of the procured.	recorded nd/or delivered n site.		2	3		<u>5</u>
3	The project procurement process vimplemented according to the time.  Materials procured were properly in the accounts of municipalities a MDLF.  Materials procured were properly to the site and properly installed or Assess the effectiveness of the propercess adopted by the municipality.	e plan. recorded nd/or delivered n site. ocurement		2	3		<u>5</u>
1 2 3 4 Part	The project procurement process vimplemented according to the time.  Materials procured were properly in the accounts of municipalities a MDLF.  Materials procured were properly to the site and properly installed of Assess the effectiveness of the propercy process adopted by the municipality and the site and properly installed of the property process adopted by the municipality and the site and properly installed of the property process adopted by the municipality and the site and properly installed or process adopted by the municipality and the site and properly installed or process adopted by the municipality and the site and properly installed or process adopted by the municipality and the site and properly installed or process adopted by the municipality and the site and properly installed or process adopted by the municipality and the site and properly installed or process adopted by the municipality and the site and properly installed or process adopted by the municipality and the site and properly installed or process adopted by the municipality and the site and properly installed or process adopted by the municipality and the site and properly installed or process adopted by the municipality and the site and properly installed or process adopted by the municipality and the site and properly installed or process adopted by the municipality and the site and properly installed or process adopted by the municipality and the site and properly installed or process adopted by the municipality and the site and properly installed or process adopted by the municipality and the site and properly installed or process adopted by the municipality and the site and properly installed or process adopted by the municipality and the site and process adopted by the municipality and the site and process adopted by the municipality and the site and process adopted by the site and process and the site and the s	e plan. recorded nd/or delivered n site. ocurement			□3 □3	4	5 5



	Policies, Guidelines and Procedures?						
3	Quality control measures adopted on site		1	2	<u></u> 3	4	<u></u>
4	Good workmanship		1	2	<u></u> 3	4	<u></u>
5	Delays		1	2	<u></u> 3	4	<u></u>
6	Claims		1	2	3	4	<u>5</u>
7	Physical progress was/is in line with the		1	2	<u></u> 3	4	<u></u>
	financial progress						
8	Contractor's attitude during the contract		1	2	<u></u> 3	4	<u></u>
9	Are internal project status meetings held at		1	2	<u></u> 3	4	<u></u>
	reasonable intervals?						
Part	J: Safety Measures and Procedures						
1	Assess safety provisions in contract		1	<u> </u>	<u>3</u>	4	5
	documents and field practices during						
	construction (based on municipal site						
	engineers and MDLF regional supervisors).						
2	The contractor provided the necessary		1	2	☐ 3	4	<u></u>
	safety measures and tools as per contract						
	requirements.						
3	Compliance to and follow up of Safety		Ava	ilable	Not A	vailable	
	Measures during construction	NA	<b>A</b>				
4	Quality of Safety Measures		1	$\square$ 2	☐ 3	4	□ 5
5	Are there any reported accidents		Yes		No		
Part	K: Environmental and Social Compliance						
1	The Environmental and Social measures are		1	<u>2</u>	<u>3</u>	4	<u>5</u>
	listed in the contract						
2	The municipal staff is familiar with EMSP		1	<u> </u>	<u>3</u>	<u> </u>	<u>5</u>
	and has the capacity to follow up.					<del></del>	_
3	The community participated in all phases		1	<u> </u>	<u>3</u>	4	<u>5</u>
	(planning, construction and operation).						



4	The community is satisfied		Ш	1		2	<u></u> 3		∐ 5
5	The project caused impacts for			1		2	<u></u> 3	4	<u></u>
	environmental resources during								
	implementation								
6	The project caused im	pacts for		1		2	<u></u> 3	4	<u></u>
	environmental resource	ces during operation							
7	The project caused im	pacts for		1		2	<u></u> 3	4	<u></u>
	socioeconomic condit	ions during							
	implementation								
8	The project caused im	pacts for		1		2	<u></u> 3	4	<u></u>
	socioeconomic condit	ions during operation							
			1						
Par	t L: Operation and M	aintenance							
1	Are the following	a. Preventative		1	$\Box 2$		3 \ \ \ 4	□ 5	□ NA
	types of	maintenance		-	ш-				
	maintenance carried	b. Corrective	$\vdash$	1	${2}$		3 🗆 4	□ 5	□ NA
	out on a planned	maintenance	╽╙	1	□ ∠	ш	<i>J</i> □ <del>4</del>		
	basis:	c. Periodic		1	${2}$		3 \ \[ \] 4	□ 5	NA NA
			╽╵	1	□ ²	Ш	<i>J</i> □ 4		Пил
2	Are Maintenance Met	maintenance		1			2 🗆 4		□ NT A
2		nes defined and in	╽╙	1	<u></u> 2	Ш	3 \[ 4	<u> </u>	∐ NA
	place?	a man ma af yaana.							
	(defect rates; problem								
	•	ets per Function; mean							
	time to repair defect;	mean cost to repair							
2	defect)	1					2 🗆 4		
3	Is the facility adequate	ely staffed with	╽╙	1	2	Ш	3 \[ 4	<u> </u>	□NA
	certified O&M staff		<u> </u>			_	<u> </u>		
4	Does the facility main	tain records for O&M	$  \sqcup $	1	2	Ш	3 4	<u> </u>	□NA
5	Are the necessary spa	re parts and tools for		1	2		3 4	<u> </u>	NA
	O&M available?								
6	How is O&M perform	nance tracked and							
	measured?								
7	Additional Comments								



Par	Part M: Supplies Handling and Storage (Only for Supplies Projects)						
1	The supplies are of high priority		2	3	4	<u></u>	
2	The supplies ensure the sustainability of		2	3	4	<u></u>	
	services						
3	The supplies agreed with safety manuals,	<u> </u>	2	<u></u> 3	4	<u></u>	
	storage and handling with hazard materials						
4	The supplies extend for more than six	<u> </u>	2	<u></u> 3	4	<u></u>	
	months						
5	Is the certificate of origin provided by the		2	3	4	<u></u>	
	supplier						
6	The supplies have the safety and information		2	3	4	<u></u>	
	labels, and visible for concerned staff						
7	In general, the supplies are stored according	<u> </u>	2	3	4	<u></u>	
	to EMSP						
Add	itional Comments						
٠	or Concerns / Recommended Actions for the						
Site	Visit						



# Appendix 2 (Interviews Template and Questionnaires with Engineers #2) Arabic version



# Interviews Template and Questionnaires Engineers



## The Islamic University of Gaza -IUG

Municipality	Municipality
Representative	
Date and Time	Day
	Evaluator

هل يمكن أن تعرف عن نفسك بإيجاز ؟	.1
it is to it is and the second of the second	2
بالتفصيل دورك في مشروع (MDLF) تقييم الاحتياجات ، التنفيذ ، المتابعة ، إلخ	.2
	_
كيف يتم / تم تحديد الاحتياجات المشروع؟	.3
م نا ما که داران از	_
كيف ترى تنفيذ الأنشطة؟	.4
هل هناك نشاطات أخرى ترغب في تنفيذها؟ اذا كانت الاجابة بنعم، يرجى التوضيح	_
هل هناك تستطات الحرى در عب في تنفيدها: ادا كانت الاجابة بنغم، يرجى التوصيح	.5
e e. 211 • e. **** *** ** * * * * * * * * *	_
كيف تقيم التعاون والتنسيق بين الفريق؟	.6



جابة بنعم ، كيف تعاملت معها؟	7. هل تلقيت أي شكاوى من المستفيدين؟ إذا كانت الإه
اك عناصر مهمة مفقودة؟	<ol> <li>8. هل جميع انشكة المشروع كاملة و شاملة أم أن هنـ</li> </ol>
	9. ما هي التحديات الرئيسية التي واجهتك؟
خطط لها؟	10. هل فترة المشروع مناسبة لتنفيذ الأنشطة كما هو ه
	11. كيف تقيم استدامة الأنشطة المنفذة؟
شاریع ، مقیاس من 1 - 5:	يرجى تقييم الأسئلة التالية فيما يتعلق بزيارات المواقع للم
و (5) ممتاز.	(1) ضعيف جدا ، (2) متوسط ، (3) جيد ، (4) جيد جدأ
	جزء (A): الجدوى وفعالية التكلفة
5 4 3 2 1	1 المشروع مجدي اقتصادياً
	2 المشروع فعال من حيث التكلفة
	3 الفوائد النهائية تتماشى مع الفوائد المقدرة
	4 هل تم قياس فعالية تكلفة المشروع ومقارنتها
	بالتقديرات في المذكورة في طلب المنحة؟
	جزء (B): ملاءمة وسلاسة المسائل الفنية
	1 هل المعايير المتبعة هي وفق افضل الممارسات



5 4	3 2	]1	دية مؤهل	هل فريق البل	2		
	الاحتياجات المطلوبة	اذكر					
نعم لا	 بق اضافي :						
	ييات اضافية :						
	ات ومعدات اضافية :						
نعم 📗 لا	افق اضافية :	مر					
] نعم 📗 لا	ير شامل :	تغي					
5 4	3 2	مة؟ 1	ول على جميع الموافقات اللاز	هل تم الحصو	3		
5 4	3 2	نتها 1	milestone بشكل فعال ومقار	هل يتم تتبع ج	4		
			رع؟	بخطة المشرو			
5 4	3 2	1 ? 8	وثيقة لتقييم المخاطر للمشروع	هل تم اعداد	5		
			ف والتحقق من النتائج	1.18\$1 ·(C)	e is		
5 14	$3  \square 2  \square$	71	روع ویستخدم بشکل جید.	, ,	1		
	$3  \square 2  \square$	□¹   □1	سهولة الاستخدام عالية وتقدير من قبل				
	32		·	المستفيدين	2		
5 4	$3  \square 2  \square$	71			3		
	$3  \square  2  \square$		يتم تحقيق النتائج المرجوة				
	_32 _	عير ال	تضمن المشروع بعض النتائج الإيجابية غير				
5 14	$3  \square 2  \square$	<u>بر</u> 1	شروع بعض النتائج السلبية غ	المقصودة	5		
	_32	پر ۱ <sub>۱</sub>		المقصودة	3		
				المعصودة			
				[): الوثاثق	DEE	T) e is	
النوعية	جاهزيتها		مدی توافرها		الوثيق	#	
5 4 3 2 1	ا متوسط عالى عالى	صعیف 🗍	نعم 🗌 لا 📄 لا ينطبق		طلب	1	
5 4 3 2 1	_ ]. متوسط _عالي	شعیف	نعم الاالينطبق	التصميم		2	
5 4 3 2 1	]. منوسط ]عالى	صعیف 🗍	نعم 📗 لا 🔝 لا ينطبق		المخط	3	
5 4 3 2 1	ا. متوسط عالى	صعیف 🗌	نعم   لا   لا ينطبق			4	
	ا. متوسع المحتي		ا اسم اے اور	Draw	Shop	4	
5	ا متو سط [عالي	□ ضعيف □	انعمالا الانتطنة	Diaw	العقد العقد	5	



5 4 3 2 1 1	ضعيف متوسطعالي	🗌 نعم 📗 لا 🔛 لا ينطبق	المواصفات	6
5 4 3 2 1 1	ضعيف متوسطعالي	🗌 نعم 📗 لا 🔝 لا ينطبق	BoQ	7
5 4 3 2 1	ضعيف متوسطعالي	🔃 نعم 🗌 لا 🔝 لا ينطبق	As Built	8
			Drawing	
5 4 3 2 1	_ ضعيف متوسطعالي	📗 نعم 📗 لا 🔝 لا ينطبق	تقارير التقدم	9
			الشهري	
5 4 3 2 1	□ ضعيف □. متوسط □عالي	🗌 نعم 📗 لا 🔝 لا ينطبق	وثائث الأوامر	10
			التغييرية ان وجدت	
5 4 3 2 1 1	ضعيف متوسطعالي	🗌 نعم 📗 لا 🔛 لا ينطبق	التقرير النهائي	11
5 4 3 2 1	ضعيف متوسطعالي	🗌 نعم 📗 لا 🔝 لا ينطبق	تقارير الاختبارات	12
5 4 3 2 1 1	ضعيف متوسطعالي	🗌 نعم 📗 لا 🔛 لا ينطبق	جدول المشروع	13
5 4 3 2 1	🔃 ضعيف 🔝 متوسط 🔃 عالي	🗌 نعم 📗 لا 🔛 لا ينطبق	تسجيلات الدفع	14
5 4 3 2 1 1	ضعيف متوسطعالي	🗌 نعم 📗 لا 🔛 لا ينطبق	المراسلات	51
5 4 3 2 1 1	ضعيف متوسطعالي	🗌 نعم 📗 لا 🔝 لا ينطبق	شهادات الدفع	16
5 4 3 2 1 1	_ ضعيف متوسطعالي	🗌 نعم 📗 لا 🔝 لا ينطبق	تحليل التكاليف	17
			و الفو ائد	
5 4 3 2 1	ضعيف متوسطعالمي	📗 نعم 📗 لا 🔛 لا ينطبق	/ ESMP المستند	18
			الإجراءات	
5 4 3 2 1	🔃 ضعيف 📄 متوسط 🔃 عالي	📗 نعم 📗 لا 🔝 لا ينطبق	Soft Copy	19
			توافر	

						ع (G): القضايا المؤسساتية	جز			
<u></u>	4	<u></u> 3	2		هل تم تحديد كل الأدوار والمسؤوليات؟					
<u></u>	4	☐ 3	2	<u> </u>	هل نم تحديد جميع أصحاب المصلحة؟ "البلدية ، المقاول ، صندوق تطوير وإقراض البلديات ، الاستشاري ، المستفيدين					
<u></u>	4	<u>3</u>	2		مل بالمشروع؟	إلخ" هل التزم جميع أصحاب المصلحة ومجموعات الع	3			
<u></u>	4	<u></u> 3	2		البلدية		4			
<u></u>	4	3	2		الاستشاري					
<u></u>	4	<u></u> 3	2		MDLF	نقييم مستوى إشراك أصحاب المصلحة				
<u></u>	<u> </u>	<u>3</u>	2	1	وزارة الحكم المحلي					



11 5	العلاقات بين موظفي البلدية والمقاولين	<u> </u>			∐ 4	<u></u> 5
6	العلاقات بين الاستشاري وموظفي البلدية		2	<u></u> 3	4	<u></u>
11 7	العلاقات بين الاستشاري وموظفي المقاول		2	<u></u> 3	4	<u></u>
8	هل توجد مشاكل / تحديات يواجهها أصحاب المصلحة؟		2	<u></u>	4	<u></u>
	48.75 = 1	وضح:				
جزء	(H): المشتريات					
1	تم تنفيذ عملية شراء المشروع وفقًا للخطة الزمنية.	1	2	<u></u> 3	4	<u></u>
2	تم تسجيل المواد التي تم شراؤها بشكل صحيح في		$\square$ 2	□ 3	□ 4	□ 5
_	إجراءات حسابات البلديات و / أو MDLF.					
3	تم تسليم المواد التي تم شراؤها بشكل صحيح إلى الموقع		2	☐ 3	<u> </u>	<u></u>
4	وتثبيتها بشكل صحيح في الموقع.					
4	تقييم فعالية عملية الشراء التي تعتمدها البلدية	1	2	3	4	<u></u>
	(I): إجراءات مراقبة الجودة					
1	هل كانت هناك إجراءات إدارية متبعة أثناء التنفيذ؟		2	<u>3</u>	4	5
2	هل هناك خطة جودة (QCQA) تغطي جميع السياسات		$\square$ 2	□ 3	<u> </u>	□ 5
2	والإرشادات والإجراءات؟					
3	تدابير مراقبة الجودة المعتمدة في الموقع	1	2	<u>3</u>	4	<u>5</u>
4	التأخير ات مطالبات	1	2	3	4	<u>5</u>
5	·		2	3	4	<u>5</u>
6	كان التقدم المادي / يتماشى مع التقدم المالي	1	2	3		<u>5</u>
7	أداء المقاول خلال العقد	1	2	3	<u> </u>	5
8	هل تعقد اجتماعات لمتابعة حالة المشروع الداخلية على فترات ؟	1	2	☐ 3	4	<u></u>
	ا سرت					
	(J): اجراءات السلامة					
1	تقييم اجراءات السلامة في وثائق العقد والممارسات	<b>□</b> 1		□ 2		
	الميدانية أثناء البناء (على أساس مهندسي الموقع البلدي والمشرفين الإقليميين للوزارة).	<u>1</u>	<u></u>	<u></u>	<u></u>	<u></u> 5
2	والمسريون م ميمين للوراره). قدم المقاول تدابير وأدوات السلامة اللازمة وفقاً					
	لمتطلبات العقد		$\square$ 2	☐ 3	4	□ 5



3	الامتتال ومتابعه إجراءات الس	سلامه انتاء البناء		يوجد	_ لايوج		
4	جودة تدابير السلامة			2	<u>3</u>	4	<u></u>
5	هل هناك أي حوادث مرصود	دة		نعم [	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
جزء	(K): الامتثال البيئي والاجا	تماع <i>ي</i>					
1	يتم إدراج التدابير البيئية والا.	جتماعية في العقد		2	<u>3</u>	4	<u></u>
2	موظفو البلدية على دراية بـ إ المتابعة	EMSF ولديهم القدرة على		2	<u></u> 3	<u> </u>	<u></u>
3	شارك المجتمع في جميع المر و التشغيل).	راحل (التخطيط والبناء		2	<u>3</u>	<u>4</u>	<u></u>
4	المجتمع راضي			2	<u>3</u>	4	<u></u>
5	تسبب المشروع في تأثيرات . التنفيذ	على الموارد البيئية أثناء		2	<u>3</u>	4	<u></u>
6	تسبب المشروع في تأثيرات . التشغيل	على الموارد البيئية أثناء		2	<u>3</u>	4	<u></u>
7	تسبب المشروع في آثار للظر والاقتصادية أثناء التنفيذ	وف الاجتماعية		2	<u>3</u>	4	<u></u>
8	تسبب المشروع في أثار للظر والاقتصادية أثناء التشغيل	روف الاجتماعية		2	<u></u> 3	4	<u></u>
جزء	(L): التشغيل والصيانة						
1	هل يتم تنفيذ أنواع الصيانة التالية على أساس مخطط	أ. الصيانة الوقائية		2	<u>3</u>	4	<u></u>
		ب. الصيانة التصحيحية		2	<u>3</u>	<u> </u>	<u></u>
		ج. صيانة دورية	1	2	<u>3</u>	4	<u></u>
2	هل معايير الصيانة محددة وم مشاكل لكل مستخدم ؛ عيوب وظيفة ؛ متوسط الوقت لإصلا لإصلاح العيب)	لكل منطَّقة ؛ عيوب لكل	_1	2	<u></u> 3	<u>4</u>	<u></u>
3	المعتمدين	م بموظفي التشغيل والصيانة		2	<u>3</u>	4	<u></u>
4	هل يحتفظ الطاقم بسجلات M	0 & N	1	$\square$ 2	<b>3</b>	$\overline{\Box}$ 4	<b>5</b>



<u> </u>	4	<u>3</u>	2		هل قطع الغيار والأدوات اللازمة لـ O & M متاحة؟	5
					كيف يتم تتبع أداء O & M وقياسه؟	6
					تعليقات اضافية	7
				قط)	(M): التوريدات والتخزين (خاص بمشاريع التوريد ف	جزء
<u> </u>	4	3	_ 2		التوريدات ذات أولوية عالية	1
<u> </u>	4	3	2		تضمن التوريدات استدامة الخدمات	2
□ 5	□ 4	□ 3	$\square$ 2	$\Box$ 1	التزمت عملية التوريد على باجراءات السلامة والتخزين	4
	<u> </u>				والتعامل مع المواد الخطرة	
<u></u>	4	<u>3</u>	2		تمتد التوريدات لأكثر من ستة أشهر	5
<u> </u>	4	3	2		هل تم تقديم شهادة المنشأ من قبل المورد	6
□ 5	<u> </u>	□ 3	$\square$ 2	$\Box$ 1	التوريدات لديها علامات السلامة والمعلومات ، ومرئية	7
	· .				للموظفين المعنيين	
<u> </u>	4	☐ 3	2		بشكل عام ، يتم تخزين المواد الموردة وفقًا لـ EMSP	8
					ت اضافية	تعليقاد
					تاجات الرئيسية / الإجراءات الموصى بها لزيارة الموقع	الاستنا



# Appendix 3 (Questionnaires with Experts #1) English version





# Civil Engineering Department

# Questionnaire for collecting weighting

# Data of Factors Affecting the Assess of Gaza Municipalities' Development Projects towards MDLF Quality

In fulfillment of MSC Thesis Requirement

Researcher: Sarah R. Rustom

Supervised By

Dr. Khaled Al Halaq

May, 2018



# Introduction

#### Dear Sir/madam

Evaluating projects is essential to measure the achievement of the desired goals and test the effectiveness and efficiency; we need to evaluate projects to transition from the judgments to more objective stage based on knowledge and scientific research. The aim of this survey is to present a new method for assessing the municipal development projects based on developing a quantifiable model to measure the extent to which municipalities comply with MDLF guidelines and standards as a case study

This questionnaire is required to be filled with exact relevant facts as much as possible.

All data included in this questionnaire will be used only for academic research and will be strictly confidential.

After all questionnaires are collected and analysed, interested participants of this study will be given feedback on the overall research results.

Thanks a lot for your cooperation



# Section I: Personal data: (Please put (X) on the appropriate answer)

1	Sex									
•	Male		Female							
)	Age									
2	Less than 30	30-40 years	40-50 years	Older than 50						
	years			years						
3	Educational qualifications									
7	☐ Diploma	Bachelor	Master	☐ PHD						
	Years of experience	related to Evaluation	1							
4.	Less than 5	5- Less than	10- Less than	15 years and						
	years	10 years 15 years		higher						
5.	Did you get any train	ning related to evalu	ation?							
	Yes		□No							

# Section II: Company profile

	Age of organization										
6.	Less than 5	5-10 years	□10-15 years	15 years and higher							
	Number of projects implemented during the last five years										
7.	Less than 10 projects	☐10-Less than 15projects	15-Less than 20 projects	20 projects and higher							
0	Number of projec	ts implemented relate	d to evaluation during	the last five years							
8.	Less than 5 projects	5-Less than 10 projects	10-Less than 15 projects	15 projects and higher							

# Section III: Main Factors for Assessing Gaza Municipalities'

### **Development Projects**

The questionnaire will analyse according to The Analytical Hierarchy Process (AHP results of the comparison (for each factors pair) were described in term of integer values from 1 to 9 where:

1=Equal importance, 3= Moderate importance, 5= Strong importance, 7= Very strong importance, 9= Extreme importance, (2, 4, 6, 8= Intermediate values between adjacent scale values)

#### For Example:

Items	A	В	С	D	Е	F	G	Н	I	J	K	L	M
A		A 5											

The team decide which is better (A or B) in this case A wins by 5points which means A is strong important than B

Note: You need only fill half of the Matrix (above the diagonal)

Which factor is more important relative to other factor in each pairwise comparison and by how much? (Write the number of fraction representing the intensity of importance



. Which factor is more important relative to other factor in each pairwise comparison and by how much? (Write the number of fraction representing the intensity of importance

ID	Description
A	Feasibility and Cost Effectiveness.
В	Appropriateness and soundness
С	Objectives and Outcomes verification
D	Documents Availability
Е	Documents Readiness
F	Documents Quality
G	Institutional Issues.
Н	Procurement Procedures
I	Quality Control Procedures
J	Safety Measures and Procedures
K	Environmental and Social Compliance.
L	Operation and Maintenance.
M	Supplies handling and Storage

Items	A	В	С	D	Е	F	G	Н	I	J	K	L	M
Itelis	A	В		<u>п</u>		I -	0	11	1	,			IVI
A													
В													
C													
D													
Е													
F													
G													
Н													
I													
J													
K													
L													
M													



Section IV: Minimum threshold to assess the acceptance of the individual evaluation factors.

To assess the minimum acceptable percentage of each evaluating factor (bench mark) over which each project will be tested, please choose the appropriate level Poor, Mid or High.

These scores will also be used to measure the minimum threshold for success of the whole program at the end.

Example: if the total score of the factor "Feasibility and Cost Effectiveness" = 65% in the program evaluation, and your score for "Less than 60-70%" is Poor, then the program is evaluated Poor.

#		Less than	60%-	70%-	80%-	90%-
	Description	60%	70%	80%	90%	100%
1	Feasibility and Cost Effectiveness.					
2	Appropriateness and soundness					
3	Objectives and Outcomes verification					
4	Documents Availability					
5	Documents Readiness					
6	Documents Quality					
7	Institutional Issues.					
8	Procurement Procedures					
9	Quality Control Procedures					
10	Safety Measures and Procedures					
11	Environmental and Social Compliance.					
12	Operation and Maintenance.					
13	Supplies handling and Storage					



# Appendix 4 (Questionnaires with Experts #2) Arabic version





قسم الهندسة المدنية

# استبيان لجمع الأوزان

# العوامل المؤثرة في تقييم مشاريع بلديات حسب معايير صندوق تطوير وإقراض البلديات

وفقا لمتطلبات أطروحة الماجستير

الباحثة: سارة رستم

المشرف / د.خالد الحلاق

مايو /2018



### المقدمة

عزيزي السيد/ة

تقييم المشاريع أمر ضروري لقياس تحقيق الأهداف المرجوة واختبار الفعالية والكفاءة ؛ نحن بحاجة لتقييم المشاريع للانتقال من الأحكام إلى مرحلة أكثر موضوعية تقوم على المعرفة والبحث العلمي. الهدف من هذا المسح هو تقديم طريقة جديدة لتقييم مشاريع البلدية على أساس تطوير نموذج قابل للقياس لقياس مدى امتثال البلديات لمبادئ ومعايير صندوق تطوير وإقراض البلديات (MDLF) كدراسة حالة

يجب ملء هذا الاستبيان بالوقائع ذات الصلة الدقيقة قدر الإمكان.

سيتم استخدام جميع البيانات الواردة في هذا الاستبيان فقط للبحث الأكاديمي وستكون سرية للغاية.

بعد تجميع جميع الاستبيانات وتحليلها ، سيتم إعطاء المشاركين المهتمين في هذه الدراسة تغذية راجعة حول نتائج الأبحاث العامة.

شكرا جزيلا لتعاونكم



# القسم الأول: البيانات الشخصية: (يرجى وضع (/) على الإجابة المناسبة)

)   1	الجنس			
	نکر		أنثى	
2	العمر			
]	أقل من 30 سنة	40-30 سنة	50-40 سنة	أكثر من 50 سنة
	المؤهلات العلمية			
$\begin{bmatrix} 3 \end{bmatrix}$	دبلوم	بكالوريس	ماجستير	دكتوراة/اكثر
	عدد سنوات الخبرة في مجال	التقيم		
] 4.	أقل من 5 سنوات	10-5 سنة	15-10 سنة	اً أكثر من 15 سنة
5.	هل تلقيت اي برنامج تدريبي	, في مجال التقييم		
	نعم		7	

# القسم الثاني: بيانات حول المنظمة

			عمر المنظمة بالسنين	6.
ا أكثر من 15 سنة	15-10 سنة	10-5 سنة	أقل من 5 سنوات	
		ل السنوات الخمس الماضية	عدد المشاريع المنفذه خلا	
ا أكثر من 20 مشروع	20-15 مشروع	15-10 مشروع	اً أقل من 10 مشاريع	7.
	الخمس الماضية	متعلقة بالتقييم خلال السنوات	عدد المشاريع المنفذه وال	
اً أكثر من 20 مشروع	20-15 مشروع	15-10 مشروع	اً أقل من 10 مشاريع	8.

### القسم الثالث: العوامل الرئيسية لتقييم مشاريع بلديات غزة

سوف يقوم الاستبيان بتحليل وفقا لعملية التحليل الهرمي (تم توضيح نتائج AHP للمقارنة (لكل زوج من العوامل) من حيث القيم الصحيحة من 1 إلى 9 حيث (1 = 1 أهمية متساوية ،1 = 1 أهمية معتدلة ،1 = 1 قوية ،1 = 1 أهمية قوية جدًا ،1 = 1 أهمية قصوى ،1 = 1 أهمية قوية جدًا ،1 = 1 أهمية قصوى ،1 = 1 أهمية قوية جدًا ،1 = 1 أهمية قصوى ،1 = 1 أهمية قوية بين قيم المقياس المجاور)

#### فمثلا:

Items	A	В	С	D	E	F	G	Н	I	J	K	L	M
A		A 5								/			

يقرر الفريق أيهما أفضل (A أو B) في هذه الحالة A اعلى من B ب 5 نقاط وهذا يعني أن A مهم للغاية من B

ملاحظة: ما عليك سوى ملء نصف المصفوفة (فوق القطر)



. ما العامل الأكثر أهمية بالنسبة إلى عامل آخر في كل مقارنة وكمية؟ (اكتب عدد الكسر الذي يمثل كثافة الأهمية)

الوصف	الرمز
الجدوى وفعالية التكلفة.	A
الملاءمة والصلاحية	В
الأهداف والتحقق من النتائج	C
توافر الوثائق	D
جاهزية الوثائق	E
جودة المستندات	F
القضايا المؤسسية.	G
إجراءات الشراء	Н
إجراءات مراقبة الجودة	I
إجراءات السلامة	J
الامتثال البيئي والاجتماعي.	K
التشغيل والصيانة.	L
التعامل مع التوريدات والتخزين	M

	1	1	I	1	1			ı	I			1	1
Items	A	В	С	D	Е	F	G	Н	I	J	K	L	M
A													
В													
C													
D													
Е													
F													
G													
Н													
Ι													
J													
K													
L													
M													

# القسم الرابع: الحد الأدنى لتقييم قبول عوامل التقييم كل على حدة.

لتقييم الحد الأدنى المقبول من كل عامل مؤثر في عملية التقييم التي سيتم اختبار كل مشروع عليها ، يرجى اختيار المستوى المناسب ضعيف أو متوسط أو مرتفع. سيتم استخدام هذه الدرجات لقياس الحد الأدنى لنجاح البرنامج بأكمله في النهاية.

مثال: إذا كانت الدرجة الكلية للعامل "الجدوى وفعالية التكلفة" = 65٪ في تقييم البرنامج ، وكانت درجتك "أقل من 60-70٪" ضعيفة ، فسيتم تقييم البرنامج ضعيفًا.

90%-	80%-	70%-	60%-	اقل من 60 %		
100%	90%	80%	70%		الوصف	#
					الجدوى وفعالية التكلفة.	1
					الملاءمة والصلاحية	2
					الأهداف والتحقق من النتائج	3
					توافر الوثائق	4
					جاهزية الوثائق	5
					جودة المستندات	6
					القضايا المؤسسية.	7
					إجراءات الشراء	8
					إجراءات مراقبة الجودة	9
					إجراءات السلامة	10
					الامتثال البيئي والاجتماعي.	11
					التشغيل والصيانة.	12
					التعامل مع التوريدات والتخزين	13

