

# Final Evaluation and Beneficiaries Impact Assessment of Strengthening the Resilience of Gaza Vulnerable Communities (SRGVC)



Joint Venture ASSAHEL-ALMADINA Consultants

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## Table of Contents

|                                                                                             |           |
|---------------------------------------------------------------------------------------------|-----------|
| <b>1. INTRODUCTION</b>                                                                      | <b>I</b>  |
| 1.1 BACKGROUND                                                                              | 1         |
| 1.2 PROJECT OVERVIEW                                                                        | 2         |
| 1.3 EVALUATION SCOPE AND OBJECTIVES                                                         | 6         |
| 1.4 METHODOLOGY                                                                             | 7         |
| 1.4.1 Desk Review                                                                           | 7         |
| 1.4.2 Field Work                                                                            | 8         |
| 1.4.1 Beneficiaries Focus Group Discussions                                                 | 9         |
| <b>2. OVERALL EVALUATION</b>                                                                | <b>20</b> |
| 2.1 PROBLEMS AND NEEDS (RELEVANCE)                                                          | 20        |
| 2.1.1 Relevance to the National policy Agenda:                                              | 21        |
| 2.1.2 Responsive/Relevant to the Needs of the vulnerable Communities:                       | 21        |
| 2.1.3 Relevance/Responsiveness of Particular Activities and Areas                           | 26        |
| 2.1.4 Relevance of Communities Selection:                                                   | 26        |
| 2.2 ACHIEVEMENT OF PURPOSE (EFFECTIVENESS)                                                  | 27        |
| 2.2.1 Have the Projects Objectives been met?                                                | 27        |
| 2.2.2 Efficiency of introducing solar energy at vulnerable communities in Gaza              | 29        |
| 2.2.3 Equity and Gender Aspects                                                             | 30        |
| 2.3 SOUND MANAGEMENT AND VALUE FOR MONEY (EFFICIENCY)                                       | 31        |
| 2.3.1 Implementation of Project Activities                                                  | 31        |
| 2.3.2 Coordination between MDLF and Municipalities                                          | 32        |
| 2.3.3 Cost Effectiveness                                                                    | 33        |
| 2.3.4 Monitoring and Evaluation                                                             | 33        |
| 2.3.5 Decision-making Rules and Procedures                                                  | 33        |
| 2.4 ACHIEVEMENT OF WIDER EFFECTS (IMPACT)                                                   | 34        |
| 2.4.1 Overall Impact of SRGVC Interventions                                                 | 34        |
| 2.4.2 Impacts of Developing Roads Intersections using Solar Street Lighting and Landscaping | 35        |
| 2.4.3 Impacts of Providing Solar Energy for Water Wells                                     | 36        |
| 2.4.4 Impacts of Establishing Municipal Brackish Water RO Desalination Plants               | 36        |
| 2.4.5 Impacts of Establishing Municipal Public Building                                     | 37        |
| 2.5 LIKELY CONTINUATION OF ACHIEVED RESULTS (SUSTAINABILITY):                               | 38        |
| 2.6 VISIBILITY OF THE PROJECT AND COMMUNICATIONS MATERIAL                                   | 40        |
| <b>3. BENEFICIARIES IMPACT ASSESSMENT</b>                                                   | <b>43</b> |
| 3.1 IMPROVING DOMESTIC WATER SUPPLY AND SAFE DRINKING WATER                                 | 43        |
| 3.2 ASSESSMENT OF RELEVANCE OF WATER INTERVENTIONS TO THE NEEDS                             | 45        |
| 3.3 ASSESSMENT OF THE BENEFICIARIES' SATISFACTION ON DELIVERED OUTPUTS                      | 50        |
| 3.4 ASSESSMENT OF BENEFICIARIES' PERCEPTION                                                 | 50        |
| 3.4.1 Beneficiaries' interaction between municipalities and citizens                        | 51        |
| 3.4.2 Assessment of consultation with the community in project selection                    | 52        |
| 3.5 DEVELOPING ROAD INTERSECTIONS USING SOLAR STREET LIGHTING AND LANDSCAPING               | 54        |
| 3.5.1 Relevance of developing road intersections to the need of local communities           | 57        |
| 3.5.2 Beneficiaries' satisfaction of developing road intersections                          | 58        |
| 3.6 PUBLIC PARTICIPATION AT DEVELOPING ROAD INTERSECTION                                    | 59        |
| 3.7 BENEFICIARIES' IMPACT OF DEVELOPING ROAD INTERSECTIONS                                  | 60        |
| 3.7.1 Assessment of beneficiaries' perception of other interventions                        | 60        |

|                     |                                                                                       |           |
|---------------------|---------------------------------------------------------------------------------------|-----------|
| 3.7.2               | Contractors and beneficiaries' perception regarding the efficiency on .....           | 60        |
| 3.8                 | IMPLEMENTATION OF ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN. ....                      | 62        |
| 3.9                 | PERCEIVED IMPACT ON ESTABLISHING PUBLIC BUILDINGS .....                               | 63        |
| 3.9.1               | Relevance of public building to the needs of vulnerable communities .....             | 63        |
| 3.9.2               | Assessment of beneficiaries' perception on their participation .....                  | 64        |
| 3.9.3               | Anticipated Impact on establishing multi-purpose hall on Khuzaa residents ....        | 64        |
| 3.9.4               | Anticipated satisfaction of establishing multi-purpose hall .....                     | 65        |
| 3.9.5               | Anticipated public participation of establishing multi-purpose hall .....             | 65        |
| <b>4.</b>           | <b>CONCLUSION AND RECOMMENDATIONS .....</b>                                           | <b>66</b> |
| 4.1                 | CONCLUSION.....                                                                       | 66        |
| 4.2                 | RECOMMENDATIONS .....                                                                 | 68        |
| <b>ANNEXES.....</b> | <b>.....</b>                                                                          | <b>1</b>  |
| ANNEX 1:            | LIST OF PERSONS CONSULTED/INTERVIEWED .....                                           | 2         |
| ANNEX 2:            | LIST OF FOCUS GROUPS ATTENDANCE.....                                                  | 3         |
| ANNEX 3:            | HOUSEHOLD QUESTIONNAIRES (WATER PROJECTS) .....                                       | 5         |
| ANNEX 4:            | HOUSEHOLD QUESTIONNAIRES (ROAD INTERSECTIONS LIGHTING PROJECTS).....                  | 6         |
| ANNEX 5:            | HOUSEHOLD QUESTIONNAIRES (PUBLIC BUILDING PROJECTS).....                              | 7         |
| ANNEX 6:            | GUIDING QUESTIONS FOR INTERVIEWING MDLF SENIOR STAFF.....                             | 8         |
| ANNEX 7:            | GUIDING QUESTIONS FOR INTERVIEWING MUNICIPAL SENIOR STAFF (MAYER OR HIS DEPUTY) ..... | 9         |
| ANNEX 8:            | GUIDING QUESTIONS FOR INTERVIEWING MUNICIPAL ENGINEERS.....                           | 10        |
| ANNEX 9:            | GUIDING QUESTIONS FOR INTERVIEWING RELEVANT STAFF AT CMWU .....                       | 11        |
| ANNEX 10:           | GUIDING QUESTIONS FOR INTERVIEWING CONTRACTORS WHO IMPLEMENTED THE PROJECTS.....      | 12        |
| ANNEX 11:           | FOCUS GROUPS QUESTIONS .....                                                          | 13        |
| ANNEX 12:           | SAMPLE OF LABORATORY TEST FOR WATER QUALITY AFTER THE INTERVENTIONS .....             | 14        |

## List of Figures

|                                                                                           |    |
|-------------------------------------------------------------------------------------------|----|
| Figure 1: Process for assessment and reporting on capacity building .....                 | 2  |
| Figure 2: Capacity building plan for public participation .....                           | 3  |
| Figure 3: Status and Distribution of SRGVC intervention .....                             | 4  |
| Figure 4: Methodology for Beneficiaries impact assessment .....                           | 7  |
| Figure 5: Interviews with stakeholders .....                                              | 9  |
| Figure 6: Photos of focus groups with Community accountability committees.....            | 10 |
| Figure 7: Preparation process for each focus group .....                                  | 12 |
| Figure 8: Photos for data collection through questionnaire.....                           | 15 |
| Figure 9: Photos for the field visits to the project sites .....                          | 16 |
| Figure 10: Spatial distribution of selected projects for BIA.....                         | 17 |
| Figure 11: Streetlights at Abasan Al Jadedda during night .....                           | 35 |
| Figure 12: Providing solar energy for water wells.....                                    | 36 |
| Figure 13: Establishing brackish water RO desalination plants with PV System.....         | 37 |
| Figure 14: Establishing municipal public building at Khuzaa .....                         | 38 |
| Figure 15: Visibility of the interventions .....                                          | 41 |
| Figure 16: Distribution of questionnaire respondents by Gender .....                      | 44 |
| Figure 17: Distribution of questionnaire respondents by location .....                    | 45 |
| Figure 18: Priority selection process .....                                               | 45 |
| Figure 19: Source of domestic water at vulnerable communities.....                        | 46 |
| Figure 20: Frequency of operating water wells at vulnerable communities.....              | 47 |
| Figure 21: Source of drinking water at vulnerable communities.....                        | 47 |
| Figure 22: Quality of drinking water at vulnerable communities .....                      | 48 |
| Figure 23: The different ways of public engagement at water interventions .....           | 48 |
| Figure 24: Public participation at planning process at water interventions.....           | 49 |
| Figure 25: Public participation at implementation phase of the interventions.....         | 49 |
| Figure 26: Photos for meetings of social accountability committee members .....           | 50 |
| Figure 27: Photos for meetings of social accountability committee members .....           | 50 |
| Figure 28: Gender of respondent to the questionnaire about street lighting .....          | 56 |
| Figure 29: Respondents to the questionnaire about street lighting.....                    | 57 |
| Figure 30: The existence of streetlights before GIZ intervention.....                     | 57 |
| Figure 31: The quality of street lighting before GIZ intervention.....                    | 57 |
| Figure 32: Street lighting before GIZ intervention.....                                   | 58 |
| Figure 33: Level of satisfaction on street lighting projects.....                         | 58 |
| Figure 34: Public participation at the planning stage of GIZ intervention .....           | 59 |
| Figure 35: Public participation at the implementation stage of GIZ intervention.....      | 60 |
| Figure 36: Public participation at the implementation stage of GIZ intervention.....      | 60 |
| Figure 37: Relevance of establishing public building to the community needs.....          | 63 |
| Figure 38: The need for establishing public building to the community needs.....          | 64 |
| Figure 39: Public participation in planning and implementation of public building .....   | 64 |
| Figure 40: Anticipated impacts of public building at Khuzaa.....                          | 64 |
| Figure 41: Level of satisfaction of local community on establishing public building ..... | 65 |
| Figure 42: Impact of establishing multi-purpose hall on public participation .....        | 65 |

## List of Tables

|                                                                                      |    |
|--------------------------------------------------------------------------------------|----|
| Table 1: Details of the implemented projects and the target communities.....         | 5  |
| Table 2: Field work tools and objectives .....                                       | 8  |
| Table 3: Focus groups meetings .....                                                 | 10 |
| Table 4: Number of questionnaires distributed to beneficiaries .....                 | 13 |
| Table 5: Geographical distribution of questionnaires.....                            | 14 |
| Table 6: Sample selection among the implemented projects.....                        | 18 |
| Table 7: Relevance of the water projects to the vulnerable communities .....         | 23 |
| Table 8: Relevance of Road intersections using Solar Street lighting .....           | 24 |
| Table 9: Relevance of establishment public buildings at vulnerable communities....   | 25 |
| Table 10: Effectiveness of Achieved Objectives of SRGVC .....                        | 28 |
| Table 11: Solar Energy Efficiency.....                                               | 30 |
| Table 12: Ownership and sustainability means.....                                    | 39 |
| Table 13: Visibility of GIZ's implemented interventions.....                         | 40 |
| Table 14: Water interventions under SRGVC .....                                      | 43 |
| Table 15: Number of beneficiary questionnaires .....                                 | 44 |
| Table 16: Contracts with local companies for implementation of SRGVC projects ....   | 51 |
| Table 17: Interventions of road intersections using solar energy and landscaping ... | 55 |
| Table 18: list of contracts for Development of roads intersections .....             | 61 |
| Table 19: List of established public buildings under SRGVC .....                     | 63 |

**List of Abbreviations and Acronyms**

|       |                                                                     |
|-------|---------------------------------------------------------------------|
| BIA   | Beneficiaries Impact Assessment                                     |
| CMWU  | Coastal Municipalities Water Utility                                |
| FGs   | Focus Groups                                                        |
| GIZ   | Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH        |
| GVCDP | Gaza Vulnerable Communities' Development Project                    |
| KII   | Key Informative Interviews                                          |
| MDLF  | Municipal Development and Lending Fund                              |
| PWA   | Palestinian Water Authority                                         |
| PCBS  | Palestinian Central Bureau of Statistics                            |
| PCDCR | Palestinian Center for Democracy and Conflict Resolution            |
| RO    | Reverse Osmosis                                                     |
| SDC   | Swiss Agency for Development and Cooperation                        |
| SRGVC | Strengthening the Resilience of Gaza Vulnerable Communities         |
| UG    | Universal Group (the Project Consultant for Design and Supervision) |

## Executive Summary

Funded by the German Government through the GIZ, Municipal Development and Lending Fund (MDLF) in partnership with seven municipalities worked during 2019-2021 in response to the ever-increasing high demand for essential services among vulnerable communities in the Gaza Strip, MDLF has received an initial financing amount of 1,369,150.59 Euro from the German Government through GIZ towards the implementation of the Strengthening the Resilience of Gaza Vulnerable communities (SRGVC) interventions. The interventions are located under the context of strengthening the resilience of the population in Gaza, particularly the vulnerable communities that had been identified under Component 2 of the ongoing MDLF program entitled "Gaza Vulnerable communities' development Project (GVCDP)". These SRGVC interventions have further supported the accountable services delivery component (Component 1) of the same program by supporting the improvement of essential basic infrastructure using renewable energy and other relevant interventions. The SRGVC projects target empowering specific communities within smaller municipalities with vulnerable and marginal populations south of the Gaza; i.e. municipalities located in the southern part of the Middle Area, as well as the municipalities located in Khan Younis and Rafah Governorates, especially those located to the East of Salah Eddin Road. The implemented GIZ funded interventions included developing road intersections using solar street lighting and landscaping, providing solar energy for water wells, establishing containerized municipal brackish water RO desalination plants, and establishment of public buildings.

This final Beneficiaries impact assessment BIA of SRGVC projects was designed to provide an objective assessment of the project's performance, paying particular attention to the impact of the project's actions against its objectives. The BIA has identified key lessons learned and proposed practical recommendations for follow-up actions. The evaluation team was guided and supported by MDLF team. The BIA covered the seven municipalities targeted by this project.

Evaluators conducted field visits to the fourteen locations, where they conducted focus groups, interviews, and a quantitative survey of stakeholders and direct beneficiaries. In order to be as thorough and meticulous as possible, the evaluators supplemented the above-mentioned fieldwork with key informant interviews and a comprehensive document review.

### Main Findings:

**Relevance:** the SRGVC interventions has remained relevant to the needs of the vulnerable communities and targeted beneficiaries. Focus groups with beneficiaries

and stakeholders revealed that the project successfully addressed core issues that were identified by the baseline study of these communities (2019). The comprehensive approach of working with men and women at neighborhood committees ensured that the project remained relevant to specific needs and that each aspect of the project was integrated with GVCD activities to reach the desired objectives. Introducing solar energy projects to vulnerable areas suffering from shortage of electricity, lack of water supply and insufficient basic infrastructure facilities makes GIZ funded interventions as relevant to needs and priorities these areas. The evaluation team found that SRGVC is relevant to the Palestinian National policy Agenda (2017-2022) and National Development Plan that support the poor, marginalized and vulnerable communities with basic infrastructure such as road development, and enhancing water facilities for domestic uses.

**Effectiveness:** Regarding the project's structure, composition, and implementation methodology, the evaluators determined that the project was highly effective in achieving the desired results. Community members were given the chance to participate in planning and implementation of local interventions. In general, the implemented intervention such as introducing solar energy to road intersection, water wells, desalination, plants and public buildings energy were highly efficient in terms of implementation, cost, time are relevant to the section below. The evaluators have concluded that the project objectives were largely met differed slightly from area to area.

**Efficiency:** The overall efficiency of implemented activities – including developing road intersections using solar energy for Street lighting and landscaping, providing solar energy for water wells, establishing containerized municipal brackish water RO desalination plants, and establishment of public buildings have brought a positive change to their daily lives. The majority of implemented interventions are working efficiently with no diversion to the targeted efficiency. Limited number of interventions was in the final stage of completion, where the evaluators couldn't measure its efficiency.

Furthermore, the SRGVC interventions had a visible impact on local authorities and community members. The media campaigns were also highly successful in generating the desired impact.

**Sustainability:** Qualitative and quantitative data indicated that the project will have a lasting impact on the targeted beneficiaries. The evaluator considers the project's achievements substantial and believes that particular aspects of the project have established a sustainable impact.

**The beneficiaries' impact assessment (BIA)** showed that the development of road intersection by using solar energy for streetlights is relevant to the needs for all communities since the community members select this intervention as priority to

these community. Similarly, the development of water wells by using solar energy and establishing water desalination plants is a real need for these communities and helped the vulnerable communities to find safe drinking water and increased the water quantities from two times per week to four times per week.

The SRGVC interventions enhanced communication and public awareness among the local communities in social accountability and increased their participation in public life.

The beneficiaries' impact assessment (BIA) showed high beneficiaries' satisfaction on nature and the quality of the delivered outputs. It is found that there is high efficiency throughout the implementation. The team evaluated the beneficiaries' perceptions regarding the interaction between municipalities and their citizens and the transparency of the Municipal Councils in project identification and implementation. It was found that there is improvement in the relationship between municipalities and their citizens that helped the community members to monitor the municipal work and encouraged the transparency of the Municipal Councils.

Focus group discussion revealed that the level and nature of the consultation with the community regarding the selection of the subprojects was at satisfactory level and there is a feedback mechanism that used by the communities' representatives in order to increase the impact of public participation in decision making at municipal level.

Developing road intersections using solar energy and landscaping had clear impact on beneficiaries. This is represented by having streetlights all over the nights after years of darkness, increase safety at night especially for women and children, it also increased the working hours of the commercial activities, development of the existing small-scale business and encouraged new commercial activities to start.

It was noticed that there are active public participation and community engagement in the planning and implementation of the interventions. That leads to increase beneficiaries' perception of nature and the quality of the delivered outputs and involved directly in selection of the subprojects. The efficiency of implemented interventions mainly solar energy for streetlights and water wells was tangible and appreciated from the municipality and local communities.

The evaluation team recommended that more effort should be placed to implement renewable energy projects wherever possible and increase public awareness and participation in such projects. Focusing on vulnerable communities and marginalized people is recommended at all over Gaza Strip. It is recommended that implementing partners develop a simplified joint monitoring system that would enable feedback to be more frequently and efficiently collected and shared at all levels – during the implementation process.

# PART ONE

## INTRODUCTION TO EVALUATION OF SRGVC



## 1. INTRODUCTION

This section of the report provides a general background regarding the context of the project, the project objective, status and activities as well as the assignment scope and objectives, and the methodology followed by the consultant to achieve these objectives.

### 1.1 Background

In response to the ever-increasing high demand for essential services among vulnerable communities in the Gaza Strip, MDLF has received an initial financing in the amount of 1,369,150.59 Euro from the German Government through GlZ towards the implementation of the Strengthening the Resilience of Gaza Vulnerable communities (SRGVC) interventions.

The interventions are located under the context of strengthening the resilience of the population in Gaza, particularly the vulnerable communities that had been identified under Component 2 of the ongoing MDLF program entitled "Gaza Vulnerable communities' development Project (GVCDP). These SRGVC interventions have further supported the accountable services delivery component (Component 1) of the same program by supporting the improvement of essential basic infrastructure using renewable energy and other relevant interventions.

The SRGVC projects target empowering specific communities within smaller municipalities with vulnerable and marginal populations south of the Gaza city and Wadi Gaza; i.e., municipalities located in the southern part of the Middle Area, as well as the municipalities located in Khan Younis and Rafah Governorates, especially those located to the East of Salah Eddin Road.

Selection of vulnerable communities has followed clear criteria, which has been developed following the instructions and guidance provided in the Baseline Assessment<sup>1</sup>. The selection has also referred to the assessment of the infrastructure services by PCBS in 2017, in addition to field visits and discussion among MDLF staff and municipalities' staff.

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<sup>1</sup> EMCC (2019) Baseline study; Documentation and Analysis of Vulnerability of Municipal Services in Target Areas in Gaza Strip

## 1.2 Project Overview

The particular objective of the SRGVC intervention is "to improve equal access to basic services for up to 24 vulnerable communities through the implementation of a number of small-scale infrastructure projects giving a preference to the nexus of renewable energy, water, and agriculture (renewable energy, water, sewage, solid waste, and public health, drainage, playgrounds, etc.)", noting that the use of renewable energy was considered as a priority intervention area.

The 24 vulnerable communities, with a total population of 191,000 inhabitants, are located within the boundaries of seven municipalities, namely the municipalities of Al Buraij, Al Qarara, Abasan Al Jadeda, Khuzaa, Al Shoka, Al Naser and Rafah.



At the end of assessment phase, PCDCR was able to identify 40 vulnerable communities in the seven municipalities merged into 24 communities and identify the need assessment for civic participation gender sensitive responsiveness, and vulnerable groups' inclusion:

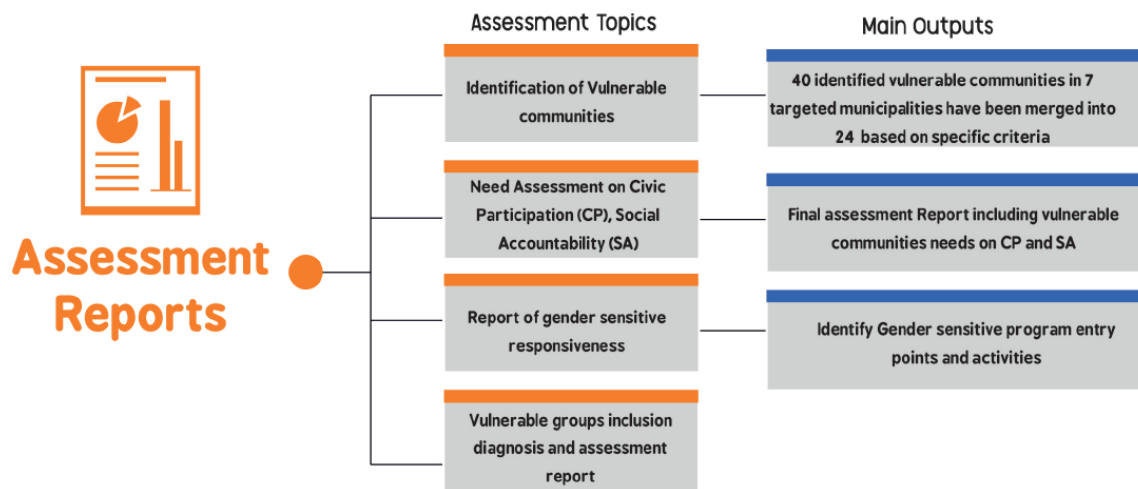


Figure 1: Process for assessment and reporting on capacity building of local communities

- 286 citizens (54% women) had engaged in civil participation and social accountability trainings.
- 57 social committee members elected to representing the vulnerable communities.
- 52 active citizen trained as Civic participation and Social accountability ambassadors through TOT advanced training.

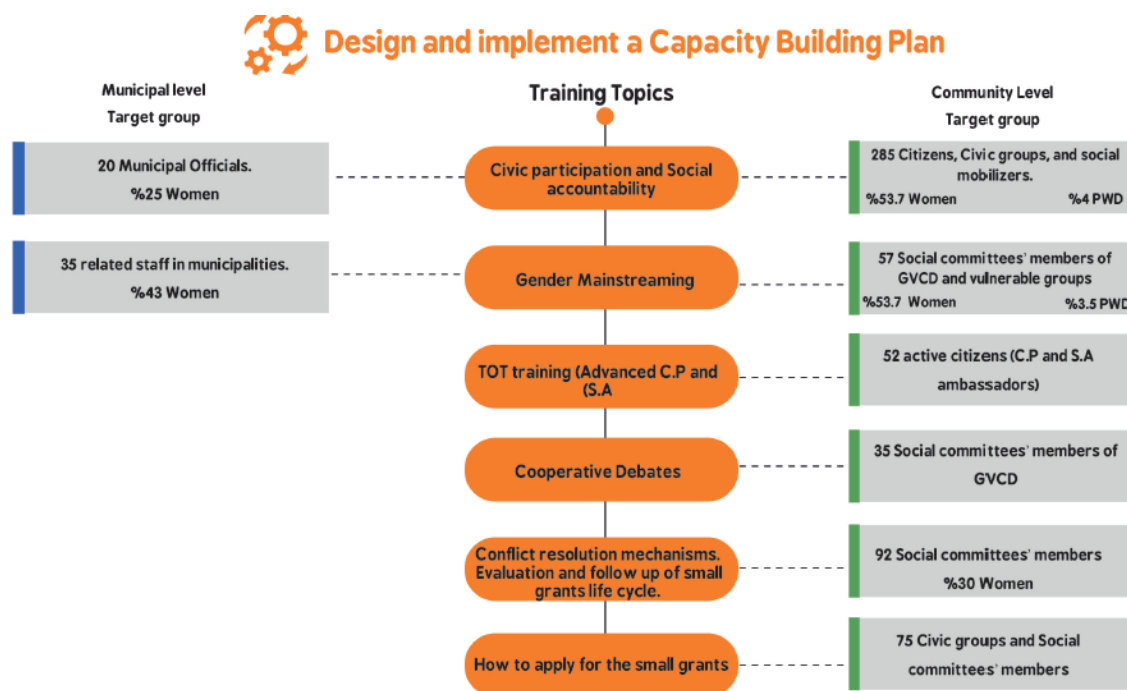


Figure 2: Capacity building plan for public participation

Fourteen projects have been implemented under the SRGVC interventions these projects can be classified under four main categories/lots as follows:

- (6 interventions) Development of roads intersection using solar streets lighting and landscaping.
- (3 interventions) Provide solar energy for water wells.
- (3 interventions) Establishment of the desalinating plant with PV system.
- (2 interventions) Establishment of public facilities and community cultural youth centers.

The implementation status of these projects as well as their cost and distribution along the target municipalities are illustrated in Figure 3.

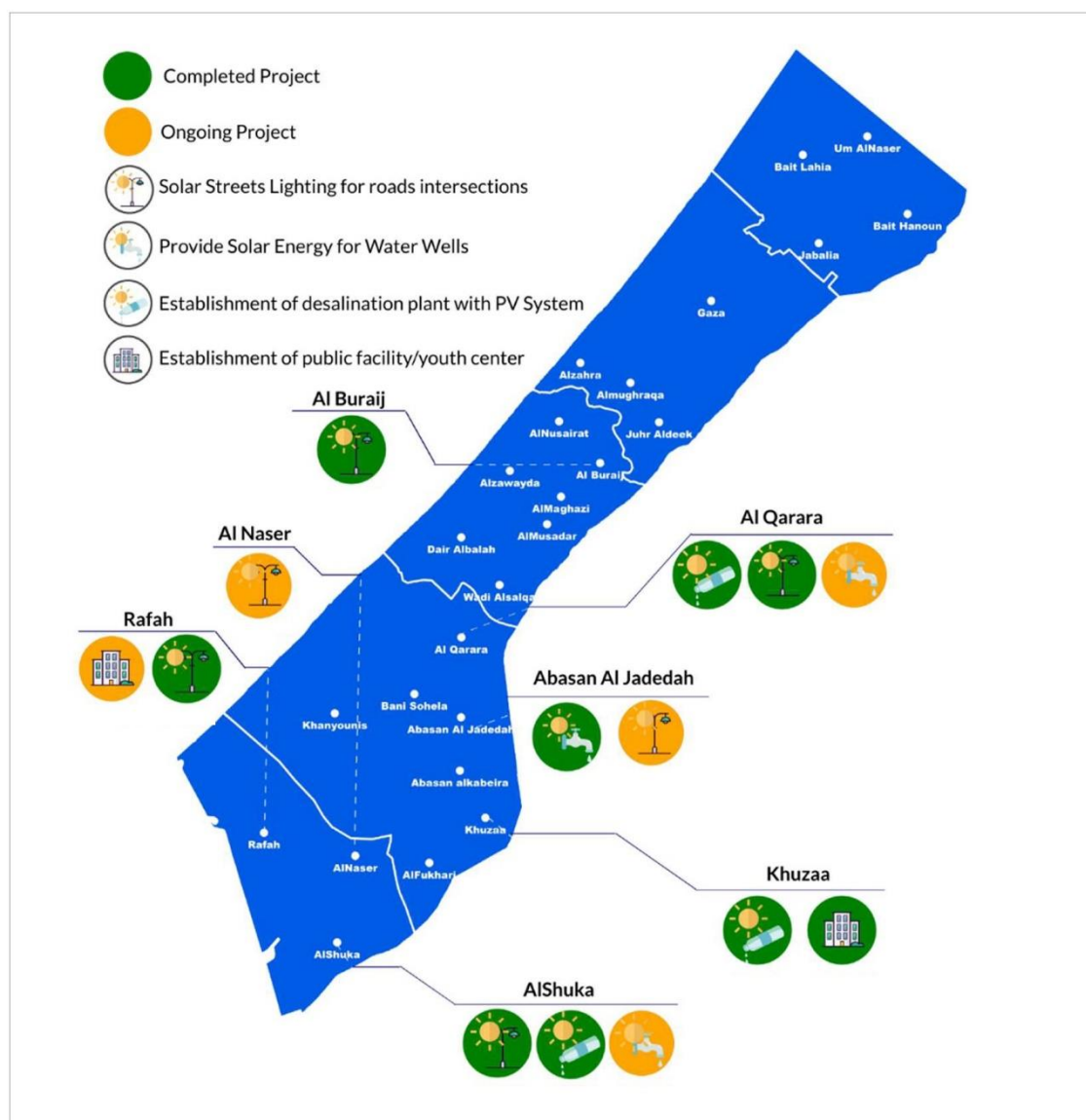


Figure 3: Status and Distribution of GIZ-funded Projects under the SRGVC intervention

Further details regarding the name of the projects and the target communities at each municipality are provided in Table 1.

Table 1: Details of the implemented projects and the target communities

| Municipality      | Target Community                                                                               | Direct Beneficiaries | Name of the project                                                                                                                                                   |
|-------------------|------------------------------------------------------------------------------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Al Buraij         | Magbola, Alsa'ayda, S'od, Abu-Medain, Al-Tal Al-Akhdar                                         | 8,000                | Development of roads intersections using solar street lighting and landscaping                                                                                        |
| Al Qarara         | Al-Sreaj, Al-Ma'ari, Abu Alhana, & Sheakh Hmood, Abu-Fayad, Abu-Haddaf, Al-Astal & Abu-Gomeaza | 26,000               | Development of roads intersections using solar street lighting and landscaping                                                                                        |
|                   |                                                                                                |                      | Providing solar energy for water wells - Aljeia well                                                                                                                  |
|                   |                                                                                                |                      | 48 m <sup>3</sup> /day containerized municipal brackish water RO desalination plants                                                                                  |
| Abasan Al Jadedda | Al-Sahaba & Wosta, Alshoroq, Al-N'eam & Redwan                                                 | 18,500               | Development of roads intersections using solar street lighting and landscaping                                                                                        |
|                   |                                                                                                |                      | Providing solar energy for water wells - Eastern well                                                                                                                 |
| Khuzaa            | Al-Najar, Sharq Al-Madaris, Abu-Rok & Abu-Ali                                                  | 9,000                | Establishment of one desalination plant with PV system in Abu Ali and Abu Rock (48 m <sup>3</sup> /day containerized municipal brackish water RO desalination plants) |
|                   |                                                                                                |                      | Establishment of a multipurpose Hall and development of the existing cultural center in Abu Ali and Abu Rock                                                          |
| Al Naser          | Al-Sh'ot, Thawabta & Al-Hosain, Abu-Mo'amer, Abdean & Al-Burj                                  | 10,000               | Development of roads intersections using solar street lighting and landscaping                                                                                        |
| Al Shoka          | Al-Safa, Mosab & Al-Taqwa, Abu-Loli & Ribat, Al-Sohada Village                                 | 23,000               | Development of roads intersections using solar street lighting and landscaping                                                                                        |
|                   |                                                                                                |                      | Providing solar energy for water wells - Malaysian well                                                                                                               |
|                   |                                                                                                |                      | 48 m <sup>3</sup> /day containerized municipal brackish water RO desalination plants                                                                                  |
| Rafah             | AL-Barazeal, Khrbit Al-Adas, Amer project, Musabih                                             | 22,000               | Development of roads intersections using solar street lighting and landscaping                                                                                        |
|                   |                                                                                                |                      | Establishment of a youth center, playground for volley-basketball. for Khirbet al-Adas                                                                                |

### 1.3 Evaluation Scope and Objectives

The objective of this Evaluation is to examine the effect of the implemented projects on beneficiaries as follows:

|                                                                               |                                                                                     |                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Evaluation of relevance, effectiveness, efficiency, impact and sustainability |    | To assess the relevance of the project to the national policy agenda and priorities, relevance with the requirements of the beneficiaries, etc.                                                               |
|                                                                               |    | To assess the efficiency and effectiveness of the project in achieving its expected results                                                                                                                   |
|                                                                               |    | To assess the implemented infrastructure sub-projects in terms of (functionality, usability, and utilization, unintended results if any)                                                                      |
|                                                                               |    | Assessment of beneficiaries' perception regarding the efficiency throughout the implementation                                                                                                                |
|                                                                               |    | To assess the operation and maintenance arrangements, monitoring and evaluation, and the sustainability of the implemented sub-projects                                                                       |
|                                                                               |    | To review norms, specifications construction quality, soundness of the design, quality control, physical progress, compliance with social and environmental safeguard measures                                |
|                                                                               |   | To assess the cost efficiency and the value of money, by comparing the estimated and final benefits of the project (before vs after the implementation)                                                       |
|                                                                               |  | Identify the problems/challenges faced by each stakeholder in fulfilling their roles in the implementation of the sub-projects                                                                                |
|                                                                               |  | Assessment of public participation and community engagement of the selected projects and the relevance of the interventions to the community needs and priorities.                                            |
|                                                                               |  | Assessment of public participation and community engagement and efforts to enhance communication and public awareness-raising efforts.                                                                        |
| Beneficiaries impact assessment (BIA)                                         |  | Assessment of the beneficiaries' perception of nature and the quality of the delivered outputs. (Provision of physical infrastructure).                                                                       |
|                                                                               |  | Assessment of beneficiaries' perception of other interventions that should have been implemented instead of the ones chosen.                                                                                  |
|                                                                               |  | Assessment of beneficiaries' perception regarding the efficiency throughout the implementation.                                                                                                               |
|                                                                               |  | Assessment of the beneficiaries' perceptions regarding the interaction between municipalities and their citizens and the transparency of the Municipal Councils in project identification and implementation. |
|                                                                               |  | Assessment of the level and nature of the consultation with the community regarding the selection of the subprojects and existing feedback mechanisms.                                                        |
|                                                                               |  | Assessment of the effectiveness and leverage of the capacity building component at the institutional and the local community.                                                                                 |
|                                                                               |  | Identify the problems/challenges faced by each stakeholder in fulfilling their roles in the implementation of the sub-projects                                                                                |

## 1.4 Methodology

In order to prepare this assignment, and to achieve the expected outcomes, the adopted methodology followed a participatory mixed approach through specific interviews with MDLF team in order to ensure the combined accountability and lessons-learning rationale. Mixed methods and triangulation of sources have also been considered and attention was paid to Theory of Change principles applied to the program as a whole and to the outputs and outcomes.

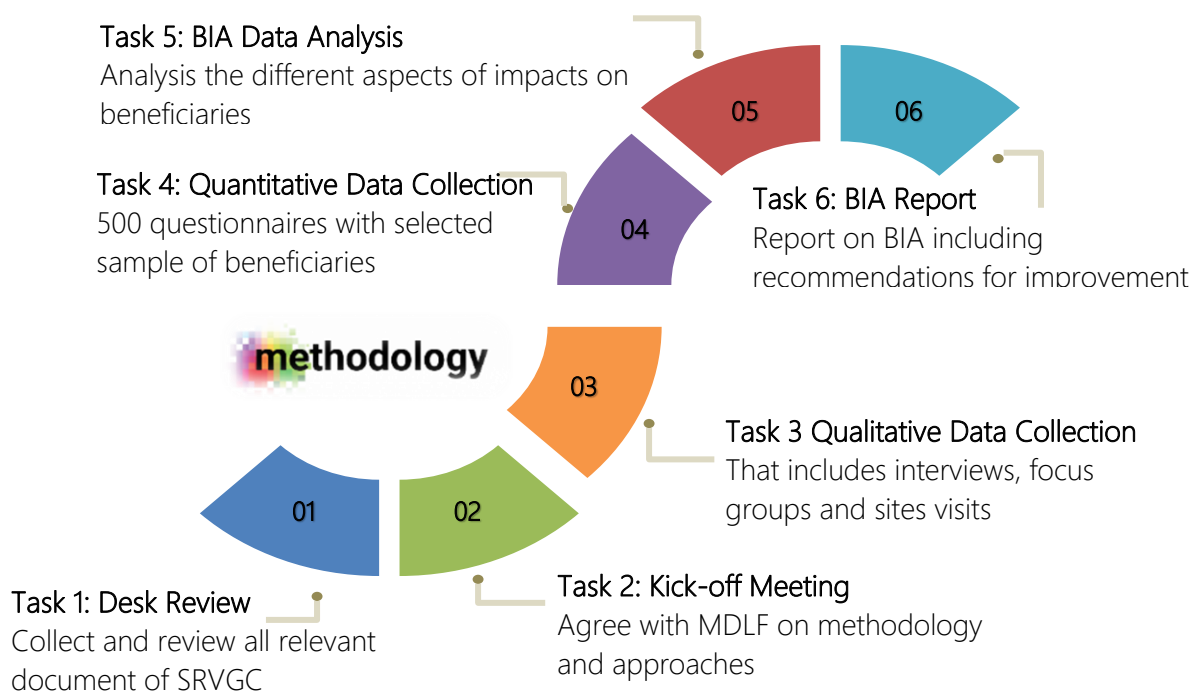


Figure 4: Methodology for Beneficiaries impact assessment

### 1.4.1 Desk Review

In order to gain a thorough understanding of the implemented projects, all relevant documentation on the project context, objectives, the role and responsibilities of different actors, contractual compliance matters in which projects are selected and implemented were reviewed. All available literature/documents related to the development, planning, implementation, and status of the program were gathered and digested along with other available secondary literature and research studies. During this preliminary investigation, a broad range of relevant information was gathered and examined in order to establish an understanding of the MDLF's intervention in the basic infrastructure and renewable energy sector. The key documents reviewed for this evaluation include but not limited to the following:

1. Grant agreement documents (signed between MDLF and the GIZ).
2. Updated procurement plan (December, 2020).
3. Baseline assessment: Documentation and analysis of vulnerability of municipal services in target areas in Gaza Strip (EMCC, 2019).

4. Need assessment for vulnerable communities – Transparency and accountability (PCDCR, 2019).
5. Agreements signed for each project with municipalities.
6. Bidding documentation and tender documents for each intervention issued by the consultant Universal Group and the municipalities.
7. Detailed design, specifications and tender documents for each intervention.
8. Vulnerable community selection report (PCDCR, 2019)
9. Environment and social management plan for lighting road intersections by solar energy (2019).
10. Technical specifications for street Intersection lighting (2019).
11. Agreements signed for each project with municipalities.
12. Progress reports for each intervention.
13. Available disaggregated data related to indicators, targets, outputs and outcomes through monitoring and evaluation system of the project.

#### 1.4.2 Field Work

Upon the approval of the inception report, the evaluation team started data collection through extensive field survey, interviews and focus group discussions. The site visits, meetings and interviews allowed deeper understanding of the overall conditions, implementation process, limitations and successes. Using a participatory approach, the consultant tapped into the knowledge, experience and lessons learned of different local stakeholders and beneficiaries. Input gathered during this process helped the consultant to identify the different aspects of impacts on beneficiaries of the implemented interventions at the seven municipalities as follows:

*Table 2: Field work tools and objectives*

| Tools                          | Sample | Target                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interviews                     | 14     | The mayors and engineers of technical departments at the seven municipalities participated in interviews. The involved municipalities; Al Buraij, Al Qarara, Khuzaa, Al Nasser, Abasan Al Jadedda, Al Shoka, and Rafah.                                                                                                                                                                                                                                            |
| Key Informant Interviews (KII) | 5      | KIIs were conducted with MDLF senior staff, Palestinian Center for Democracy and Conflict Resolution (PCDCR) and CMWU and two Contractors who involved in this project.                                                                                                                                                                                                                                                                                            |
| Focus Groups Discussion (FGD)  | 7      | At least one FGD was conducted at each community. Additional FGDs were conducted according to the community characteristics and boundaries.                                                                                                                                                                                                                                                                                                                        |
| Questionnaires                 | 500    | The consultant considered the stratified random sampling method that is representative in terms of targeted groups type, geographical location, and gender. Considering that, the total targeted population is 191,000, then the sample size will be 500 persons. However, the consultant ensures that the sample include at least 75 questionnaires at each community. The questionnaire was prepared in Arabic in order to facilitate the dealing with community |

### 1.4.2.1 Key Informant Interviews

Key stakeholders of the project were approached through formal interviews that were designed to collect in-depth information regarding the planning, design, implementation and operation of different project activities, as well as the public participation and community engagement of the selected projects.

The interviews had mainly targeted the local implementing partners, MDLF program team, CMWU water department staff, PCDCR project coordinator, Project technical consultant, Contractors, other community members and local experts with experience and knowledge pertaining to the energy and infrastructure sector (List of interviewed personnel is attached in Annex 1).

By designing simplified questions for each evaluation pillar, the collected information assisted in consolidating the results collected through the focus groups meetings and questionnaire survey (See Annex 6, 7, 8, 9, and 10 for the KIIs guiding questions).



Interview with MDLF senior staff (January 31, 2021)



Interview with Rafah Mayor (January 27, 2021)



Interview with the consultant-UG (February 3, 2021)



Interview with the CMWU staff (February 7, 2021)

*Figure 5: Interviews with stakeholders*

### 1.4.1 Beneficiaries Focus Group Discussions

Seven focus group meetings with direct beneficiaries were conducted between 19 and 27 January 2021 as part of the data collection process. Neighborhood committees that exist in all targeted areas were mainly targeted for these focus groups. The group

meetings included men and women living in targeted areas and familiar with the implemented interventions as they have participated in the interventions selection and prioritization of project implemented in their communities.



Focus group at Al Buraij (January 19, 2021)



Focus group at Abasan Al Jadedah (January 20, 2021)



Focus group - at Al Shoka (January 21, 2021)



Focus group at Al Naser (January 25, 2021)

*Figure 6: Photos of focus groups with Community accountability committees*

The meetings used flexibly the questionnaires protocols defined ahead of time so as to adapt to the trends of groups conversation, inquire with more details when new issues emerged, allowing to collect additional qualitative insights and stories while ensuring also that a core common set of information and data was gathered (See Annex 11 for the FGDs guiding questions). Each focus group was guided by specific questions related to the project implemented.

*Table 3: Focus groups meetings*

| Municipality      | Project Name                                                                          | Date            | Number of participants |
|-------------------|---------------------------------------------------------------------------------------|-----------------|------------------------|
| Al Buraij         | Development of roads intersections using solar street lighting and landscaping.       | 19 January 2021 | 8                      |
| Al Qarara         | Development of roads intersections using solar street lighting and landscaping.       | 26 January 2021 | 8                      |
|                   | Providing solar energy for water wells - Aljeia Well.                                 |                 |                        |
|                   | 48 m <sup>3</sup> /day containerized municipal brackish water RO desalination plants. |                 |                        |
| Abasan Al Jadedah | Development of roads intersections using solar street lighting and landscaping.       | 20 January 2021 | 5                      |

| Municipality | Project Name                                                                                                                                                           | Date            | Number of participants |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------|
|              | Providing solar energy for water wells - Eastern Well.                                                                                                                 |                 |                        |
| Rafah        | Development of roads intersections using solar street lighting and landscaping.                                                                                        | 27 January 2021 | 9                      |
|              | Establishment of a youth center, playground for volley-basketball for Khirbet al-Adas.                                                                                 |                 |                        |
| Al Naser     | Development of roads intersections using solar street lighting and landscaping.                                                                                        | 25 January 2021 | 8                      |
| Al Shoka     | Development of roads intersections using solar street lighting and landscaping.                                                                                        | 21 January 2021 | 7                      |
|              | Providing solar energy for water wells - Malyzian Well.                                                                                                                |                 |                        |
|              | 48 m <sup>3</sup> /day containerized municipal brackish water RO desalination plants.                                                                                  |                 |                        |
| Khuzaa       | Establishment of one desalination plant with PV system in Abu Ali and Abu Rock (48 m <sup>3</sup> /day containerized municipal brackish water RO desalination plants). | 24 January 2021 | 7                      |
|              | Establishment of a multipurpose Hall and development of the existing cultural center in Abu Ali and Abu Rock.                                                          |                 |                        |

Focus groups with direct beneficiaries, mainly the neighborhood committees that exists in all targeted areas. The neighborhood committees included men and women living in targeted areas and familiar and participated in the interventions selection and prioritization workshop that held in 2019. Focus groups used flexibly the questionnaires protocols defined ahead of time so as to adapt to the trends of groups conversation, inquire with more details when new issues emerged, allowing to collect additional qualitative insights and stories while ensuring also that a core common set of information and data was gathered. These groups purposively selected to provide multiple perspectives based on geographic locations themes and gender based and other criteria.



Figure 7: Preparation process for each focus group

All focus groups held at the municipal hall with all precaution measures for **COVID-19** including social distancing, face masks and other measures that published by Ministry of Health. The following table presents focus group discussions that held to collect the qualitative data. The guided questions are presented in Annex 11.



Each focus groups were guided by specific questions related to the project implemented and has the following criteria:

| Venue          | Time                            | Participant               | Manuscript              | Number             | Moderator         |
|----------------|---------------------------------|---------------------------|-------------------------|--------------------|-------------------|
| •Mnicipal Hall | •Min 1.0 Hour<br>•Max 2.0 hours | •Neighborhoods committees | •Yes with documentation | • Min 6<br>•Max 12 | •Dr. Mohamed Eila |

#### 1.4.1.1 Beneficiaries Questionnaire

The questionnaire has helped in collecting quantitative data that helped in the evaluation of the projects interventions according to OECD's Development Assistance Committee (DAC) criteria (relevant, efficient, effective, impact, and sustainability). The questions were designed to help in assessing the impacts and changes encountered by the beneficiaries as a result of the projects implementation, as well as level and

nature of the consultation regarding the selection of the subprojects and existing feedback mechanisms. The questions have also assisted in the assessment of the beneficiaries' perception regarding the efficiency throughout the implementation of the projects and the relevance of the interventions to the community needs and priorities. The consultant performed a total of 500 questionnaires for household survey. Three forms of questionnaire focused on the following themes – the detailed and final questionnaires are shown in Annexes 3, 4 and 5:

- Basic/personal information
- Social and economic status
- Evaluation of the project's interventions according to DAC criteria (Relevant, efficient, effective, impact, and sustainability). This includes the following questions:
  - To what extent the project meets the demands and needs of the beneficiaries with different types of vulnerable communities?
  - To what extent the project activities were adapted to the evolving context of intervention?
  - The extent to which project activities reached the specific target population and/ or to what extent the beneficiaries had access to services.
  - Involvement of beneficiaries in the planning, delivery, management and review of services.
  - How successful were the projects in targeting suitably needy beneficiaries in their activities?
  - What were the major challenges encountered during the implementation of the programs, and how have these been addressed?
  - Impacts on the beneficiaries before and after the project's implementation? What changes have occurred as a direct result of the project at different levels?

A sample size of beneficiaries was well defined by the consultant, the beneficiaries were selected using stratified random sampling, and this was classified by gender, age, and geographical areas. The field workers attended one-day workshop for orientation on the fieldwork. The team leader provided a comprehensive explanation of the aims and objectives of the evaluation, the program phases and components, target area, geographical distribution and beneficiaries.

*Table 4: Number of questionnaires distributed to beneficiaries*

| Municipality                | Project                                                                    | Household Sample size |
|-----------------------------|----------------------------------------------------------------------------|-----------------------|
| Abasan Al Jadeda            | providing solar energy for water wells - Eastern Well                      | 75                    |
| AlShoka & Al Qarara         | establishing containerized municipal brackish water RO desalination plants | 150                   |
| Al Burajj, Qarara and Rafah | Developing road intersections using solar street lighting and landscaping  | 225                   |
| Khuzaa                      | Establishment of public buildings                                          | 50                    |
|                             | <b>Total Questionnaires</b>                                                | <b>500</b>            |

The geographical distribution of these questionnaires and dates of the field survey are as follows:

*Table 5: Geographical distribution of questionnaires*

| Project Type                    | Municipality      | Project Name                                                                                                 | Household Sample size | Date of field survey |
|---------------------------------|-------------------|--------------------------------------------------------------------------------------------------------------|-----------------------|----------------------|
| Water Wells                     | Abasan Al Jadedda | providing solar energy for water wells - Eastern Well                                                        | 75                    | 25-30/01/2021        |
| Water RO Desalination Plants    | Al Shoka          | Establishing 8 m <sup>3</sup> /day containerized municipal brackish water RO desalination plant              | 75                    | 25-30/01/2021        |
|                                 | Al Qarara.        | establishing 48 m <sup>3</sup> /day containerized municipal brackish water RO desalination plant             | 75                    | 25-30/01/2021        |
| Street lighting and landscaping | Al Buraij         | Developing road intersections using solar street lighting and landscaping                                    | 75                    | 25-30/01/2021        |
|                                 | Al Qarara         | Developing road intersections using solar street lighting and landscaping                                    | 75                    | 25-30/01/2021        |
|                                 | Rafah             | Developing roads intersections using solar street lighting and landscaping.                                  | 75                    | 25-30/01/2021        |
| Public buildings                | Khuzaa            | Establishment of a multipurpose Hall and development of the existing cultural center in Abu Ali and Abu Rock | 50                    | 25-30/01/2021        |
| <b>Total Questionnaires</b>     |                   |                                                                                                              | <b>500</b>            |                      |

See Annexes 8, 9, and 10 for three types of questionnaires as follows:

|                                                                                                              |                                                                                      |                                                                                       |
|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                           |  |  |
| Questionnaire for providing solar energy for water wells and municipal brackish water RO desalination plants | Developing road intersections using solar street lighting and landscaping            | Establishment of a multipurpose Hall and development of the existing cultural center  |



Figure 8: Photos for data collection through questionnaire

#### 1.4.1.2 Field Visits

Field visits to the sites of the 14 projects at the seven municipalities were carried out to further support the data collection process. The visits were designed to allow the consultant to collect all necessary information to capture the impact of the implemented projects on the target communities, and to determine the extent to which the implemented activities had achieved their objectives.



Photos for developing road intersections using solar Street lighting and landscaping,



Providing solar energy for water wells, establishing containerized municipal brackish water RO desalination plants,



Photos for site visits for the establishment of Green building at Rafah

*Figure 9: Photos for the field visits to the project sites*

#### **1.4.1.3 Sample Selection and Sample Size for beneficiaries Impact Assessment**

The sample was selected in coordination of the municipalities to identify the exact beneficiaries of each project. However, the consultant proposed to select the sample based on the following criteria:

1. Representing of most of municipalities
2. Representing of all project types
3. Representing of most beneficiaries
4. Representing of most targeted communities
5. Projects that completed in terms of implementation

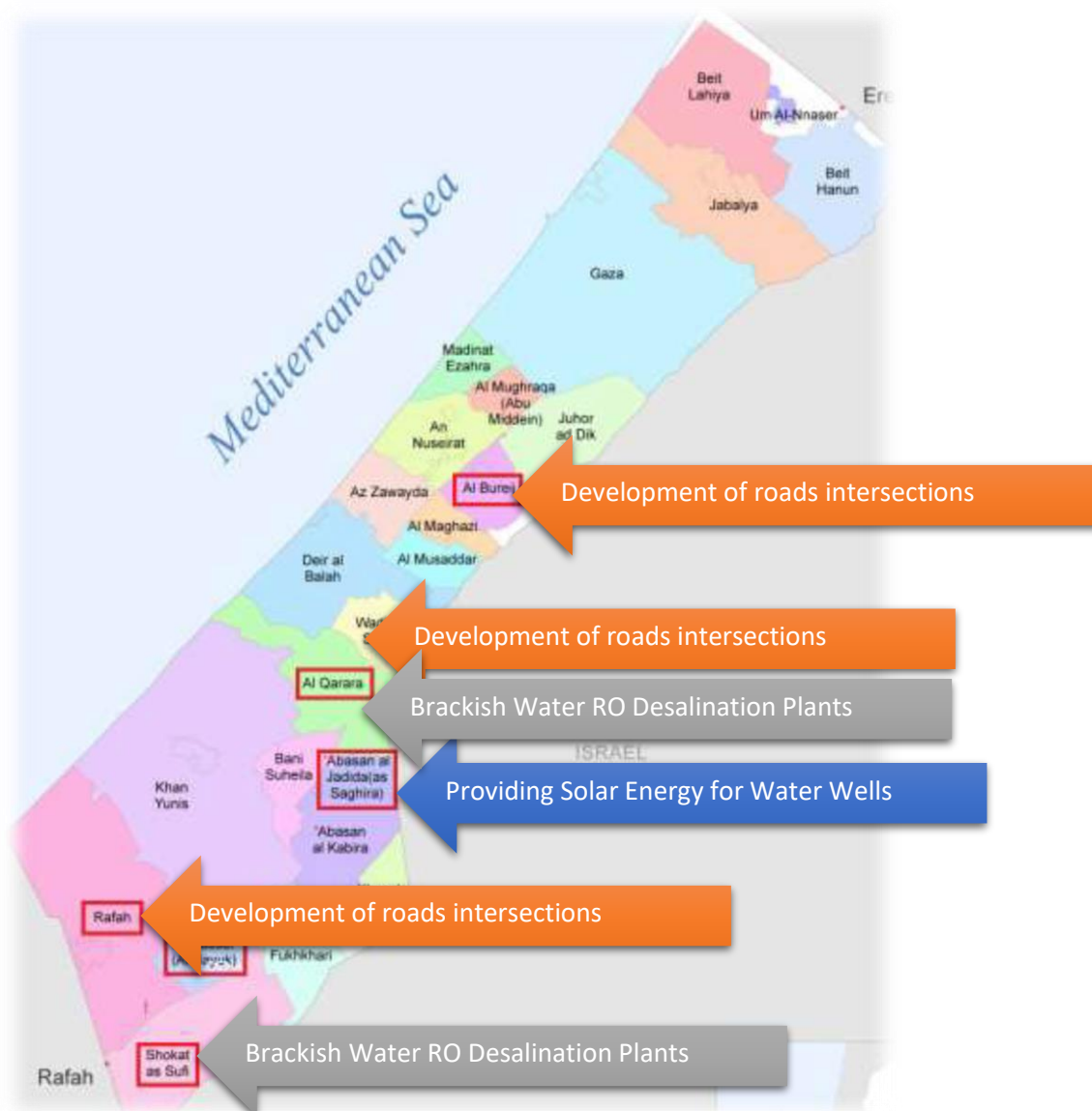


Figure 10: Spatial distribution of selected projects for BIA

Table 6: Sample selection among the implemented projects

| Municipality      | Project Number | Project Name                                                                                                                                                          | Contract Amount | Sample Selection |
|-------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------|
| Al Buraij         | SRGVC5.1.1     | Development of roads intersections using solar street lighting and landscaping.                                                                                       | 49,480          | Selected         |
| Al Qarara         | SRGVC5.1.2     | Development of roads intersections using solar street lighting and landscaping.                                                                                       | 48,695          | Selected         |
| Abasan Al Jadedda | SRGVC5.1.3     | Development of roads intersections using solar street lighting and landscaping.                                                                                       | 66,754          | Not Selected     |
| Rafah             | SRGVC5.1.4     | Development of roads intersections using solar street lighting and landscaping.                                                                                       | 66,920          | Selected         |
| Al Naser          | SRGVC5.1.5     | Development of roads intersections using solar street lighting and landscaping.                                                                                       | 42,914          | Not Selected     |
| Al Shoka          | SRGVC5.1.6     | Development of roads intersections using solar street lighting and landscaping.                                                                                       | 45,250          | Not Selected     |
| Al Qarara         | SRGVC5.2.1     | Providing solar energy for water wells - Aljeia Well.                                                                                                                 | 116,241.70      | Not Selected     |
| Abasan Al Jadedda | SRGVC5.2.2     | Providing solar energy for water wells - Eastern Well.                                                                                                                | 64,146.50       | Selected         |
| Al Shoka          | SRGVC5.2.4     | Providing solar energy for water wells - Malyzian Well.                                                                                                               | 94,467.93       | Not Selected     |
| Al Qarara         | SRGVC5.3.1     | 48 m <sup>3</sup> /day containerized municipal brackish water RO desalination plant.                                                                                  | 36,023          | Selected         |
| Al Shoka          | SRGVC5.3.2     | 48 m <sup>3</sup> /day containerized municipal brackish water RO desalination plant.                                                                                  | 43,919          | Selected         |
| Khuzaa            | SRGVC5.3.3     | Establishment of one desalination plant with PV system in Abu Ali and Abu Rock (48 m <sup>3</sup> /day containerized municipal brackish water RO desalination plant). | 39,163          | Not Selected     |
| Rafah             | SRGVC5.4.1     | Establishment of a youth center, playground for volley-basketball for Khirbet al-Adas.                                                                                | 218,500         | Not Selected     |
| Khuzaa            | SRGVC5.4.2     | Establishment of a multipurpose Hall and development of the existing cultural center in Abu Ali and Abu Rock.                                                         | 232,653         | Selected         |

Note: Project not selected for beneficiary's impact assessment because these projects were not completed by the time of evaluation. The selected projects have a cost of 541,837 out of the total budget of 1,369,150.59 which is 39.60% of the total budget. It represents 6 municipalities out of 7 municipalities. It represents all project types (four types of projects).

## PART TWO

# OVERALL EVALUATION OF SRGVC



## 2. Overall Evaluation

The findings examine the effects of the SRGVC interventions on its beneficiaries by assessing the selected projects and the relevance of these interventions to the community needs and priorities. It also assesses public participation and community engagement and efforts to enhance communication and public awareness-raising efforts. In addition, the finding presents the beneficiaries' perception of the nature and the quality of the delivered outputs, the efficiency throughout the implementation, the interaction between municipalities and their citizens and the transparency of the Municipal Councils in project identification and implementation. In addition, findings also present the assessment of the level and nature of the consultation with the community regarding the selection of the subprojects and existing feedback mechanisms and the effectiveness and leverage of the capacity building component at the institutional and the local community.

### 2.1 Problems and Needs (Relevance)

According to representatives of both MDLF, municipalities, and neighborhoods committees, the SRGVC project has remained relevant to the needs of the targeted beneficiaries. Data collected during the evaluation process reaffirmed the findings of both the baseline study conducted in during July 2019 and October 2019 by local consultant (EMCC) and the venerable communities' selection report conducted in 2019 by PCDCR that these communities are in bad need of basic infrastructure of water supply and electricity. Focus groups with beneficiaries and stakeholders revealed that the project successfully addressed the core issues that were identified by the baseline study (2019). Activities and interventions that built on need assessment remained relevant to the actual needs of the targeted beneficiaries in vulnerable communities. The comprehensive approach of working with local vulnerable communities represented by neighborhood committee members ensured that the project remained relevant to specific needs and that each aspect of the project was integrated with GVCD interventions to reach the desired objectives. Considering the challenges intrinsically facing women, children and youth of Gaza, the project was exceptionally relevant.

MDLF identified the seven municipalities of Al Bureij, Al Qarara, Abasan Al Jadedah, Khuzaa, Al Shoka, Al Naser, and Rafah while the local consultants selected the most marginalized areas within these municipalities. The selected 24 communities were based on the findings of the GVCD report (Identification of Vulnerable Communities), which was prepared by the Palestinian Center for Democracy and Conflict Resolution (PCDCR). The evaluation team investigate the process of identification of vulnerable communities and vulnerability classification criteria that were adopted.

The initial need assessment covered 40 marginalized communities distributed at the seven municipalities, based on a comprehensive methodology that included the

theoretical framework and the field study. The vulnerability was addressed through three basic components: infrastructure services, social and economic status, empowerment and community participation, several determinants and criteria were set out for assessing each of the three divisions. The most significant findings associated with the highly and very highly vulnerable communities (the degree of vulnerability is between 69% -100%) in the target areas are as follows:

- 32 communities out of 40 have high and very high degree of vulnerability.
- 36 communities have unpaved or poorly constructed roads.
- 30 communities have high average of infrastructure vulnerability or very high.
- 36 communities lack many services and facilities; (water facilities community institution, lighting, and transportation) .
- 25 communities have poor access to educational facilities.
- 15 communities have low community participation where the relationship between the municipality and citizens is weak.

Therefore, the evaluation team found that the implemented project is totally relevant to the existing problems at these communities and responds to the urgent needs of these communities.

#### **2.1.1 Relevance to the National policy Agenda:**

Evaluation team found that all implemented interventions are consistent with the Palestinian national Agenda (2017-2022) that stated in its objectives "Social justice must be steadfastly pursued by alleviating poverty and protecting the poor, marginalized and vulnerable". All implemented interventions are fall under the National Policy number one which is "Escaping Poverty" that includes several Policy Interventions mainly "Strengthen economic and social empowerment programmes benefiting vulnerable groups and the poor" and "Ensure that economic and social policies address the needs of vulnerable groups and the poor".



#### **2.1.2 Responsive/Relevant to the Needs of the vulnerable Communities:**

Focus groups with local communities revealed that the implemented project are totally relevant to the needs of targeted vulnerable communities. All community members expressed the relevancy of such projects to their present needs. These projects were chosen in full participation with the community, MDLF and municipalities' staff.

Therefore, these projects are considered very relevant to the targeted groups at local communities.

### **2.1.2.1 Relevance of implemented water interventions**

Gaza faces a severe water crisis. The majority of population relies almost entirely on a coastal aquifer as the sole source of freshwater. However, 97% of the aquifer's water is not safe for drinking without treatment.<sup>2</sup> The dire water situation in Gaza has been recognized and understood by both the Palestinian Authority (PA) and international community for more than two decades. In response to the crisis, multiple plans, strategies, and programs have been crafted and carried out, with the immediate intention to improve infrastructure and increase potable water supply, and the long-term objective of transforming the water sector to be more efficient and effective in delivering water services.

The former part of this problem is a lack of access to safe water for drinking, cooking, and personal and domestic hygiene, which is a severe risk to public health security. First is the continued depletion of the coastal aquifer, Gaza's only source of freshwater, which is not sufficient to meet the needs of its approximately two million Palestinian residents. Decades of over-pumping, combined with the seepage of wastewater and agrochemicals and seawater intrusion, have brought the aquifer to a possibly irrecoverable state. As a result, some 97 percent of the aquifer's groundwater is already unfit for human consumption, according to World Health Organization (WHO) water quality standards. In 2018, the water consumed for domestic use was lower than PWA's targets (consumption was only 70 l/p/d rather than the target of 100 l/p/d). The reality is that the 70 l/p/d actually delivered are not all potable and a more realistic figure shows that the actual potable water consumption is in the range of 20 l/p/d. The reality on the ground is likely to be even worse as most water delivered to the household through the existing network is unfit for drinking and Gazans are left with no other option than buying bottled water or purchasing it from water truckers. Additionally, Gaza is only going to rise with an expected population growth of over 3.2 percent per year; household water demand is expected to increase from 84 MCM in 2019 to 158.7 MCM in 2030<sup>3</sup>.

The seven municipalities under study, do not provide drinking purified water to people, and the people buy it from private desalination stations via water tankers that may be licensed or unlicensed and are not subject to inspection for water quality. Various efforts have been made for some municipalities such as Khza'a, where they established two desalination plants. The Coastal Municipalities Water Utility (CMWU), in collaboration with the Rafah Municipality, also established a desalination plant that

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<sup>2</sup> PWA, Strategic Water Resources and Transmission Plan, 2014

<sup>3</sup> PWA, Gaza Water Security Mapping, 2019

provides part of the needed water for Al Salam and part of Al Barazeel neighborhoods in Rafah. Other efforts are being made by donors (individuals or institutions) to establish desalination plants that provide free water for people in Khuzaa and Abasan but do not cover the people's need of potable water.

According to the interviews with Municipal Mayors, there are challenges facing the municipalities when it comes to providing people with domestic water (tap water). First of which is the constant power cuts that reaches up to 20 hours a day, which is the real crisis for the municipality. This requires large amounts of diesel to run the water pumps in order to reach the water pipelines and then reach people's homes, so that people who live in low-lying areas begin to use it whenever there is electricity available through their own water pumping motors until their tanks are full. On the other hand, the upland people are not provided with water until after the low-lying areas are done, and they may not get it till after the power is cut, so they cannot get the water to their tanks. The second challenge is people's behavior regarding the use of domestic water. Another behavior that depletes municipal water is using it for agricultural ponds in agricultural areas.

The third challenge is adjusting the water distribution schedule (it is usually up to 6 hours a day) with the electricity's availability schedule. It is very difficult to cover all areas with water distribution at the same time when there is electricity which it only available 4 to 8 hours a day.

*Table 7: Relevance of the water projects to the vulnerable communities*

| Municipality                               | Needs                                                                      | Relevance to the vulnerable communities                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Abasan Al Jadedda, Al Qarara, and Al Shoka | Providing solar energy for water wells                                     | The water has been pumped one or two times weekly for 4 hours in these municipalities. In Abasan Al Jadedda, the municipal water reached the communities 2-3 times weekly. While in Al Qarara, the municipal water reached the communities 3 times weekly                                                                                                                                                                                                                                                                                       |
| Al Shoka, Khuzaa and Al Qarara             | Establishing containerized municipal brackish water RO desalination plants | According to the base line study <sup>4</sup> around 53.4% of the households at these areas complained from pollution incidents of drinking water last year. The highest percentage was in Khuzaa and Al Qarara. This pollution could be physical and/or biological. The desalinated water could be contaminated by impurities or in few to some cases by microorganisms through the distribution system, as mentioned in PWA reports. However, the reported incidents of pollution of drinking water are mainly related to physical pollution. |

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<sup>4</sup> EMCC (2019) Baseline Assessment: Documentation and Analysis of Vulnerability of Municipal Services in Target Areas in Gaza Strip

### 2.1.2.2 Relevance of developing road intersections interventions

For years now, Gaza is suffering from a chronic crisis in the electricity supply. This crisis is an extension of an ongoing series of crises escalating in severity in accordance with the changes in conditions and contexts affecting such crises. The aspects of the crisis vary due to the multiplicity sources of electrical energy that supply Gaza Strip. Gaza is supplied with electricity from three primary sources: Israel (120MW), Egypt (27MW), the Palestine Electric Company (PEC), the said quantity depends on the amount of fuel available for the production of electricity. In average, (PEC) provides about 65 MW, or more than 50% of its full capacity, which is around 120 MW<sup>5</sup>. Thus, the total supply of electric power in the Gaza Strip from the aforementioned three sources is about 212 MW. On the other hand, Gaza needs of electricity totaling (440 MW). As a result, there is a significant deficit up to more than 220 MW in fulfilling the needs of the Gaza Strip, and this deficit is followed by a recurring interruption of electricity for homes and economic and services facilities. Electricity shortage led to insufficient streetlights. Most of nights these streets are totally dark which lead to car accidents, unsafe roads, and less commercial activities.

In close coordination with the municipalities, the local communities selected 96 intersections out of 151 potential intersections to have streetlights using solar energy under the SRGVC. The total estimated budget for these projects is about €388,550. In addition to adding streetlights, the project aims at enhancing the landscaping of the roads' intersections including the provision of sitting chairs. Therefore, this project is considered as relevant to the local communities' needs and priorities. Consequently, the project succeeded to provide better and safer place at night, especially for women and children living in these municipalities. The relevance of developing road intersections using Solar Street lighting and landscaping to the vulnerable communities are presented in Table 8.

*Table 8: Relevance of Road intersections using Solar Street lighting and landscaping*

| Municipality | Name of Vulnerable Community                                                              | Relevance                                                                                                                                                                                                                                                                                          |
|--------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Al Buraij    | Maqboula<br>Saieda<br>Soud<br>Abu Medin<br>AlTal Al Akhdar                                | Limited lights are available on main or sub streets. The project covers all vulnerable communities at Al Buraij. The project is to supply and install road lighting intersections – complete internal cable connections and electric poles, setting up lighting lanterns work through solar cells. |
| Al Qarara    | Sereij & Shuiebat<br>Sheikh Hamada<br>AlAstal & Abu Jumeze<br>Abu Fayda<br>Abu Hadaf Area | The project covers all vulnerable and underserved communities. The project is to supply and install road lighting intersection – complete internal cable connection and electric poles, setting up lighting lanterns work through solar cells.                                                     |

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<sup>5</sup> Palestine Economic Policy Research Institute (2013) Electricity Crisis in Gaza. Causes, Consequences and Treatments

| Municipality      | Name of Vulnerable Community                                    | Relevance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Abasan Al Jadedah | Al Sahaba<br>Al Shrouq<br>Al Radwan<br>Al Naaem<br>Al Wsta      | There is no lighting in Abasan Al Jadedah. There are frequent night traffic accidents and it is difficult to move for women and children at night. A predominantly agricultural area where a lot of stray dogs roams the night. The targeted locations are Al- Radwan Street, Street 26, 24, in Al-Shorouk neighbourhood, Abu Arafat Street, Umm Al-Mahd Street, Riad Street, and Abu Latifa Street. The project is to supply and install road lighting intersections – complete internal cable connections and electric poles, setting up lighting lanterns work through solar cells. |
| Rafah             | Al Barzayel<br>Khirbet Al Adas<br>Al Tanour<br>Musabah          | No light is available on main or sub streets. The project is to supply and install road lighting intersections – complete internal cable connection and electric poles, setting up lighting lanterns work through solar cells.                                                                                                                                                                                                                                                                                                                                                         |
| Al Naser          | Al Thawbata<br>Abu Mumar                                        | There is no adequate lighting grid in the roads, the condition of the lanterns is bad, in the case of a power outage there is no lighting on the roads. The project is to supply and install road lighting intersections – complete internal cable connections and electric poles, setting up lighting lanterns work through solar cells.                                                                                                                                                                                                                                              |
| Al Shoka          | Safa & Al Taquwa<br>Abu Luli & Al<br>Rebate<br>Qaret Al Shahada | No light is available on main or sub streets. The project is to supply and install road lighting intersections - complete internal cable connections and electric poles, setting up lighting lanterns work through solar cells.                                                                                                                                                                                                                                                                                                                                                        |

### 2.1.2.3 Relevance of establishment of community public building projects

The relevance of establishment of community public building to the vulnerable communities at Khuzaa and Rafah is seen as strong relevance to the local communities since both areas are suffering from lack of these facilities and public spaces. Therefore, these projects would enhance public participation, social accountability, community engagement at public life.

*Table 9: Relevance of establishment public buildings at vulnerable communities*

| Municipality | Needs                                                                                                         | Relevance to the vulnerable communities                                                                                                                                                                                                               |
|--------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Khuzaa       | Establishment of a multipurpose Hall and development of the existing cultural center in Abu Ali and Abu Rock. | The vulnerable people at Khuzaa mainly at Abu Ali and Abu Rock neighbourhoods had no multipurpose Hall for community meetings, voluntary activities and social gathering. Therefore, developing a multipurpose hall is relevant to these communities. |

| Municipality | Needs                                                                                  | Relevance to the vulnerable communities                                                                                              |
|--------------|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Rafah        | Establishment of a youth center, playground for volley-basketball for Khirbet Al-Adas. | The communities in Rafah are in dire need for public multipurpose building and youth centers since there is a lack of these centers. |

### 2.1.3 Relevance/Responsiveness of Particular Activities and Areas

Qualitative data indicated that the project activities were both relevant and responsive to the targeted vulnerable communities. Focus groups, key informant interviews and the quantitative survey contributed to this finding. Activities were developed and implemented in a way that addressed issues of concern to the targeted vulnerable communities. Qualitative data indicated that each of the project activities was endorsed by the targeted community neighborhoods members and municipalities and was highly appreciated and welcomed by the local communities.

In particular, developing road intersections using solar Street lighting and landscaping, providing solar energy for water wells, establishing containerized municipal brackish water RO desalination plants, and establishment of public buildings were especially responsive because they were designed by community neighborhoods members to respond to the needs of local communities. Direct beneficiaries also responded well to these activities. According to Municipal Mayors and municipal engineers, the project built the capacity of the beneficiaries and took them along a path that was attractive and useful to them, and one that encouraged them to take ownership of the project.

### 2.1.4 Relevance of Communities Selection:

Overall, data gathered throughout the evaluation process indicated that the implementation methodology for the project was sufficient. After a lengthy selection process, 40 vulnerable communities were chosen to participate in the project. This decision was made by MDLF management staff through extensive studies of local consultants. Neighborhood committees at these areas worked closely with each municipality to identify areas that would be targeted by the project.

The evaluation team found that the vulnerability classification criteria was enough to select the targeted beneficiaries and targeted vulnerable communities. It is found also that the selected 40 communities had poor situation in terms of these criteria. Therefore, the selected communities fit to the overall objectives of the project.

Selection of vulnerable communities has followed clear selection criteria, which has been developed following the instructions and guidance provided in the *"Baseline Assessment: Documentation and Analysis of Vulnerability of Municipal Services in Target Areas in Gaza Strip"*. The selection has also referred to the assessment of the infrastructure services by PCBS in 2017, in addition to field visits and discussion among MDLF staff and municipalities' staff.

## 2.2 Achievement of Purpose (Effectiveness)

The effectiveness criterion refers to the extent to which the SRGVC project's objectives were achieved and how they are achieved. The assessment of effectiveness looked at the connection between planned and implemented activities, the factors influencing the attainment of the objectives, and means by which effectiveness can improve. In short, the evaluation team sought to answer the following question: to what extent were the objectives of the SRGVC project achieved?

Regarding the project's structure, composition, and implementation methodology, evaluators determined that the project was for the most part effective in achieving the desired results; however, the project would benefit from the lessons learnt to improve future projects' design and implementation strategies.

Considering the complexities and intrinsic challenges of working in Gaza, it is not surprising that the planned benefits of the project were wholly delivered. Furthermore, because the project was oriented toward improving the living conditions of vulnerable communities, the key inputs were human resources such as technical assistance, awareness, and facilitation – each of which faces intrinsic challenges within a context of poverty and siege.

In particular areas, the project was highly effective in achieving the desired results. Neighborhood committee's members were given high quality training and support from the MDLF and municipal engineers. For those who fully embraced the project, their capacity was notably strengthened. The seven Municipalities and neighborhood committee's members were often able to work with a large number of beneficiaries to successfully select, plan and implement community projects. Thus, it is clear that the training provided to field workers was largely effective.

Local consultants for the design and supervision (Universal Group) and contractors had exchange experience with municipal engineers and neighborhood committee's members in order to develop their capacities in planning, solar energy and implementing community projects.

### 2.2.1 Have the Projects Objectives been met?

The project's goal is to improve the Resilience of Gaza Vulnerable communities (SRGVC). The interventions are located under the context of strengthening the resilience of the population in Gaza, particularly the vulnerable communities that had been identified under "Component 2" of the ongoing MDLF program entitled "*Gaza Vulnerable communities' development Project (GVCDP)*". These SRGVC interventions have further supported the accountable services delivery component (Component 1) of the same program by supporting the improvement of essential basic infrastructure using renewable energy and other relevant interventions.

The SRGVC projects target is to empower specific communities with vulnerable and marginal populations south of the Gaza city and Wadi Gaza; i.e., municipalities located in the southern part of the Middle Area, as well as the municipalities located in Khan Younis and Rafah Governorates, especially those located to the East of Salah Eddin Road. Interviews and focus group discussions revealed that these objectives were achieved at the targeted areas through implementing interventions that has clear effectiveness.

The site visits, focus groups and interviews with communities' members have been used to qualify or supplement the quantitative results with specific qualitative aspects. The access to improved water supply has been completely achieved which is confirmed by the FGDs and site visits: the satisfaction level among local communities is very high; the majority agrees that developing road intersections using solar Street lighting and landscaping, providing solar energy for water wells, establishing containerized municipal brackish water RO desalination plants, and establishment of public buildings have brought a positive change to their daily lives.

Furthermore, a significant number of these vulnerable communities have become capacitated by the project and are capable of using their newly gained knowledge and skills to make an impact on their local communities and create better lives for themselves. In addition, women are aware of community development issues that gave them the tools necessary to clearly identify their needs, work towards resolving their problems and communicate with the municipal officials directly. This finding was affirmed throughout the evaluation process via qualitative and quantitative data. These findings will be elaborated upon within the beneficiary impact report.

*Table 10: Effectiveness of Achieved Objectives of SRGVC*

| Intervention                                                                      | Specific Achieved Objectives                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Providing solar energy for water wells</b>                                     | Increase water supply through increasing pumping hours of the water well.<br>Increase the efficiency of the water well through providing solar energy to ensure the continuity of water supply.<br>Increase water quantity and quality provided to seven communities municipalities through rehabilitation of the water well.<br>Improve water quality by improving the disinfection system.<br>Improve the general conditions of the well by rehabilitation the room and electrical system. |
| <b>Establishing containerized municipal brackish water RO desalination plants</b> | Improved drinking water quality by providing the desalination and disinfection system.<br>Decreased the time spent by the local residents to fetch the safe drinking water.<br>Provide safe drinking water free of charge to poor communities.<br>Improved health conditions among the poor communities, marginalized areas and vulnerable groups in Gaza.<br>Reduced waterborne diseases through providing safe drinking water and awareness sessions.                                      |

|                                                                           |                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Developing road intersections using solar street lighting and landscaping | Improved road safety and minimize car accidents especially at night time.<br>Created safe roads for men, women and children during nights.<br>Encouraged the micro-economy of the small-scale business along the roads |
| Establishment of public buildings                                         | Improved youth engagement of the vulnerable communities,<br>Enhance public participation and cooperation between the local communities and local authorities.<br>Increased women participation in public life.         |

Interviews and focus group discussions revealed that the SRGVC objectives were largely met due to the high level of commitment and effort of the neighborhood committees and municipalities. Throughout the implementation period, project partners in many cases worked well to alleviate some of impeding challenges. For example, qualitative data revealed that the project partners helped MDLF to identify the beneficiaries and the targeted area to more effectively achieve the project's goals and objectives. Notably, MDLF worked with municipalities to make key alterations to planned project activities targeting Poor and Vulnerable Communities. For example, Municipalities and local communities were – reportedly – appreciative of these amendments and felt that the local communities had become more enthusiastic about participating in the project activities because of them. In fact, this is a good example of a time where the project methodology showed signs of flexibility and efficiency. Clearly, there were times during the implementation of the project where the project team was able to make changes to the project methodology in order to ensure that the project objectives were met.

### 2.2.2 Efficiency of introducing solar energy at vulnerable communities in Gaza

The SRGVC interventions had been described by local communities as very efficiency in terms of producing renewable energy that overcome the electricity shortage of Gaza in these areas. No more road intersections in these communities being dark at night. According to the community is Khuzaa "safety and security are being guaranteed after street lights". Energy efficiency is clear from comparing the planned and actual energy outcomes. The project outcome indicated that the percentage of planned to implemented is 101% of the solar energy outputs.

Table 11: Solar Energy Efficiency

| Municipality      | Project Name                                                                                                                                             | Tender kWp    | Installed kWp |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------|
| Al Buraij         | Development of roads intersections using Solar Street lighting and landscaping                                                                           | 6.48          | 6.48          |
| Al Qarara         | Development of roads intersections using Solar Street lighting and landscaping                                                                           | 6.08          | 6.08          |
| Abasan Al Jadedah | Development of roads intersections using Solar Street lighting and landscaping                                                                           | 9.72          | 9.72          |
| Rafah             | Development of roads intersections using Solar Street lighting and landscaping                                                                           | 10.53         | 10.53         |
| Al Naser          | Development of roads intersections using Solar Street lighting and landscaping                                                                           | 5.27          | 5.27          |
| Al Shoka          | Development of roads intersections using Solar Street lighting and landscaping                                                                           | 6.48          | 6.48          |
| Al Qarara         | Providing Solar Energy for Water Wells - Aljeia Well                                                                                                     | 83.33         | 86.32         |
| Abasan Al Jadedah | Providing Solar Energy for Water Wells - Eastern Well                                                                                                    | 45.00         | 46.48         |
| Al Shoka          | Providing Solar Energy for Water Wells - Malyzian Well                                                                                                   | 66.67         | 66.40         |
| Al Qarara         | 48 m3/day Containerized Municipal Brackish Water RO Desalination Plants                                                                                  | 5.67          | 5.67          |
| Al Shoka          | 8 m3/day Containerized Municipal Brackish Water RO Desalination Plants                                                                                   | 7.29          | 7.29          |
| Khuzaa            | Establishment of one desalination plant with PV System in Abu Ali and Abu Rock (48 m3/day Containerized Municipal Brackish Water RO Desalination Plants) | 5.67          | 5.67          |
| Rafah             | Establishment of a youth center, playground for volley-basketball for Khirbet al-Adas                                                                    | 10.93         | 10.93         |
| Khuzaa            | Establishment of a multipurpose Hall and development of the existing cultural center in Abu Ali and Abu Rock                                             | 12.96         | 13.05         |
|                   | <b>Total Energy Outputs (kWp)</b>                                                                                                                        | <b>282.08</b> | <b>286.37</b> |

Source: MDLF (February 2021)

### 2.2.3 Equity and Gender Aspects

The equity and gender aspect is present in the program objectives, as can be seen in the project documents and implemented activities. The focus group discussions also showed that the vulnerability of the refugees, poor and vulnerable communities especially women and children, reduced by implementing such interventions. For instance, providing solar energy for water wells, establishing containerized municipal brackish water RO benefits women and children as they no longer have to wait several

days for water supply; women and children are in charge of dealing with water for domestic uses. Another example is the developing road intersections using solar street lighting and landscaping at areas not served by street lighting networks encouraged women to get-out from their houses safely during night hours.

*"During SRGVC project, women actively participated at activities such as developing road intersections that was previously limited to men. This project gave an evidence that women are able to participate in development and initiate change in vulnerable areas". Ms. Sabreen Khamis from AL Bureij*

### 2.3 Sound Management and Value for Money (Efficiency)

The efficiency criterion has been studied by examining the program's human resources strategy, the decision-making rules and procedures and the program timeframe and cost. Thus, the following sources were used: interviews with the MDLF staff, the seven municipalities and the local communities, the site visits and the focus group discussions.

Regarding the overall efficiency of the project, qualitative data indicated that the project was as efficient as could be expected given the challenging context in which the project was implemented. The volatile circumstances intrinsic to Gaza inevitably weakened the project's efficiency; the political and security situation impacted the implemented projects presented by delay in supplying materials due to Israeli constraints.

The evaluation revealed that the coordination between MDLF and municipalities was on most levels sufficient. The municipalities worked together closely to ensure that project activities implemented in a timely manner. The evaluators found that the seven municipalities worked diligently to overcome delays as much as possible and ensure that project objectives were achieved. Despite this, there was delay in some interventions.

Although, MDLF's overall capacity was found to be strong – especially in terms of its experience and knowledge of similar interventions – the capacity of municipal engineers, was always satisfactory. Given that MDLF chose to allow participants from municipalities and local communities to play a leading role in developing the interventions. The aim was to empower and build the capacity of local communities.

It was also reported all quantities were supplied according to specifications and bill of quantities mentioned in contracts, except in some cases that batteries had been changed to another type equivalents to the required specifications. Payments to contractors were paid upon progress at implementation without unjustified delay.

#### 2.3.1 Implementation of Project Activities

Municipal engineers and neighborhood committee's representatives participating at focus group discussions indicated that project activities *"went smoothly and were*

*implemented according to the plans and contracts. Whenever faced obstacles, detailed discussion with MDLF to find solutions and alternatives."* Although the evaluation revealed that there were justified delays in some projects' implementation which was out of the contractors' abilities, implementing partners agreed that they were able to overcome these obstacles and to ensure the achievement of project objectives. After reviewing all relevant reports and visiting all sites of implemented interventions, the evaluators confirmed that the implemented interventions were implemented efficiently. Despite that, it would be unness to show that the startup activities consume more time than anticipated, especially the mobilization and the design stage until getting the approval from the GIZ on the design and tendering.

With the existing high unemployment rates in Gaza Strip, MDLF in coordination with partners provided employment opportunities through contractors. According to a representative of MDLF, the selection process was according to specific criteria followed at MDLF and evaluation of the cost efficiency and professional experience of bidders; Beside that, on-the-meetings were conducted for all of them to ensure equal understanding of the project components. Furthermore, local community representatives of men and women participating in the focus group discussion indicated that they were always happy with the awareness sessions provided to them by PCDCR. PCDCR representatives confirmed that the trainers were committed and punctual and often available when needed. The awareness sessions covered topics ranging from public participation, accountability, transparency and implementing initiatives.

### **2.3.2 Coordination between MDLF and Municipalities**

As mentioned previously, there are evidences that the coordination among implementing partners in the field was always satisfactory. Nonetheless, the overall relationship between MDLF and municipalities remained strong throughout the implementation process. Representatives of vulnerable communities at the seven municipalities indicated that they were thankful for the significant amount of support provided by GIZ through MDLF. It was stated by a representative of municipality of Al Qarara that there were "ups and downs" in the working relationship with local committees; however, these issues were always find suitable solutions. The mayor of Rafah municipality said, "What was good is that we discussed all issues and jointly reached solutions." Furthermore, a representative of Khuzaa municipality indicated that during the implementation of the project they had shown support, respect and a commitment to local communities to jointly fulfill the agreed upon objectives. Testimony given to the evaluators from both Municipalities and local committees indicates that overall, the coordination with MDLF staff was satisfactory; although some challenges did exist.

### 2.3.3 Cost Effectiveness

Taking into consideration the project activities are mostly completed, as well as the evident impact the project had on the targeted beneficiaries and testimony from beneficiaries, stakeholders and municipalities, it can be concluded that the project was cost effective. Representatives of both municipalities and local communities indicated that the allocated budget for implementing the activities was used efficiently and was sufficient to ensure that the project objectives were met. By reviewing the cost of each intervention, it is found that the cost of these intervention was based on actual unit price compared to the market price. The selection of contractors was based on cost comparison criteria that enabled MDLF and municipalities to select the best prices among bidders for each intervention.

### 2.3.4 Monitoring and Evaluation

Monitoring and evaluation of the project implementation was the responsibility of MDLF and municipalities. This was done by first implementing the base-line study – conducted before the project was implemented. Following this, communities' selection report was conducted. Lastly, progress reports were commissioned by MDLF. Adherence to the implementation plan was sought by MDLF. MDLF Gaza staff supported by the Monitoring officer ensured close monitoring of project activities, reporting to the GIZ and data collection – based on the log-frame.

MDLF's project staff monitored project implementation and tasked with the responsibility of identifying and addressing challenges to project implementation. MDLF's staff work was key in achieving project objectives and addressing all project-related matters. This evaluation is intended to support the monitoring and evaluation efforts, contribute to organizational learning and improve future projects' implementation.

### 2.3.5 Decision-making Rules and Procedures

SRGVC targets Poor and Vulnerable Communities at seven municipalities, facilitating decision-making for the selection of projects' interventions. As the interviews with the municipalities, local communities, CMWU and the MDLF staff cross-referenced with the FGDs and site visits showed, the choice of electing interventions was based on certain criteria such as:

- Sever Poor and Vulnerable Communities located on East of Salah Eddin Street.
- Actual needs of the local communities.
- Unavailability of similar infrastructure.
- Integrated with municipal plans.
- Endorsement by local communities through representatives of neighborhood committees.

- Within the allocated budgets.
- Introducing solar energy as renewable energy for communities suffer from electricity shortage.

Interviews with MDLF Staff and municipalities revealed that all decisions were taken in full participation with all implementing partners and service providers. Modifications, if required, was also made in full participation and endorsement of local communities and municipalities. The final decisions were taken by MDLF staff and sharing it with relevant partners.

The selection of contractors to implement the components is conducted through MDLF bidding system, as highlighted in the site visits and the interviews with MDLF. Then, more than three Class A and B contractors are invited for bidding with the process of contracting taking an average of three weeks. The overall timeframe for the implementation of a project remains short and transparent. According to the interviews with the contractors, this enables projects to be implemented within the timeframe and at market cost.

## 2.4 Achievement of Wider Effects (Impact)

The evaluation looked at whether the SRGVC interventions resulted in strengthening the resilience of Gaza vulnerable communities. In particular, the evaluation looked at the proposed causal change or logic model of the current problem by examining change in the identified determinants of SRGVC related problems such as water shortage, energy efficiency, road safety, health and hygiene status and to some extent environmental and societal factors. Based on the evaluation fieldwork, an outline of the key impact of the project on beneficiaries follows.

### 2.4.1 Overall Impact of SRGVC Interventions

The project had a visible impact on Poor and Vulnerable Communities. Both qualitative and quantitative data collected during the evaluation process supported this conclusion. The project's overall impact was significant, largely because of the relevance of the methodology and structure. In essence, the project was able to fill the gap between the community needs and available resources. Furthermore, the public participation provided a voice to men and women and generated a sense of empowerment among the beneficiaries. As a result of the project, men and women at the vulnerable communities became more engaged and involved with the decision making in their homes and communities in respect to development issues. According to a representative of neighborhood committee in Rafah in Gaza:

"Providing women with this opportunity and engaging us in the project planning and selection is helping to create a new generation of Palestinians who will be able to make positive changes in Palestinian society." Ms. Fayrooz Abu Muhsin from Rafah

Throughout the evaluation process, it was evident the project had led to noticeable changes in the ownership of public utilities at local communities in addition it made a significant positive change in the relation between the municipality and local communities. A female from Abasan Al Jadida is one example of a youth who changed dramatically as a result of this project. She began participating in the project when it began. Throughout engagement at this project, she knew the root causes of problem and found a solution with the help of her colleagues at the neighborhood committee members. By the end of the project, she had become one of the most active promoters in her community. Hence, women are no longer merely passive recipients of services; they have become empowered and have taken a more active role in their communities. Qualitative data collected from interviews and focus group discussions with local communities indicates that the project did increase the capacity of each targeted vulnerable areas. The clearest indication that the project had an impact on the capacity of the targeted municipality in the field of renewable energy is the fact that all Municipality is planning to implement a range of similar interventions in other communities.

#### **2.4.2 Impacts of Developing Roads Intersections using Solar Street Lighting and Landscaping**

There are obvious impacts of on the daily life of people because of developing roads intersections using Solar Street lighting and landscaping at 6 municipalities. According to the focus group discussions with local communities, there are continuous street lights provide people with safe moving during nights, decreasing car accidents and increasing commercial activities during nights.



*Figure 11: Streetlights at Abasan Al Jadeda during night*

### 2.4.3 Impacts of Providing Solar Energy for Water Wells

Providing solar energy to water wells at three municipalities (Al Shoka, Abasan Al Jadida and Al Qarara) increased the outcome of these wells. Pumping hours had increased by additional 50% of the pumped water because of having addition energy source for at least 8 hours per day. Some of the equipment for two water wells had been delayed due to Israeli constrains that affect measuring impact of these wells. The evaluation team found it difficult to measure the impacts of Al Shoka water well because it is not yet operated by solar energy.



Figure 12: Providing solar energy for water wells

The effectiveness of water project had been tested in terms of water quantities and quality. According to the laboratory tests shown in Annex 12, all implemented desalination plants had a TDS with less than 50mg/l which is an optimal drinking water. This result found in Al Shoka, Khuzaa and Al Qarara plants. Also, the evaluation team investigated the capacity and quality of water wells develop by solar energy for Al Shoka and Al Qarara before and after the operation of water wells, it is found that low capacity of these wells with high salinity before the interventions. It is expected that these wells will operate in better capacity and quality which can be determined after a period of operation not less than three months.

### 2.4.4 Impacts of Establishing Municipal Brackish Water RO Desalination Plants with PV System

Provide safe drinking water to vulnerable communities is essential for daily life. Under SRGVC three municipal brackish water RO desalination plants with PV System were established in Khuzaa, Abasan Al Jadeda and Al Qarara. The three plants had direct impact to local communities mainly the communities near these plants. People can get purified water free of charge on daily basis.



*Figure 13: Establishing municipal brackish water RO desalination plants with PV System*

#### **2.4.5 Impacts of Establishing Municipal Public Building**

Two public building were established under SRGVC. In Rafah a youth center, playground for volley-basketball at Khirbet al-Adas is under construction at the final stages. The building consists of two floors for sport and youth activities. The building used "green building approach", also known as green construction or sustainable building. The design is based on a structure and the application of processes that are environmentally responsible and resource-efficient throughout a building's life-cycle: from planning to design, construction, operation and maintenance. There was close cooperation between contractor, the local consultant, and MDLF at all stages. The Green Building practice expands and complements the classical building design concerns of economy, utility, durability, and comfort.

The common objective of green building is to reduce the overall impact of the built environment on human health and the natural environment by efficiently using and consumption of energy, water, and other resources through using solar energy and water reuse. The design emphasizes taking advantage of renewable resources, e.g., using sunlight through passive solar, active solar, and photovoltaic equipment, and using storm water harvesting and reduction of rainwater run-off. The isolation materials and techniques used in this building would help in efficient energy consumption.

A multi-purpose hall at khuzaa is finished and waiting for official opening. The impacts of these buildings are not yet clear since no public activities started. According to the mayor of Khuzaa Mr. Shehta Abu Rook, the hall would provide spaces for activities and cultural programs in Khuzaa and neighboring areas, it includes a theater and technical equipment such as light and sound systems, and it would also facilitate participation and access to cultural activities and would promote cultural development in marginalized areas.

Developing the existing cultural center by adding new multipurpose hall is added value to the existing center that would increase our participation for community development. Mr. Fawzi El Najar from Khuzaa

However, during focus group discussions with local communities they expect a significant impact of these building it terms of increasing public participation, social gathering and more active people in the public life mainly young men and women. It is worth mentioning that the buildings can be used for a broad range of different purposes. It is technologically integrated and could easily maintained. It has the capacity to accommodate more than 200 people.



*Figure 14: Establishing municipal public building at Khuzaa*

## **2.5 Likely Continuation of Achieved Results (Sustainability):**

Qualitative and quantitative data indicate that the project have a lasting impact on the beneficiaries. The evaluating team considered the project's achievements substantial and believes that particular aspects of the project have established sustainable impact. The impact on project beneficiaries, in terms of ownership of public utilities, coordination with local authorities, can be considered sustainable. All interventions are public utilities owned, operate and maintained by the municipalities, therefore the opportunity for sustainability is very high.

Many of the behavioral changes resulting from the project are likely to have long-lasting effects. As a result of the project, local communities have been introduced to new ideas such as solar energy. These interventions of the project have established a foundation that the project beneficiaries (local communities and Municipalities) will be able to build upon for the rest of their lives. It is likely that the targeted poor and vulnerable communities will continue to raise their urgent needs and remain interested in the further development of their communities.

Furthermore, the project has successfully implemented urgent interventions that would be sustainable for long time. Implementing partners agreed that the projects have provided local communities with the basic needs such as water supply and street lighting. Most visibly, the project has had a significant and sustainable impact on the 24 communities.

Different dimensions of the project's overall sustainability are addressed below.

## Level of ownership among beneficiaries and stakeholders

The strength of the project was its success in facilitating and encouraging ownership on the part of the local communities. All implemented interventions are owned by the local authorities (municipalities).

*Table 12: Ownership and sustainability means*

| Project Name                                                                                                                                           | Ownership and Sustainability Means                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Providing Solar Energy for Water Wells at Abasan Al Jadedah, Al Qarara, and Al Shoka</b>                                                            | Municipalities of Abasan Al Jadedah, Al Qarara, and Al Shoka will be responsible for maintenance, improvement and upgrading of the system. They are hiring an operator for the water well to operate, maintain and monitor.<br>Through GIZ support, there was major repaired of the existing pump and provide solar energy for sustainable operation of the well. |
| <b>Establishing Containerized Municipal Brackish Water RO Desalination Plants at Al Shoka, Khuzaa and Al Qarara</b>                                    | The contractor will be responsible of the first year of maintenance and provided training for the relevant municipal staff.<br>The units are constructed on municipal property that ensure suitable use of it.<br>Only trained personnel will operate the units.                                                                                                  |
| <b>Developing road intersections using Solar Street lighting and landscaping at Al Buraij, Qarara, Abasan Al Jadedah, Al Naser, Al Shoka and Rafah</b> | The contractor will be responsible of the first year of maintenance and provided training for the relevant municipal staff.<br>Batteries had more than two year of warrantee. It is expected that these batteries will be functioning for at least four years after that municipality will be responsible for repair or replace the batteries.                    |
| <b>Establishment of public buildings at Khuzaa and Rafah</b>                                                                                           | These building are public property; however, local communities are sharing the responsibility for maintaining these building in sustainable manner.<br>The design and construction methods used for these buildings are leading to sustainability of these buildings.                                                                                             |

SRGVC projects sought to initiate behavioral and cultural change by providing beneficiaries with the guidance and resources to do so. Establishing sustainable change via the introduction of new ideas and concepts is inherently challenging. Thus, it is not surprising that the project's overall sustainability is in many ways obstructed by impeding development issues into socio-cultural factors intrinsic to Gaza. Initiating and sustaining positive change among beneficiaries, community members in the targeted areas will take a significant amount of time, effort and resources.

Conservative values were also identified as a challenge facing project activities, especially in regards to the participation of girls to represent local communities. Thus,

if the project is to be continued, it is recommended that cross-cutting issues such as gender equity and youth empowerment continue to be integrated into the methodology and approach.

## 2.6 Visibility of the Project and Communications Material

Coverage of GIZ grant for SRGVC was highlighted in multiple communications materials that were reflected in photography, Success stories, social media and Municipal websites; in addition to documentation of other stages of activities within the cycle of the program.

Table 13: Visibility of GIZ's implemented interventions

|   | GIZ's Intervention             | Social medial                                                                                               |
|---|--------------------------------|-------------------------------------------------------------------------------------------------------------|
| 1 | Rafah Municipality             | <a href="https://www.facebook.com/murafah/">https://www.facebook.com/murafah/</a>                           |
| 2 | Khuzaa municipality            | <a href="https://www.facebook.com/khuzaa.mun/">https://www.facebook.com/khuzaa.mun/</a>                     |
| 3 | Bureij municipality            | <a href="https://www.facebook.com/Boreij2014/">https://www.facebook.com/Boreij2014/</a>                     |
| 4 | Al Shoka municipality          | <a href="https://www.facebook.com/alshukaa/">https://www.facebook.com/alshukaa/</a>                         |
|   | Al Nasser municipality         | <a href="https://www.facebook.com/alnassermunicipality/">https://www.facebook.com/alnassermunicipality/</a> |
| 5 | Anassan Al Jadeda municipality | <a href="https://www.facebook.com/absaneljadida/">https://www.facebook.com/absaneljadida/</a>               |
| 6 | Al Qarara municipality         | <a href="https://www.facebook.com/Qarara.Mun/">https://www.facebook.com/Qarara.Mun/</a>                     |
| 7 | PCDCR web site                 | <a href="https://www.pcdcr.org/arabic/?p=6815">https://www.pcdcr.org/arabic/?p=6815</a>                     |
| 8 | Local communities              | <a href="https://m.facebook.com/groups/508509010020642">https://m.facebook.com/groups/508509010020642</a>   |

Billboards for each single intervention was designed and fixed on a visible site near to the project site.



Billboard for SGVCD 5.2.4



Billboard for SGVCD 5.4.1



Billboard for SGVCD 5.3.2



Billboard for SGVCD 5.2.4



Billboard for SGVCD 5.1.2



Billboard for SGVCD 5.4.1



Billboard for SGVCD 5.3.1



Billboard for SGVCD 5.1.2

Figure 15: Visibility of the interventions

# PART THREE

## BENEFICIARIES IMPACT ASSESSMENT



### 3. Beneficiaries Impact Assessment

This final Beneficiaries impact assessment BIA of SRGVC projects was designed to provide an objective assessment of the project's performance, paying particular attention to the impact of the project's actions against its objectives. The BIA has identified key lessons learned and proposed practical recommendations for follow-up actions. The BIA covered the seven municipalities targeted by this project and measuring the satisfaction, perception, public participation and community engagement for implemented interventions of improving the water supply, developing road intersections and establishing public buildings.

#### 3.1 Improving Domestic water supply and safe drinking water

Six water interventions with total cost of around 380,000 Euro had been implemented under SRGVC. Three of these projects are providing solar energy for existing municipal water wells located at Al Qarara, Abasan Al Jadedda and Al Shoka. While the other three projects are establishment of three desalination plants with PV System (48m<sup>3</sup>/Day Containerized Municipal Brackish Water RO Desalination Plant each) in Al Qarara, Al Shoka and Khuzaa.

*Table 14: Water interventions under SRGVC*

| Municipality                                     | Project Number | Project Name                                                                                                                                                          | Budget (Euro)     |
|--------------------------------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Al Qarara                                        | SRGVC5.2.1     | Providing Solar Energy for Water Wells - Aljeia Well.                                                                                                                 | 116,241.70        |
| Abasan Al Jadedda                                | SRGVC5.2.2     | Providing Solar Energy for Water Wells - Eastern Well.                                                                                                                | 64,146.50         |
| Al Shoka                                         | SRGVC5.2.4     | Providing Solar Energy for Water Wells - Malyzian Well.                                                                                                               | 94,467.93         |
| Al Qarara                                        | SRGVC5.3.1     | 48m <sup>3</sup> /Day Containerized Municipal Brackish Water RO Desalination Plants with PV System.                                                                   | 36,023            |
| Al Shoka                                         | SRGVC5.3.2     | 48m <sup>3</sup> /Day Containerized Municipal Brackish Water RO Desalination Plants with PV System.                                                                   | 43,919            |
| Khuzaa                                           | SRGVC5.3.3     | Establishment of one desalination plant with PV System in Abu Ali and Abu Rock (48m <sup>3</sup> /Day Containerized Municipal Brackish Water RO Desalination Plants). | 39,163            |
| <b>Total cost for water interventions (Euro)</b> |                |                                                                                                                                                                       | <b>393,961.13</b> |

Evaluation team had distributed 225 questionnaires at Abasan Al Jadedda, Al Shoka and Al Qarara, where 75 questionnaires were used at each municipality.

Table 15: Number of beneficiary questionnaires

| Municipality         | Project                                                                    | Household Sample size |
|----------------------|----------------------------------------------------------------------------|-----------------------|
| Abasan Al Jadeda     | providing Solar Energy for Water Wells - Eastern Well                      | 75                    |
| Al Shoka & Al Qarara | establishing Containerized Municipal Brackish Water RO Desalination Plants | 150                   |
|                      | <b>Total number of distributed Questionnaires</b>                          | <b>225</b>            |

The evaluation team tried to have gender balance during distribution of these questionnaires but the health situation and constrain of COVID-19 precautions measure enforced the field team to interview the available and willing persons at the targeted vulnerable communities. The field survey team targeted (20%-38%) of the respondents from female. Female participation was the higher among the three municipalities found at Abasan Al Jadeda (38%) of the total respondents. The highest Figure 16: Distribution of questionnaire respondents by Gender.

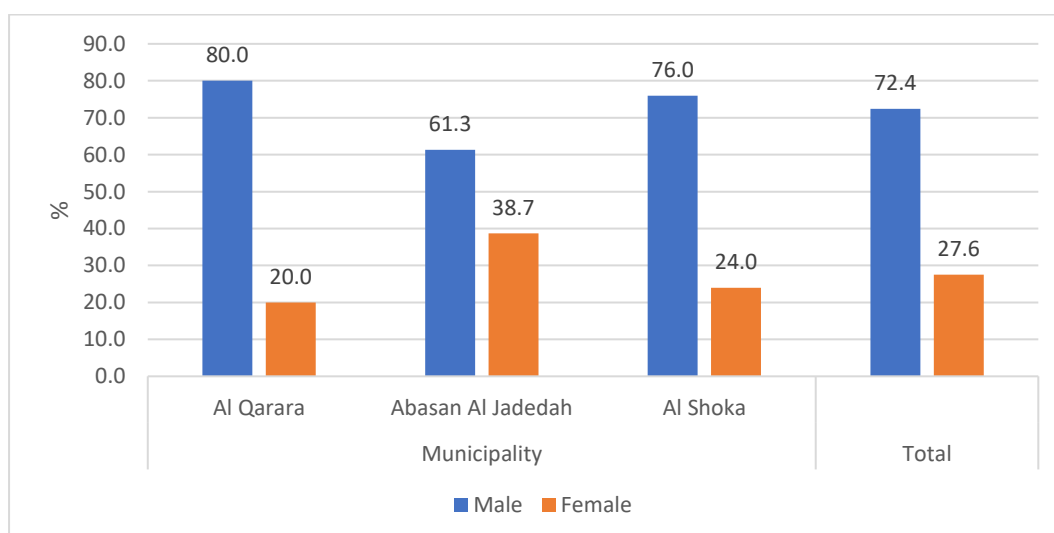


Figure 16: Distribution of questionnaire respondents by Gender

Respondents are representing the vulnerable communities who benefited directly and indirectly from the water projects. The whole vulnerable communities had benefited from providing solar energy for water wells, while only the people living close the containerized municipal brackish water RO desalination plants had benefited from them. Figure 17: Distribution of questionnaire respondents by location at the three municipalities.

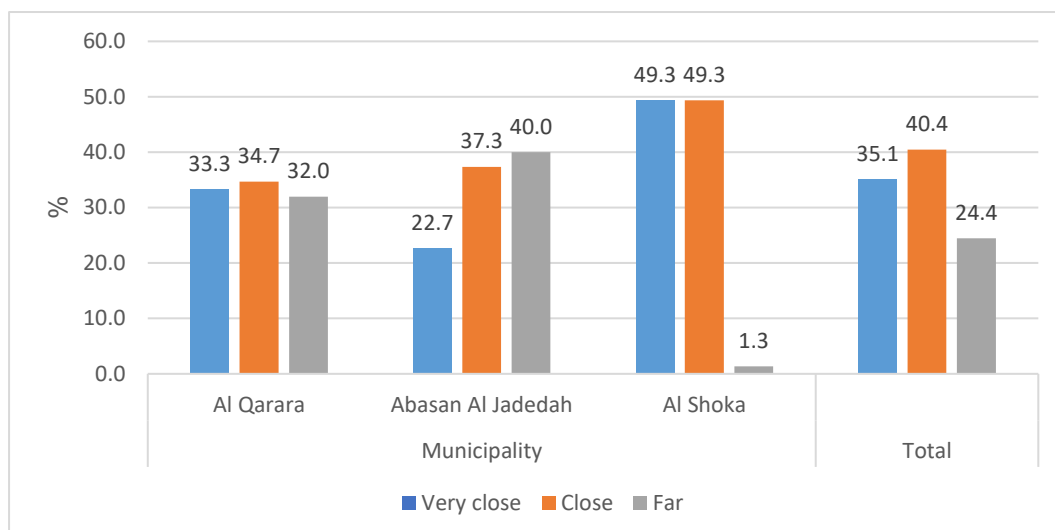


Figure 17: Distribution of questionnaire respondents by location

### 3.2 Assessment of relevance of water interventions to the needs

Based on the results of field survey, interviews and focus groups, the water related interventions “providing Solar Energy for Water Wells and establishing Brackish Water RO Desalination Plants” are totally relevant to the needs of vulnerable communities. This finding was also proven by the process of priority selection<sup>6</sup> conducted through supervision of PCDCR. The selection of the priorities was taken by the community members themselves after extensive training on priority selection. Figure 18: Priority selection process and criteria used for intervention selection.

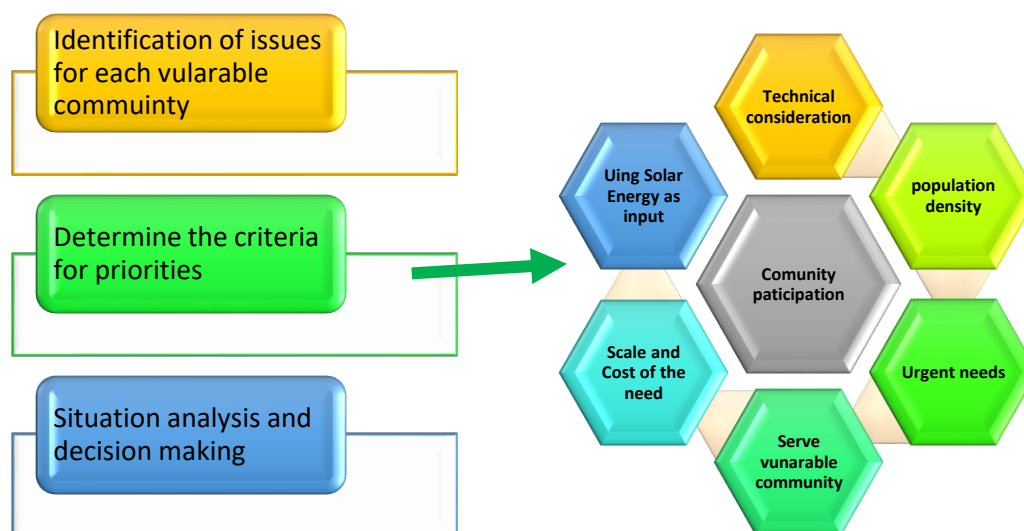


Figure 18: Priority selection process

<sup>6</sup> PCDCR (2019) Enhancing accountable infrastructure services

According to focus group discussions, all implemented water interventions are relevant and respond to the vulnerable communities' needs and priorities. The majority of vulnerable communities (72%) were depending on municipal water wells for all domestic uses. About 87% of residents at Abasan Al Jadedah and 75% of residents at Al Shoka are depending on municipal water wells. While about 56% of Al Qarara residents are depending on municipal water wells. For areas having shortage of water supply they are depending on private water wells. It is clear that municipal wells are the main water sources for the residents at these areas. The development of these water wells and increasing pumping hours is totally relevant to the needs and priority of vulnerable communities.

**"We are suffering from a bad situation of water supply. We used to have water once every three days, therefore developing water well would increase the water quantities and supply hours. Also, the main pipeline needs improvement and increase its diameter to be able to receive more water quantities". Ms. Ahlam Edbary from Al Shoka**

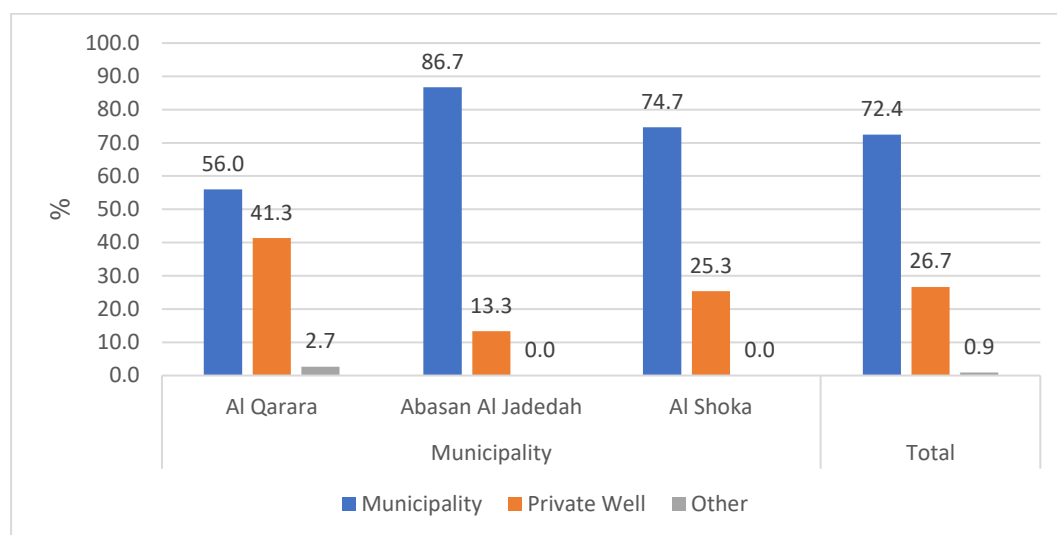


Figure 19: Source of domestic water at vulnerable communities

People at vulnerable communities are suffering from shortage of water mainly at Al Shoka municipality where they have tap water once every four days. This is another evidence on the need for developing and increasing the pumping hours for these water wells. This can't be unless the water well has another source of energy at the times of electricity cut-off. According to the focus group discussion the people having electricity only 8 hours a day. Figure 20: Frequency of operating domestic water wells at vulnerable communities before the intervention.

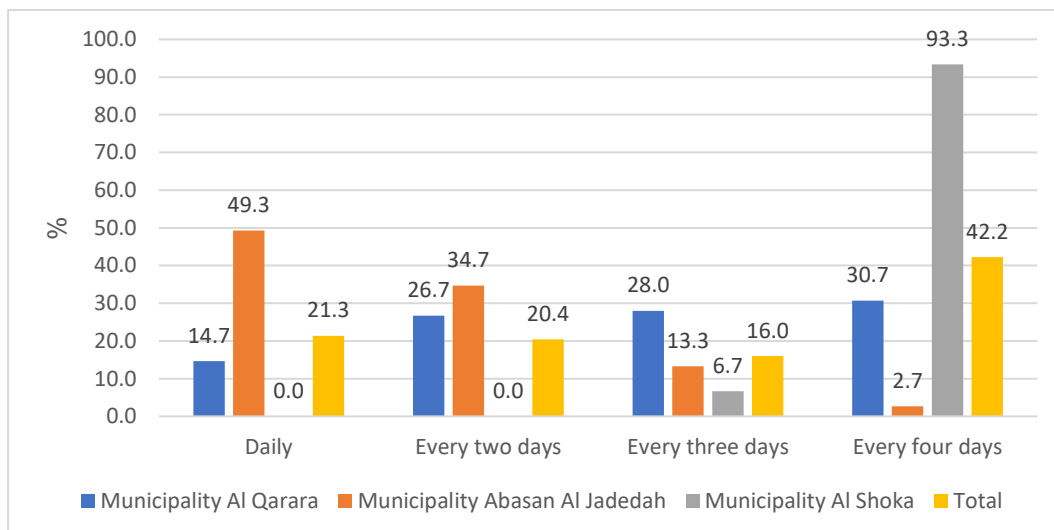


Figure 20: Frequency of operating domestic water wells at vulnerable communities

The majority of vulnerable communities at Al Qarara, Abasan and Al Shoka are getting drinking water by purchasing weekly amounts of purified water from water tankers (private companies). According to the focus group discussions, poor people cannot afford purchasing water on regular basis. Therefore, it was clear that establishing free-of-charge municipal brackish water RO desalination plants is among the needs and priorities of these communities. Figure 21: Source of drinking water at vulnerable communities

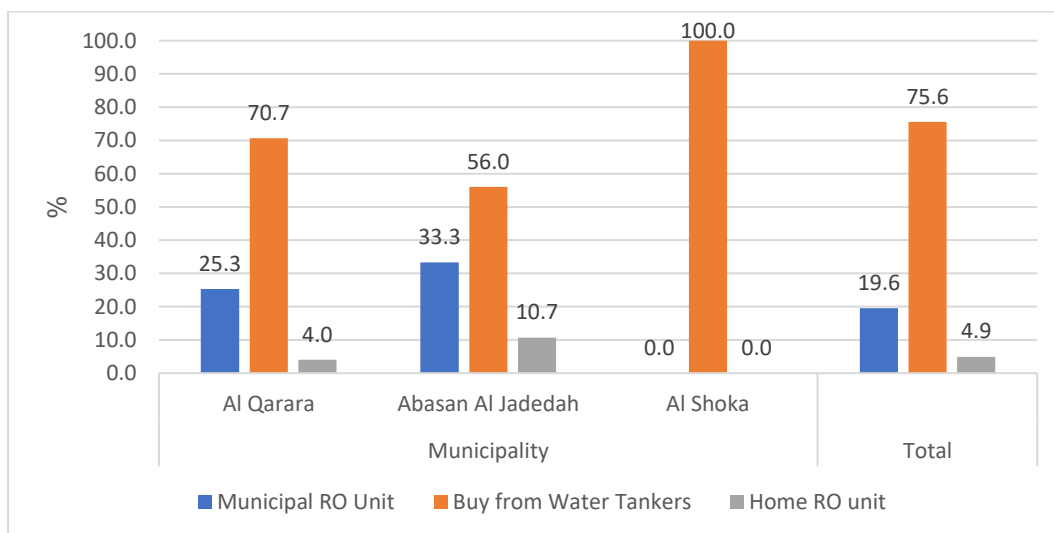


Figure 21: Source of drinking water at vulnerable communities

The majority of residents are having moderate water quality for drinking purposes. For instance, 36% of people living at vulnerable communities at Al Qarara described the available drinking water before the project as good quality while 61% of them described it as "moderate" and only 1.3% of them described the water quality as "bad". This also supports the idea of having good drinking water quality at these areas as priority. Figure 22: Quality of drinking water at vulnerable communities before the establishment of water desalination units at their communities.

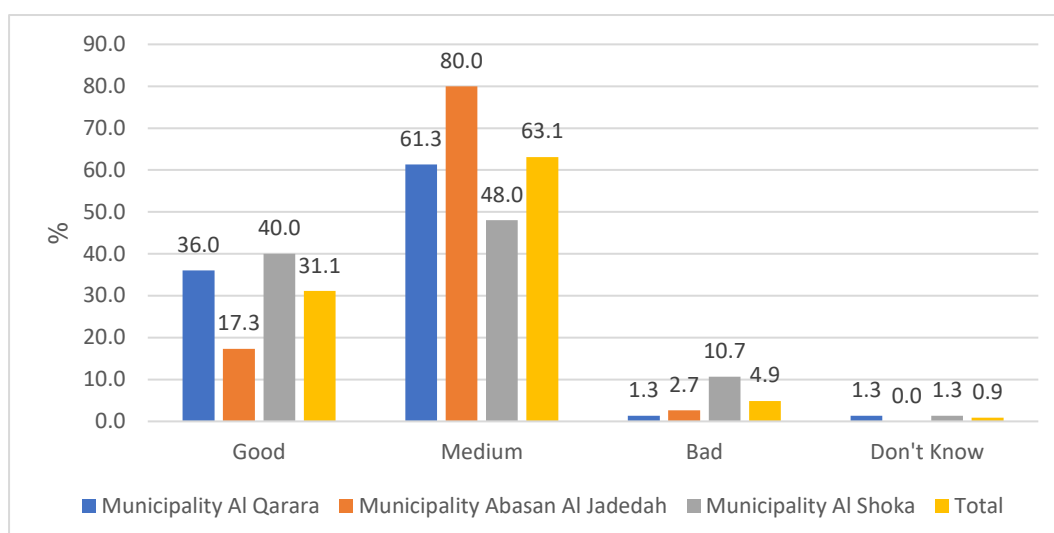


Figure 22: Quality of drinking water at vulnerable communities

Most of the people at these municipalities were informed about the GIZ interventions through neighbours and neighbourhood committee members. It was brilliant idea from MDLF and PCDCR to convey the project aims and activities through the representatives of community who are able to convene the others on the importance of public participation that strengthened the project ownership among the local communities.

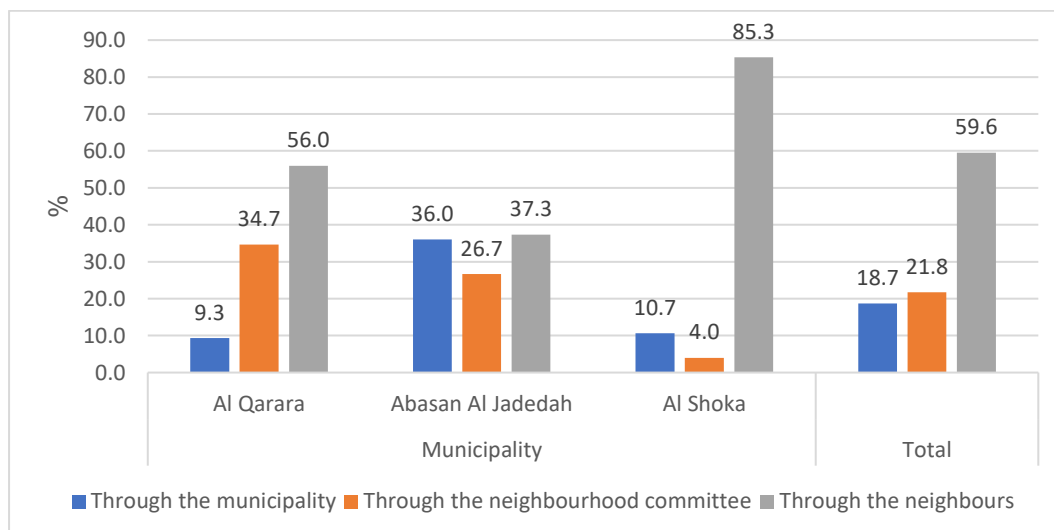


Figure 23: The different ways of public engagement at water interventions

Before starting the interventions, participation at planning stage of the interventions was limited to the representatives of the vulnerable communities. Representation of these communities were through "community accountability committee at each municipality". Each committee had at least two members from each neighborhood. For instance, Al Shoka had six vulnerable neighborhoods represented through 15 members at Al Shoka community accountability committee. Therefore, we found that less than 7% of the community members participated strongly at the planning stage of the interventions while similar percentage participated moderately.

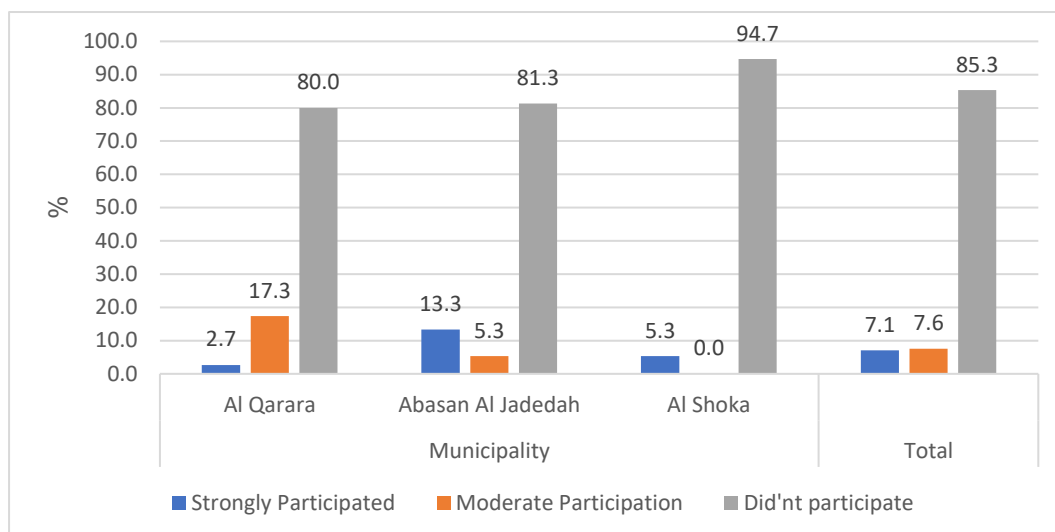


Figure 24: Public participation at planning process at water interventions

The percentage of people involved during the implementation of the intervention was higher than the people involved during the planning and preparation stage. This due to the increased awareness among local communities of public participation importance. According to the interview with PCDCR coordinator Ms. Eman Abu Said, there was gradual increase in number of people who are willing to participate at planning and implantation of these interventions. Between 14%-16% of total population at Al Qarara and Abasan have participated in the implementation stage while only 4% of Al Shoka resident have participated. According to the interview with PCDCR coordinator, Al Shoka residents were hesitated to participate until they have the impact of these projects.

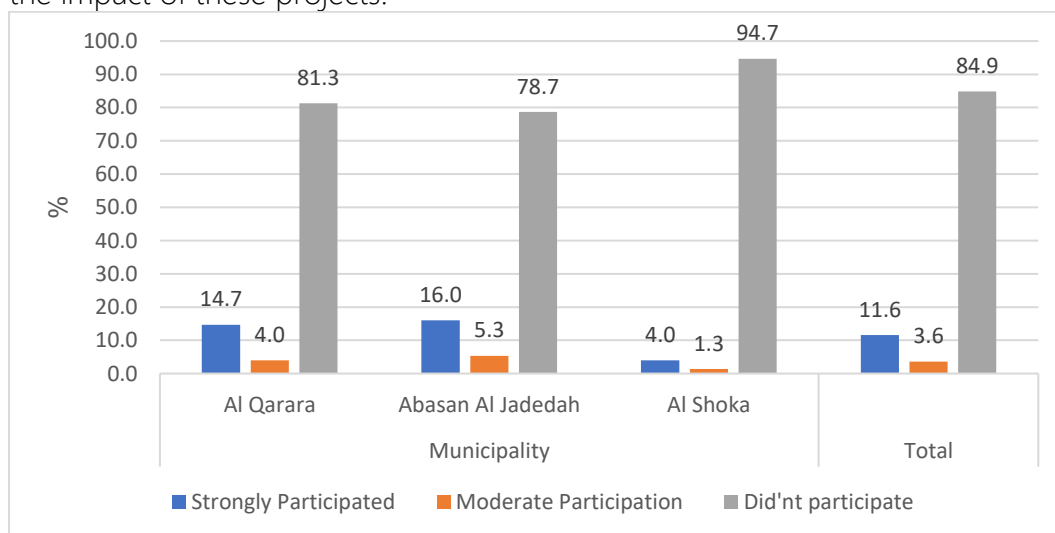


Figure 25: Public participation at implementation phase of the interventions



Figure 26: Photos for meetings of social accountability committee members

### 3.3 Assessment of the beneficiaries' satisfaction on delivered outputs

Figure 27 shows that the majority of local communities are satisfied about the quality of the implemented interventions. This satisfaction varies from area to another area i.e., there were high satisfaction at Abasan Al Jadedah and Al Qarara with more 90% and 60% respectively of the respondents. While low percentage found at Al Shoka areas since the project had delay in implementation.

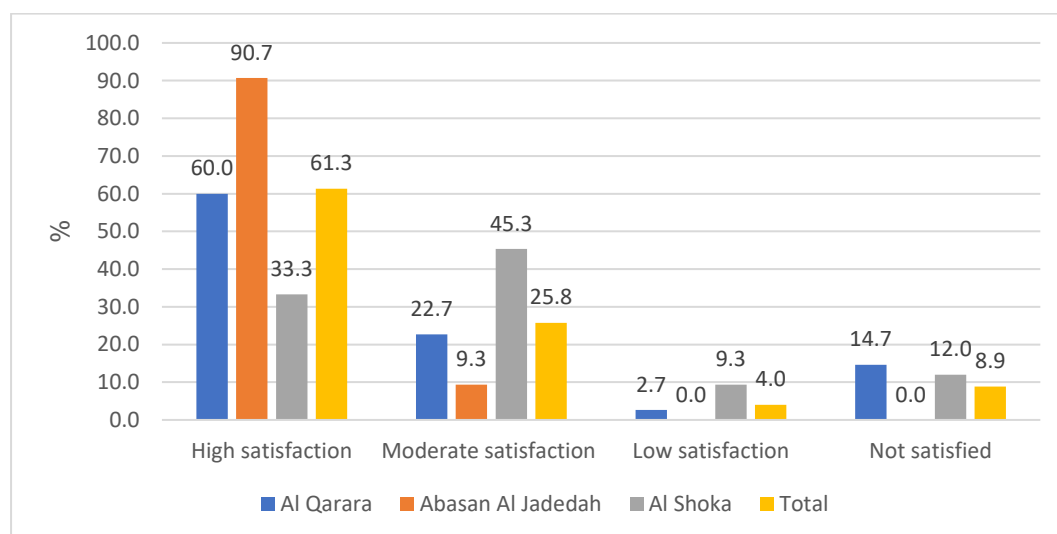


Figure 27: Photos for meetings of social accountability committee members

### 3.4 Assessment of beneficiaries' perception

The process of contracting local contractors to implement water interventions followed MDLF's procurement process and municipality's procurement process. Both processes are transparent and gave the bidders equal opportunity to participate. During the interviews with three contractors there was no claims or complaints on the selection process. According to the interviews with municipal mayors and municipal engineers they stated that the implementation was performed under direct supervision of municipal engineers. Municipal engineers had the authority for direct instructions to

the contractor based on discussions with the local consultant of the project and MDLF project coordinator.

The local Consultant (Universal Group) had supervised the implementation from technical aspects which including, material approval, construction methods, testing the operational aspects, commissioning, and handover. Neighbourhood committee members had also followed up the implementation process and coordinate with the municipal engineer for any proposed changes that would maximize the benefit of the project. Minor obstacles which faced the implementation of projects with local residents had been resolved through the Neighbourhood committee members.

From now a head all projects will be proposed, planned and implemented through the local committee. This would give us ownership feelings and more responsibility for maintain them". Ms. Nada Khashan from Al Qarara

The total budget allocated for water projects is around Euro 379,000 distributed on five contracts. The majority of these contacts had been conducted by Abdel Salam Yassen Company which is one the local large-scale companies specialized in water equipment, installation of desalination plants and construction of water wells. Table 16: Contracts with local companies for implementation of SRGVC projects

Table 16: Contracts with local companies for implementation of SRGVC projects

| Municipality     | Project Number | Contract Amount                                                                                                                                  | Complete Date  | Contractor                 |
|------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------------|
| Al Qarara        | SRGVC5.2.1     | 111,246                                                                                                                                          | 15 March. 2021 | Abdel Salam Yassen company |
| Abasan Al Jadeda | SRGVC5.2.2     | 59,151                                                                                                                                           | 25-Nov-2020    | Mega Power Company         |
| Al Shoka         | SRGVC5.2.4     | 89,471                                                                                                                                           | 15 March. 2021 | Abdel Salam Yassen company |
| Al Qarara        | SRGVC5.3.1     | 36,023                                                                                                                                           | 15-Apr-2020    | Abdel Salam Yassen company |
| Al Shoka         | SRGVC5.3.2     | 43,919                                                                                                                                           | 1-Apr-2020     | Abdel Salam Yassen company |
| Khuzaa           | SRGVC5.3.3     | 39,163                                                                                                                                           | 18-Apr-2020    | Abdel Salam Yassen company |
| <b>Total</b>     |                | <b>378,973 Euro</b> with additional 15000 Euro (5000 Euro for each of the first three project with <i>justified variation approved by MDLF</i> ) |                |                            |

### 3.4.1 Beneficiaries' perceptions regarding the interaction between municipalities and their citizens

During implementation of SRGVC projects, the relation between the municipality and the local communities represented by social accountability committee members had been strengthened. The evaluation team noticed significant satisfaction by the local communities on the municipal work. Also, it was noticeable that there were high coordination levels between the municipality and the representatives of local communities.

During 2018-2020 PCDCR worked extensively with the vulnerable communities at these municipalities mainly with social accountability committee members to increase their awareness on public participation, transparency, and accountability. After several training sessions, meetings, focus groups and brain storming session "Social Accountability Committees" were formulated in these municipality having the following tasks:

- Narrowing the views between citizens and municipality.
- Solving any conflict that may arise
- Developing mechanisms of solving conflicts with the assistance of PCDCR.
- Evaluate the small grant projects through their design, plan, implement and follow-up processes.
- Each social committee will hold quarterly meeting, 10 meetings per committee and 60 meetings for the 6 municipalities
- Discuss any relevant topics regarding the project

"This is the first time in my life to be given the opportunity to participate as "a decision maker" in selection of projects to my area according to the community needs and priority. Training and workshops by PCDCR enhanced our capacities to be effective member at our vulnerable community that has been ignored for several years ago". Mr. Issa Abu Roak from Khuzaa

### 3.4.2 Assessment of consultation with the community in project selection

According to the focus group discussions held with local community members there are high level of consultation with the community regarding the selection of the subprojects. PCDCR had trained and encouraged local neighbourhood committee members to participate in the selection process of the interventions.

This approach seeks to expand participation in establishing project prioritization and planning through the integration of rights-holders and duty-bearers represented in municipalities and donor.

Seven participatory training workshops were carried out by dividing the participants into small work groups (distribution according to the vulnerable area), where each group of the 24 marginalized communities in the seven municipalities takes in (local people, municipality delegate, NGO representative, member of the neighborhood committee if found). The audience was as follows: Al-Bureij 56 participants in) five groups (, Al-Qarara 38 participants in) five groups (, Abasan Al Jadeeda 30 participants in )3 groups (, Khuza'a 30 participants in )3 groups (, Al Shoka 38 participants in (3 groups), Al Nasser 30 participants (two groups), Rafah 38 participants in (4 groups).

"Social accountability committee members and the municipal staff working hand by hand, we are helping the municipality to overcome all obstacles that could handier the implementation of the projects. We exchanged ideas and thoughts for the benefit of vulnerable communities". Mr. Asad Abu Latifa from Abasan Al Jadedda

Participants were trained on the (Pairwise Ranking Tool) used in actual project prioritization for marginalized communities as follows:

1. To clarify the basic issues related to infrastructure and public services that will focus on the priorities of the population in marginalized communities such as roads, sanitation, solid waste disposal, domestic use water (infrastructure), tiling of squares and roads, drinking water, playgrounds, street lighting, community institutions, Landscaping, parks and gardens (public services), as well as educational and health services.
2. To identify issues that represent marginalized community priorities in each of the 24 marginalized communities.
3. Analysis of the problems that fall under each case. For example, the case: roads, problems that fall under it (a non-paved X road, including many ponds and marshes, with rainwater problem etc.)
4. Develop proposed solutions so that they represent the priorities of projects in marginalized society using the same model # 1 Example: Road paving X, including solving the problem of rainwater drainage. The following example shows grading from the issue to the problems to priorities:
5. Determine the criteria for differentiation among needs, and turn them into priorities.
6. Voting by participants from the marginalized community is based on the priorities identified within the single issue, selecting the most urgent priority and placing it in the infrastructure pairing matrix, and so on with the rest of the issues. (See matrix 1), in the same way, priorities under service-related issues are selected and therefore the most urgent priority is selected and placed in the service-related matrix (see matrix 2)
7. Finally, the list of priorities in the infrastructure and services sectors is grouped into a single matrix where the priorities are arranged at the sector level from the most important to the least important.
8. Give quantitative scores for each priority
9. Prioritize in the light of analysis results

### 3.5 Developing road intersections using Solar Street lighting and landscaping

Under SRGVC 100 road intersections using solar street lighting and landscaping had been completed at Al Buraij, Al Qarara, Abasan Al Jadeda, Rafah, Al Naser and Al Shoka. These projects had a total budget of 320,000 Euro. The direct beneficiaries of these projects are 109250 inhabitants<sup>7</sup>.

**At Al Buraij:** The project covers all vulnerable communities at Al Buraij. The project included supply and installation of road lighting intersections, complete internal cable connections, steel electric poles and setting up lighting lanterns work through solar cells. Therefore, the project included 14 intersections with solar energy lighting and street tiles of small areas of sidewalks.

"Street lightings makes us feeling safer when walking at street during nights". Ms. Reda El Nabaheen from AL Bureij

**At Al Qarara:** The project covers all vulnerable and underserved communities. The project included supply and installation of road lighting intersection - complete internal cable connection and electric poles, setting up lighting lanterns work through solar cells. Therefore 14 intersections need Solar Energy lighting and had some finishing of small area of sidewalks.

"Street lightings by solar energy during night encouraged my neighbor to open his grocery during night time" Ms. Sawzan Khashan from Al Qarara

**At Abasan Al Jadeda:** Before the project there were no lights that the street was unsafe for women and children at night and frequent traffic accidents used to be encountered. Predominantly agricultural area where a lot of stray dogs roam at night. The targeted locations are Al- Radwan Street, Street 26 and 24, in Al-Shorouk neighborhood, Abu Arafat Street, Umm Al-Mahd Street, Riad Street, and Abu Latifa Street. The project included setting up lighting lanterns work through solar cells. Therefore, the project includes 19 intersections with solar energy streetlights with some finishing of small areas of sidewalks.

"My neighbourhood benefited from streetlights. It is a big change, however, other neighbourhoods at Abasan Al Jadeda needs additional streetlights. This one of the priorities". Mr. Khalil Arafat from Abassan El Jadeda

**At Rafah:** Covered the eastern part of Rafah, the project included 18 intersections with solar energy lighting. Around 14 intersections of the total targeted intersections had some finishing of small area of the sidewalks.

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<sup>7</sup>UG (2019) Design Report - Lot1. Development of Roads Intersections Using Solar Street Lighting and Landscaping

**At Al Naser:** The project included supply and installation of road lighting intersections - complete internal cable connections and electric poles, setting up lighting lanterns work through solar cells. Therefore, the project included 13 intersections need solar energy lighting and 10 intersections had some finishing of small area of the sidewalks.

Streetlights makes our community safe and after years of darkness. Ms. Samaher Abu Srar from Al Nasser

**At Al Shoka:** No light is available on main or sub streets. The project included road lighting intersections, complete internal cable connections and electric poles, setting up lighting lanterns work through solar cells. Therefore, the project includes 12 intersections in addition to 4 intersections included solar energy for street lights and 11 intersections had some finishing of small area of sidewalks.

Streetlights was among our priorities identified by us. 12 intersections are no enough and we need at least 40 intersections to have street lights". Ms. Fatima Jubara from Al Shoka

Table 17: Interventions of road intersections using solar energy and landscaping

| Municipality/ Project Code      | Vulnerable community Name                                                                | Number of intersections <sup>8</sup> | Number of Direct and in direct beneficiaries | Budget in Euro |
|---------------------------------|------------------------------------------------------------------------------------------|--------------------------------------|----------------------------------------------|----------------|
| Al Burajj<br>SRGVC5.1.1         | Maqboula<br>Saieda<br>Soud<br>Abu Medin<br>AlTal Al Akhdar                               | 15                                   | 25000                                        | 49,480         |
| Al Qarara<br>SRGVC5.1.2         | Sereij & Shuiebat<br>Sheikh Hamada<br>AlAstal&Abu Jumeze.<br>Abu Fayda<br>Abu Hadaf Area | 14                                   | 26000                                        | 48,695         |
| Abasan Al Jadedda<br>SRGVC5.1.3 | Al Sahaba.<br>Al Shrouq                                                                  | 23                                   | 9250                                         | 66,754         |
| Rafah<br>SRGVC5.1.4             | Al Barzayel<br>Khirbet Al Adas<br>Al Tanour.<br>Musabah.                                 | 18                                   | 22000                                        | 66,920         |
| Al Naser<br>SRGVC5.1.5          | Al Thawbata<br>Abu Mumar                                                                 | 15                                   | 10000                                        | 42,914         |

<sup>8</sup> UG (2019) Design Report - Lot1. Development of Roads Intersections Using Solar Street Lighting and Landscaping

| Municipality/ Project Code | Vulnerable community Name                                     | Number of intersections <sup>8</sup> | Number of Direct and in direct beneficiaries | Budget in Euro |
|----------------------------|---------------------------------------------------------------|--------------------------------------|----------------------------------------------|----------------|
| Al Shoka<br>SRGVC5.1.6     | Safa & Al Taquwa.<br>Abu Luli & Al Rebate<br>Qaret Al Shahada | 15                                   | 17000                                        | 45,250         |
| Total                      |                                                               | 100                                  | 109250                                       | 320,013        |

Evaluation team selected three projects for beneficiary's impact assessment in Al Buraij, Al Qarara and Rafah. A total of 225 questionnaire had been distributed in these areas (75 questionnaire in each area). 63% of the respondents to the questionnaire are male and 37% are females.

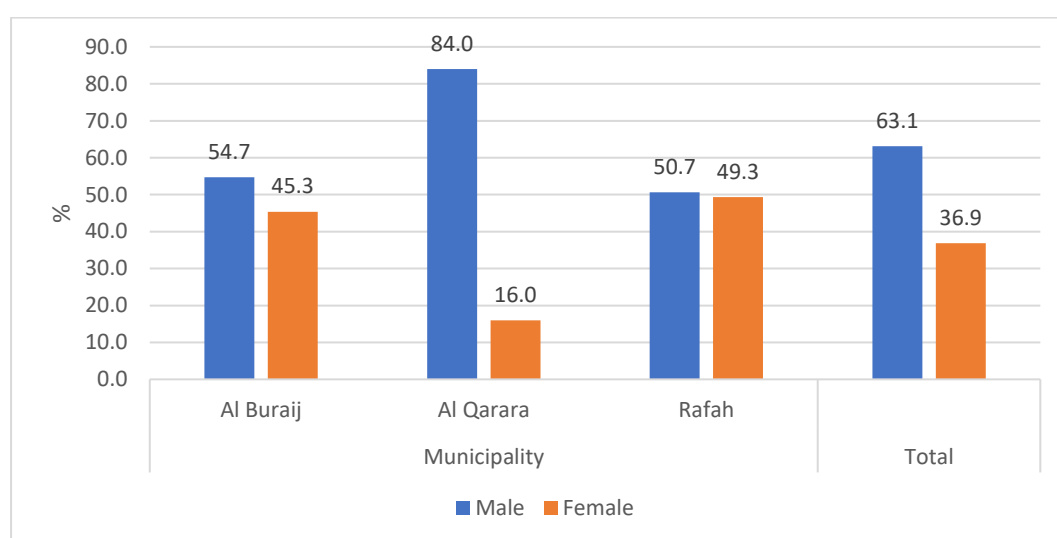


Figure 28: Gender of respondent to the questionnaire about street lighting

Figure 23 shows that most of the respondents (87%) are citizen at vulnerable communities, and some of them (3%) are drivers using these roads.

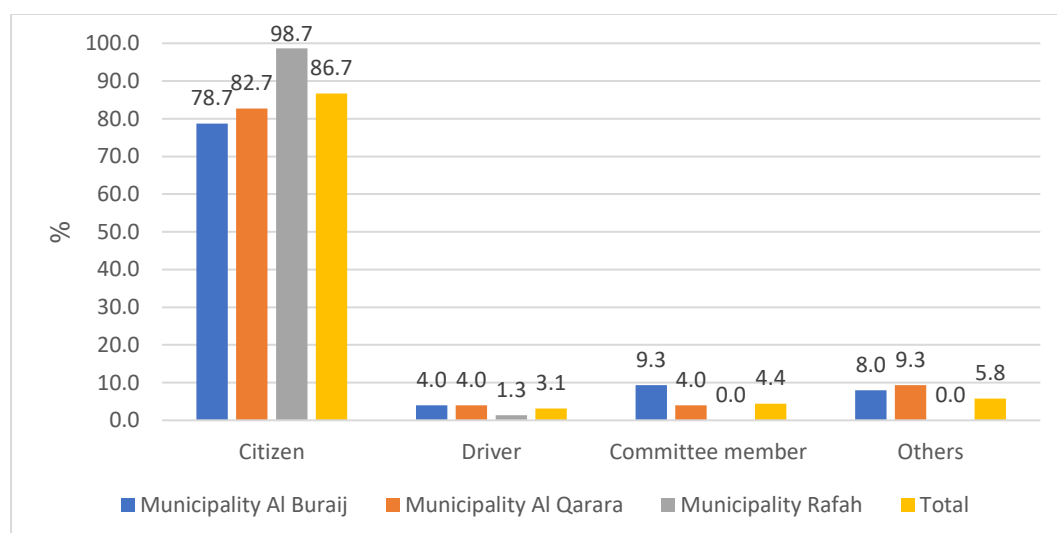


Figure 29: Respondents to the questionnaire about street lighting

### 3.5.1 Relevance of developing road intersections to the need of local communities

Before the interventions, limited streets at vulnerable communities had streetlights. It is found that 48% from Al Buraij, 70% from Al Qarara and 45% from Rafah did not have street lighting at night. Limited number of people confirmed that they had "sometimes" streetlights, this refers to the electricity cutoff every 8 hours. It is found also that 42% from Al Buraij, 29% from Al Qarara and 29% from Rafah are having streetlights whenever the electricity is available.

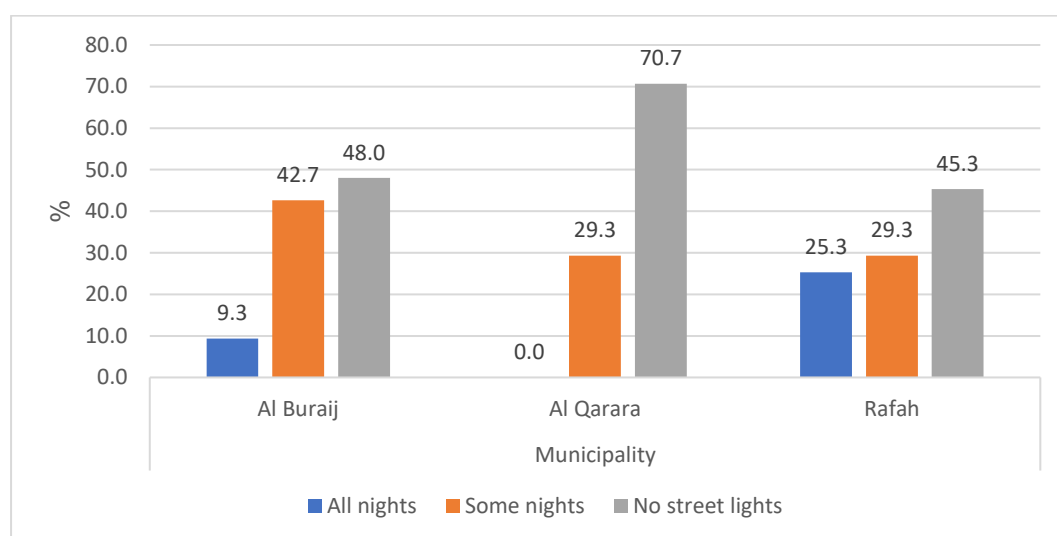


Figure 30: The existence of streetlights before GLZ intervention

Before the interventions, people were suffering from the bad street lighting. Around 57% from Al Buraij, 68% from Al Qarara and 53% from Rafah revealed that they had bad streetlights before the project.

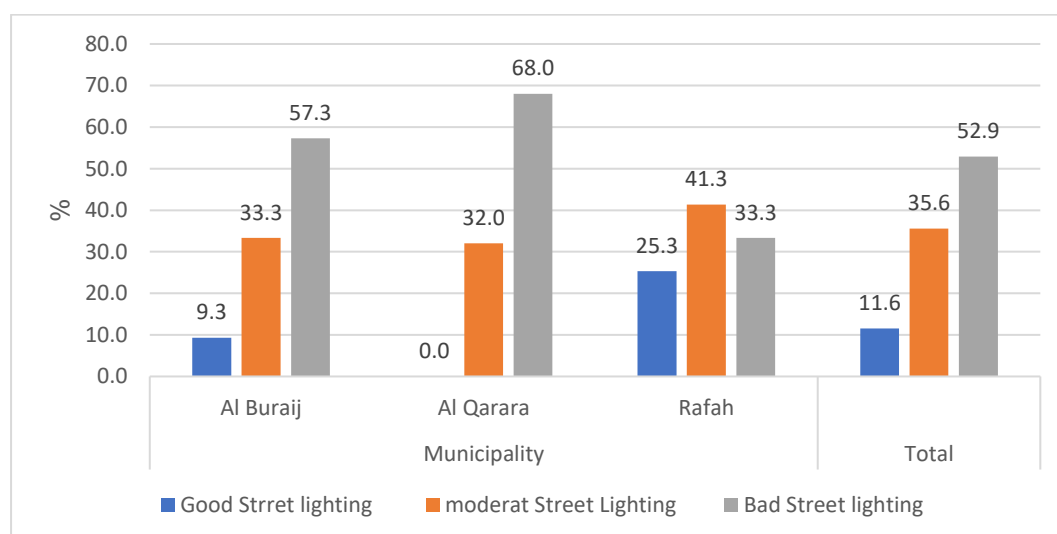


Figure 31: The quality of street lighting before GLZ intervention

Local communities reviled that many car accidents were encountered especially at nights where the streets are totally dark. 58% of residents from these municipalities confirm that there are many car accidents at their areas due to the darkness of the area.

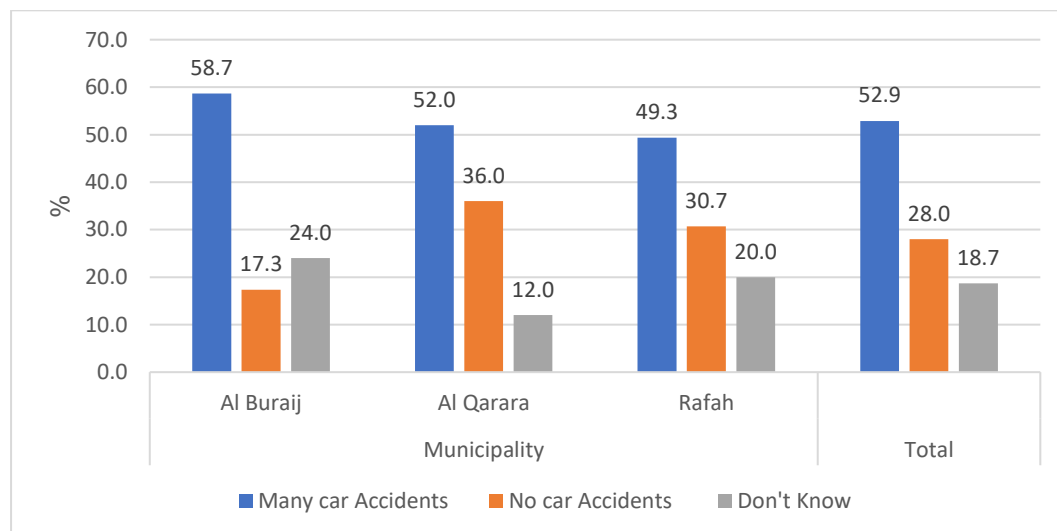


Figure 32: Street lighting before GIZ intervention

### 3.5.2 Beneficiaries' satisfaction of developing road intersections

The results of questionnaire on the residents' satisfaction revealed that 49% of Al Buraij residents, 75% of Al Qarara residents and 88% of Rafah residents are highly satisfied. Very limited number of local resident (less than 8%) expressed their dissatisfaction on the implemented projects. Focus group discussion shows that some of neighborhoods did not have streetlights due to the limited number of available streetlights under SRGVC. Therefore, we found some people are still dissatisfied because they are willing to be included in this project.

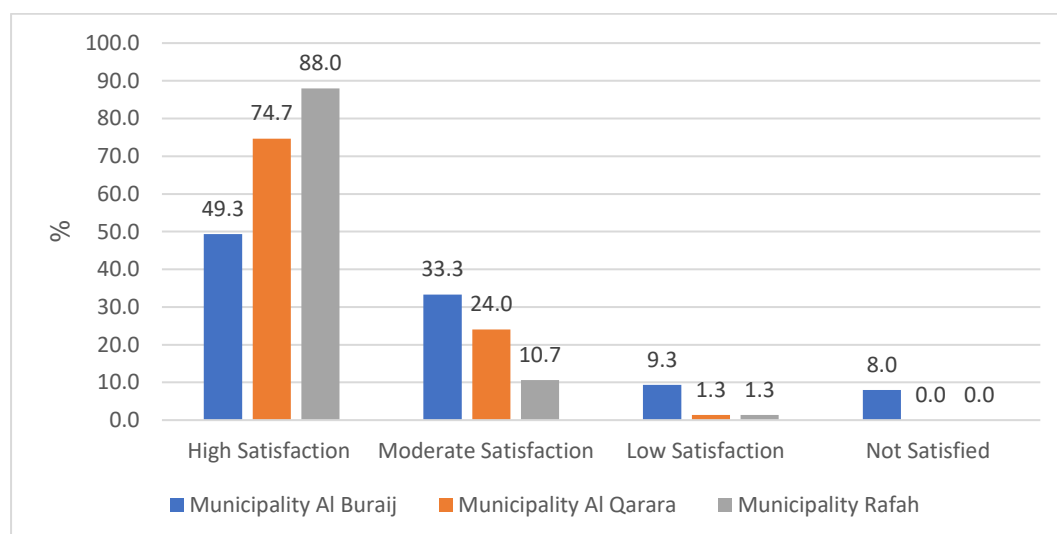


Figure 33: Level of satisfaction on street lighting projects

### 3.6 Public participation at developing road intersection

The focus groups discussions with community members reveled that before the GVCD and SRGVCD projects the vulnerable communities were not participating in any of public events held by municipality. During the planning stage of these projects, participation rates were either high or moderate, which can be summarized as follows: 36% of residents at Al Buraij, 18% of residents at Al Qarara and 65% of residents at Rafah had participated in the planning of these projects in cooperation with the municipality.

It was a unique chance for young woman to participate in in project selection for our neighbourhood that previously was limited to only official persons at the municipality".  
*Ms. Suha Karzoon from Rafah*

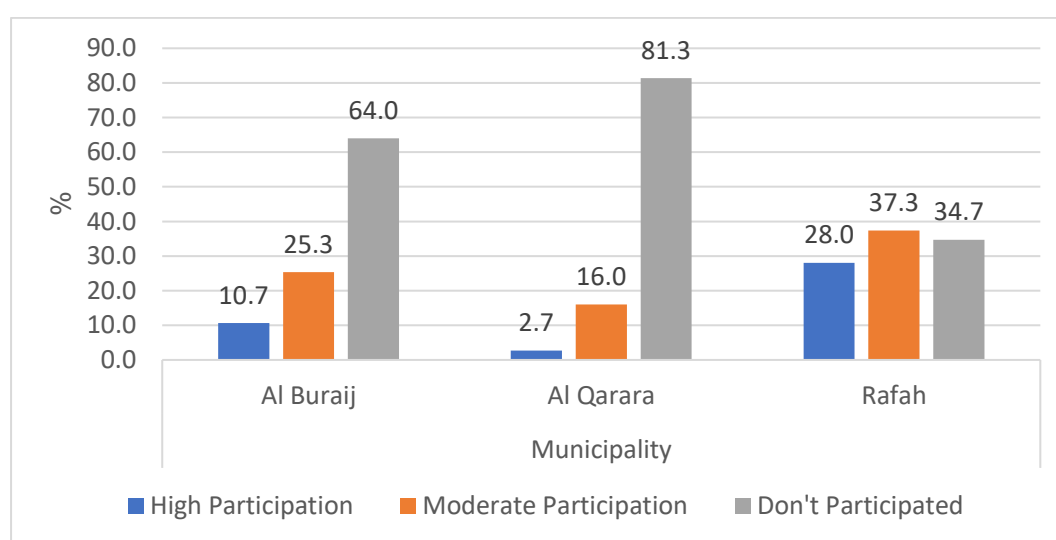


Figure 34: Public participation at the planning stage of GLZ intervention

After the GVCD and SRGVCD projects had started public participation rates either high or moderate can be increased as shown in Figure 29 where 46% of residents at Al Buraij, 33% of residents at Al Qarara and 73% of residents at Rafah had participated in the implementation of these projects in cooperation with the municipality.

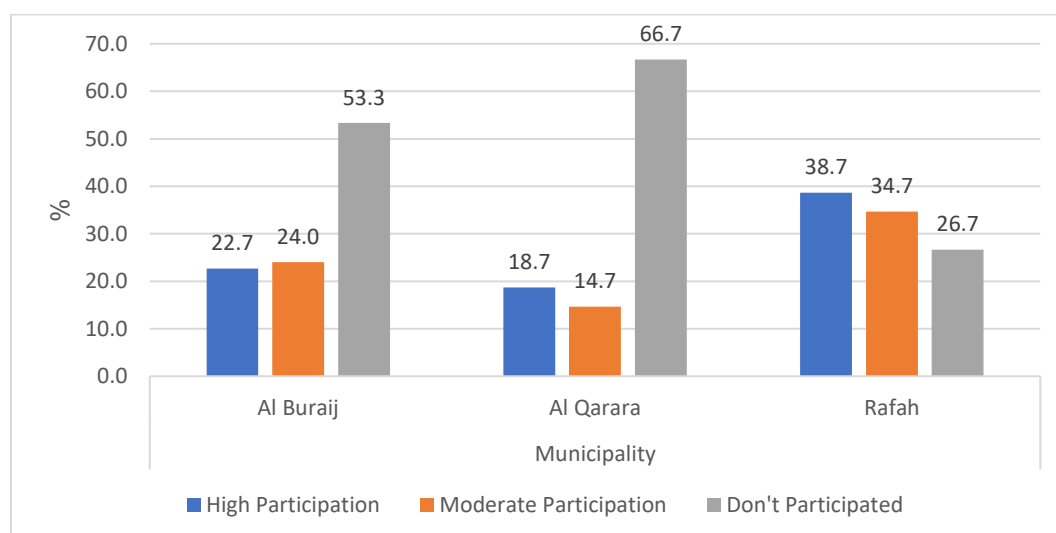


Figure 35: Public participation at the implementation stage of GIZ intervention

### 3.7 Beneficiaries' impact of developing road intersections

It is obvious that there are high impact on local residents of the developing road intersections using solar energy. This impact is represented by the respondents to the questionnaire. It is found that 83% of Al Buraij residents, 98% of Al Qarara residents and 97% had noticed impact on their daily lives.

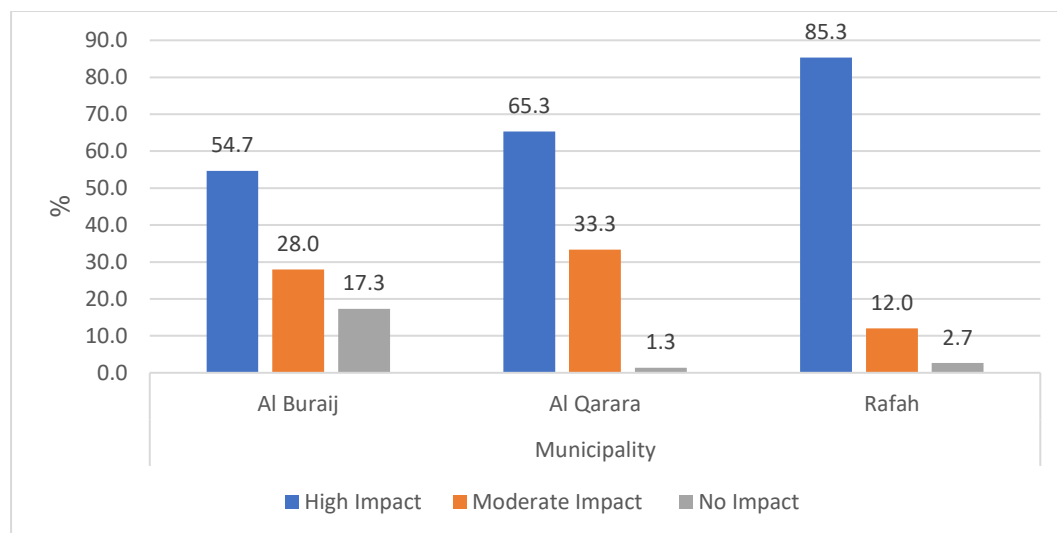


Figure 36: Public participation at the implementation stage of GIZ intervention

The impact of road development is confirmed by the municipal staff and local community members. Landscape of some areas also added value of the intervention i.e., tiling of pedestrian paths at the road intersection is appreciated by the local residents.

#### 3.7.1 Assessment of beneficiaries' perception of other interventions that should have been implemented instead of the ones chosen

During focus groups discussions the beneficiaries revealed that they had long list of proposed interventions sorted according to priority criteria. The chosen intervention under SRGVC was ranked on the top priorities that could not be replaced by another interventions. The local communities started to implement other intervention either through GVCD budget or from other donors. Therefore, the beneficiaries insisted that the implemented projects are responding to their needs.

#### 3.7.2 Contractors and beneficiaries' perception regarding the efficiency throughout the implementation

There were delays in implementation at three municipalities which are Al Buraij, Abasan Al Jadeda and Al Nasser. According to MDLF staff and the contractors, that happened due to the Israeli restrictions on allowing equipment and material to enter Gaza for

more than 6 months. However, the procurement, tendering and implementation of the interventions had strictly followed in accordance to MDLF guideline and procurement Manuel as National Shopping. The tendering steps are as follows:

### Procurement Process

The local technical consultants reviewed the Procurement Plan (PP), updated it in close collaboration with the municipalities, and recommended adjustments to speed up the project's implementation. The local technical consultants also prepared a consolidated procurement plan of the activities of the sub-project based on the review of the information given by the municipalities and reviewed and updated them periodically.

Local technical consultants will also assist municipalities in the entire procurement process including:

- a) Review of design, cost estimate, specifications;
- b) Preparation of bidding documents;
- c) Invitation to bid,
- d) Award of contracts; and
- e) Contract management and inspection of goods and works.

The local consultant coordinated with the targeted Municipalities and related line ministries in finalizing all projects documents including: design drawings, specifications, bill of quantities (BOQs) and tender documents. The local consultant also assisted the municipalities in the tendering phase for the sub-projects and participate in pre-bid meetings and site visits with contractors, bid opening and a bid evaluation.

At the end of tendering process, three companies had signed contracts to implement the development of road intersections using solar energy and landscaping in six municipalities as shown in Table 18.

*Table 18: list of contracts for Development of roads intersections*

| Project Number | Municipality      | Budget (Euro) | Completion Date | Contractor                          |
|----------------|-------------------|---------------|-----------------|-------------------------------------|
| SRGVC5.1.1     | Al Buraij         | 49,480        | 29-Dec-2020     | Abed El Hakeem Shbaeer Company      |
| SRGVC5.1.2     | Al Qarara         | 48,695        | 13-Oct-2020     | Renewable power Engineering Company |
| SRGVC5.1.3     | Abasan Al Jadedda | 66,754        | 28-Dec.-2020    | Ritaj Trading and investment Ltd.   |
| SRGVC5.1.4     | Rafah             | 66,920        | 18-Oct-2020     | Renewable power Engineering Company |
| SRGVC5.1.5     | Al Naser          | 42,914        | 27-Dec-2020     | Ritaj Trading and investment Ltd.   |
| SRGVC5.1.6     | Al Shoka          | 45,250        | 14-Oct-2020     | Renewable power Engineering Company |

After reviewing all tender documents, the evaluation team found that the tendering process was transparent, accurate, on-time, and followed MDLF's roles and regulations without any defaults.

### 3.8 Implementation of Environmental and Social Management Plan.

- The environmental and social screening was based on MDLF forms that the local consultant prepared and submitted it to MDLF with all relevant documents for review and approval.
- For sub-projects that have been environmentally and socially assessed, the local consultant reviewed environmental and social screening, the application forms, focus group meetings outcomes, and other documents and verified that comments and recommendations given by MDLF have been incorporated in design and bidding documents.
- The local consultant ensured that the submitted designs fully comply to environmental and social considerations illustrated in the Environmental and Social Framework (ESMF).
- The local consultant assisted the Municipalities in ensuring the soundness of social and environmental impact assessments to identify a comprehensive range of impacts (that are beyond the narrow focus of safeguards) and determine adequate mitigation measures that reflect sound social analysis and are in compliance with the MDLF Environmental and Social Framework (ESMF).
- For each sub-project, the local consultant reviewed and assisted municipality to revise and submit for MDLF approval, the Environmental and Social Management Plan (ESMP), prepared by each Municipality.
- Municipal engineers had monitored the implementation of social environmental mitigation measures according to the instruction of the local consultant.
- Social accountability committee member also followed up these mitigation measures and most of the time had interventions to resolve all problems.

Based on the site visits and during focus group discussions, the evaluation team did not find any complain or claims related to social and environmental impacts of implemented interventions. All residents are satisfied with the implemented mitigation measures related to air quality, water quality, land sue, solid waste, safety and occupational health, wastewater, etc.

### 3.9 Perceived Impact on establishing public buildings

Two main public buildings had been established under GIZ funded interventions. The first one in Khuzaa and the other one in Rafah as shown in Table 19.

Table 19: List of established public buildings under SRGVC

| Municipality | Code       | Intervention                                                                                                  | Budget (Euro) |
|--------------|------------|---------------------------------------------------------------------------------------------------------------|---------------|
| Rafah        | SRGVC5.4.1 | Establishment of a youth center, playground for volley-basketball for Khirbet Al Adas.                        | 218,500       |
| Khuzaa       | SRGVC5.4.2 | Establishment of a multipurpose Hall and development of the existing cultural center in Abu Ali and Abu Rock. | 232,653       |

Evaluation team selected Khuzaa multi-purpose hall for evaluation since the green building at Rafah was not yet completed by the time of evaluation.

#### 3.9.1 Relevance of public building to the needs of vulnerable communities

It is obvious that the vulnerable communities at Khuzaa are lacking of public spaces and public buildings therefore around 82% of the resident's response was that either no or sometimes public buildings are available and when it was exists it is in bad conditions.

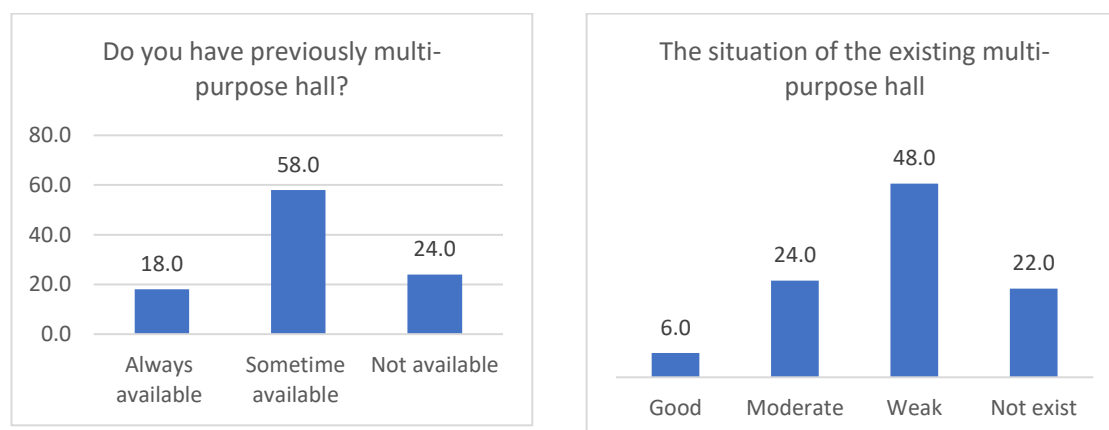


Figure 37: Relevance of establishing public building to the community needs

The results of questionnaire at Khuzaa shows that the majority people (96%) confirmed that there is a need for such building for social gathering and public events.

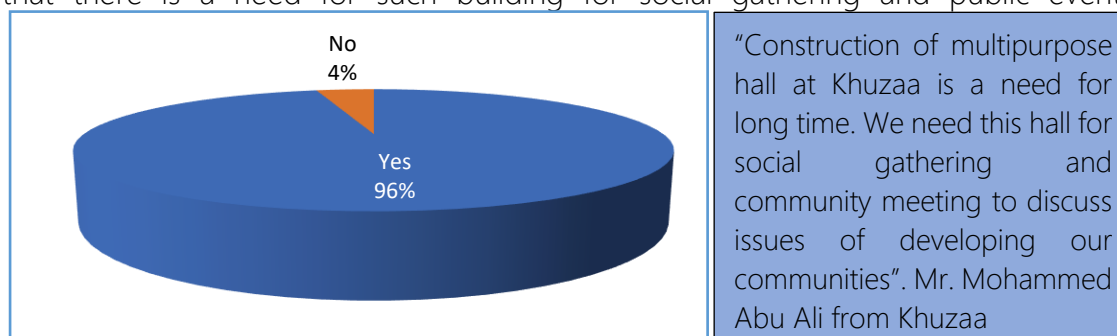


Figure 38: The need for establishing public building to the community needs

### 3.9.2 Assessment of beneficiaries' perception on their participation at the interventions

Residents from Khuzaa participated at the establishment of multi-purpose hall in planning and implementation phases. It is noticed that there was an increase in public participation at this project during time. The percentage of people strongly or moderately participated at this project increased from 52% at the beginning of the project to 76% during implementation of the project.

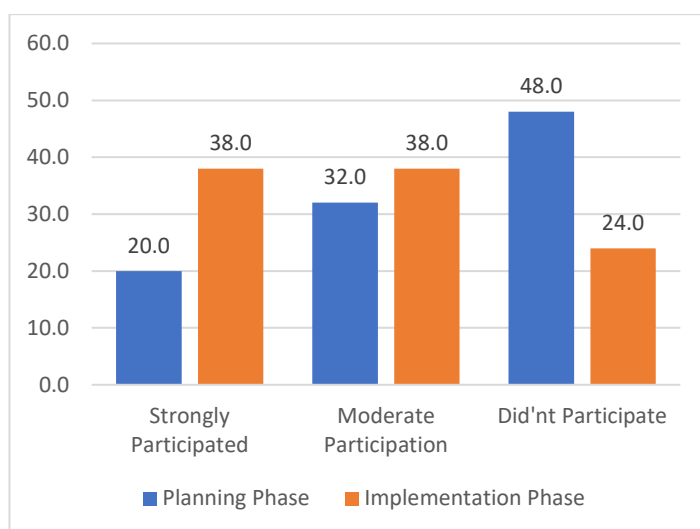
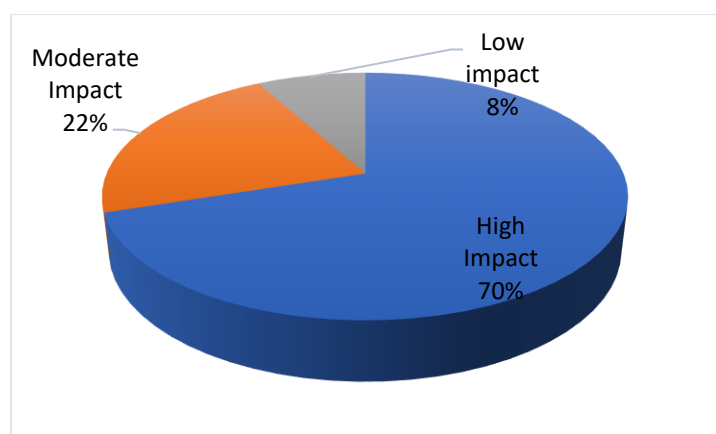


Figure 39: Public participation in planning and implementation of public building at Khuzaa

### 3.9.3 Anticipated Impact on establishing multi-purpose hall on Khuzaa residents

The majority of local community (70%) anticipated that the multi-purpose hall would have high impact while 22% anticipated moderate impact. Only 8% of the residents anticipated no impact of this multi-purpose hall on their social life.



"We are still suffering since 2014 where most of our village was destroyed by Israelis. By cooperation between the municipality and community leaders we were able to reconstruct the village better than before. We are grateful to GIZ and MDLF for their generous support to Khuzaa".  
Mr. Ashraf Qudaih from Khuzaa

Figure 40: Anticipated impacts of public building at Khuzaa

### 3.9.4 Anticipated satisfaction of establishing multi-purpose hall on Khuzaa residents

Figure 35 shows that the majority of local community (64%) anticipated that the multi-purpose hall would have high satisfaction while 32% had moderate satisfaction. Only 4% of the residents anticipated no impact of this multi-purpose hall on their social life.

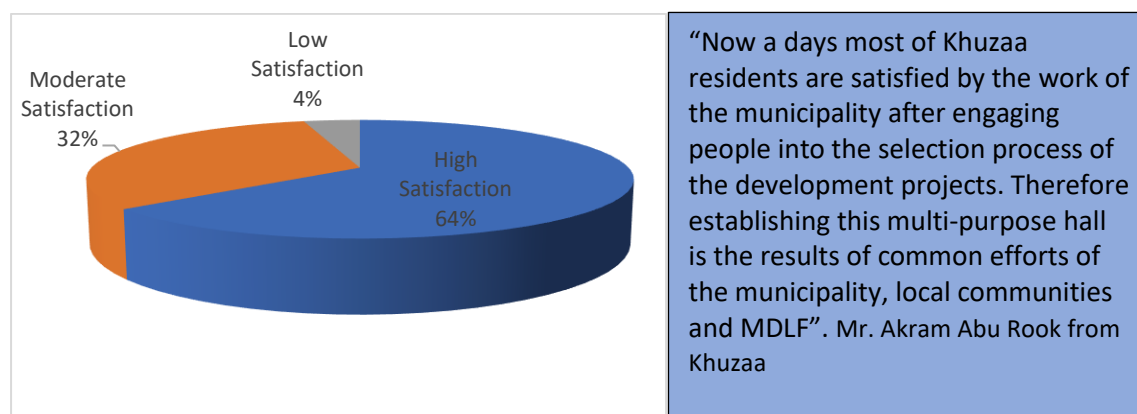


Figure 41: Level of satisfaction of local community on establishing public building at Khuzaa

### 3.9.5 Anticipated public participation of establishing multi-purpose hall on Khuzaa residents

People expressed their ambition to increase public participation and communication with the municipality. Around 96% of local communities expected that their public participation would increase, either highly or moderately, due to availability of public space. Similarly, around 84% expected that the multi-purpose hall would increase their communication with municipality.

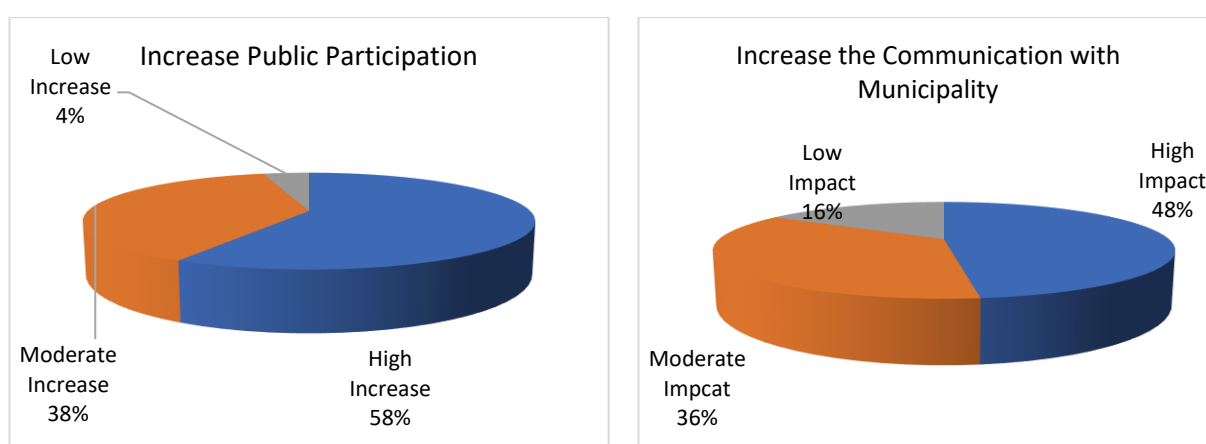


Figure 42: Impact of establishing multi-purpose hall on public participation at Khuzaa

## 4. Conclusion and Recommendations

### 4.1 Conclusion

SRGVC interventions focused on introducing solar energy on the development projects. Three main interventions were established at the seven municipalities of Al Buraij, Al Qarara, Abasan Al Jadida, Al Shoka, Al Naser, Khuzaa and Rafah.

Using solar energy for improving domestic water supply and safe drinking water are among the interventions where developing water wells and providing desalination plants for vulnerable communities. Four municipalities benefited from water related interventions which are Al Qarara, Abasan Al Jadedda, Al Shoka and Khuzaa. Water interventions are among the communities' priorities and relevant to their current needs. Evaluation team found that these interventions are having high beneficiaries' satisfaction of nature and the quality of the delivered outputs. Also, beneficiaries' and contractors expressed their satisfaction regarding the efficiency of these interventions throughout the implementation. The percentage of high to moderate satisfied among the residents are 82%, 100%, and 75% at Al Qarara, Abasan Al Jadedda and Al Shoka respectively. Local communities expressed their appreciation and satisfaction on their participation during planning and implementation of water related interventions. Social accountability committees were consulted in the selection of the targets, locations, and technical specifications. Most of interviewed persons confirmed that there were effective feedback mechanisms that enabled success implementation of the sub-projects.

SRGVC interventions included development of more than 100 road intersections through using solar energy for street lighting and landscaping at vulnerable communities at six municipalities. The evaluation team found that these interventions are totally relevant to the needs of vulnerable communities and classified as top priorities. Streetlights had great impact of local residents through increasing safety during night and minimizing car accidents and encouraged local small-scale business to open during night hours. Evaluation team found that these interventions increased the confident of people ability to be part of the development process and increase public participation. Contractors and beneficiaries expressed their satisfaction of the efficiency of street lights and the process of implementing these interventions. Municipal engineers confirmed that there was strictly implementation of these environmental and social management plan in terms of protecting environment and social mitigation measures during construction.

Establishing public buildings is the fourth group of interventions that respond to the needs of vulnerable communities to have public space for social gathering and public events. Two main building were established in Khuzaa and Rafah. Residents of Khuzaa choose to establish multi-purpose hall close to the existing cultural center. This hall will have multi-purposes and would increase public participation. Local communities

anticipated that this hall would have great Impact on the future relation with the municipality staff. Therefore, the evaluation team found the majority of Khuzaa residents (around 70% of the residents) expressed their high satisfaction of establishing multi-purpose hall on Khuzaa. Rafah green building is still under construction and has some delay on construction activities, however, the construction works are implemented according to the design and specifications. It is expected that this building will contribute to increase youth participation in the vulnerable community of Khirbit El Adas. The building had constructed based on environmental criteria such as energy efficiency, storm water harvesting, and gray water reuse.

Because the GIZ interventions were based on a participatory approach integrating municipalities, women, and community members, into the activities, the project was less abrasive in many ways to the conservative and patriarchal socio-cultural norms in Gaza. This is because the culture of change is more palatable and easier to accept when key community members are knowledgeable and supportive of the project's goals and objectives. Overall, the project was well-received and perceived by the beneficiaries and stakeholders as successful. The project encouraged the development of a culture of gender equality and women participation. The participatory methods used to raise awareness significantly contributed to the project's many successes. All of the expected results were achieved to varying degrees.

Finally, the logical framework of the project was designed very well with strong indicators that allowed the evaluator to track the implemented activities effortlessly. The evaluator did not find any significant unconventionality between the logical framework and the implemented activities, hence MDLF team was productively followed the framework that allowed them to make fruitful interventions.

Overall, the evaluation results revealed high impacts and satisfaction of the beneficiaries on the implemented projects. The majority of interviewed person appreciated the GIZ interventions and expected more impact in the coming years.

## 4.2 Recommendations

Evaluation team recommended GIZ and MDLF to continue at similar humanitarian and development approaches to include the entire communities of Gaza Strip through inclusive assessment, planning and financing processes. Besides, to reach more vulnerable communities introducing renewable energy wherever applicable. Therefore, the evaluation team offers the following recommendations for anticipated similar interventions:

- In Gaza Strip, where the majority of development projects have been suspended or delayed due to the complex political situation, it is recommended that MDLF to work on additional recovery and development interventions at the valuable communities in Gaza.
- Effective solar energy interventions, as well as longer-term, durable energy solutions for water and road development, are critical for improving the lives of Gaza population affected by a range of crises and complex humanitarian situations.
- In rural and semi-urban areas in Gaza Strip where people not only require water for drinking, cooking, washing and sanitation, but also for generating income, the humanitarian water response can have multiple uses. For example, to support the multiple-use-services approach to meet both households' domestic and livelihood (agriculture and livestock) needs, while ensuring the most efficient use of water resources.
- More effort should be placed on increasing the participation and empowerment of girls and young women. In Gaza, this is critical. Activities involving gender equality should be further developed, strengthened and increased.
- It is recommended to continue with "safe drinking water interventions" for other vulnerable areas of Gaza Strip such as Beit Lahia, Jabalia, Beit Hanoun, Deir El Balah, Al Musader, and Al Mughraka. This would help the vulnerable communities in protecting public health. Similarly, it is recommended to continue with "upgrading and maintenance of water wells and storm water harvesting" for other areas of Gaza Strip. This would protect public health of the local communities and protect the environment from pollution.
- Using social media to enhance knowledge, attitude and practices towards health and environmental issues at community level especially after Coronavirus prevalence.
- It is recommended that the methodology of the project be amended in order to enhance the role and increase the participation of local community-based organizations (CBOs) in project activities.

- It is recommended to increase emphasis on external trends such as climate change and addressing environmental risks; alternative or renewable energy options; and sustainability in humanitarian WASH programs.
- Finally, any future projects should be built upon the success achieved during SRGVC. Mainly the success achieved in road and water interventions. Lessons learned should be highlighted and guide the future interventions.

# Annexes

### Annex 1: List of persons consulted/interviewed

| Municipality/Institution | Name(s)                                                            | Date            |
|--------------------------|--------------------------------------------------------------------|-----------------|
| Al Buraij                | Eng. Aymen Dwaik                                                   | 19 January 2021 |
|                          | Eng. Eyad Alsidawi                                                 |                 |
| Abasan Al Jadeda         | Mr. Yaser Abu Anzah                                                | 20 January 2021 |
|                          | Eng. Omar Abu Etema                                                |                 |
| Al Shoka                 | Mr. Zeid Suliman Dbari                                             | 21 January 2021 |
|                          | Eng. Fayez Jubara                                                  |                 |
| Khuzaa                   | Mr. Shehda Abu Rook                                                | 24 January 2021 |
|                          | Eng. Ismael Shawwaf                                                |                 |
| Al Naser                 | Mr. Yousef Moamer                                                  | 25 January 2021 |
|                          | Eng. Mohanad Masri                                                 |                 |
| Al Qarara                | Eng. Ahmed Shaat                                                   | 26 January 2021 |
|                          | Eng. Ahmed Timawi                                                  |                 |
| Rafah                    | Mr. Anwar El Shaaer                                                | 27 January 2021 |
|                          | Eng. Mohamed Sarhan                                                |                 |
| MDLF                     | Eng. Ahmed Dardona<br>Eng. Yousef Al Qahwaji<br>Ms. Amal Al Sabawi | 31 January 2021 |
| UG                       | Eng. Zuhair Modookh<br>Eng. Mohamed Ramlawi                        | 3 February 2021 |
| PCDCR                    | Eng. Iman Abu Isaied                                               | 4 February 2021 |
| CMWU                     | Eng. Motaz Abu Qomboz<br>Eng. Hanaa Awad                           | 7 February 2021 |
| Contractor 1             | Mr. Nabil Marouf                                                   | 7 February 2021 |
| Contractor 2             | Eng. Oday Daghma<br>Mr. Ahmed Yaseen                               | 7 February 2021 |
| Contractor 3             | Eng. Adel Hussien                                                  | 8 February 2021 |

The following Facebook links for the visits of municipalities:



**Al Buraij:** <https://www.facebook.com/110686577440369/posts/204080711434288/>

**Abasan Al Jadeda:**

<https://www.facebook.com/352045264899846/posts/3219896394781371/>

**Al Qarara:** <https://www.facebook.com/236958799714774/posts/3766622126748406/>

**Khuzaa:** <https://www.facebook.com/569529766498781/posts/3604473703004357/>

**Al Naser :** <https://www.facebook.com/567056319991285/posts/4036369249726624/>

**Al Shoka:** <https://www.facebook.com/alshukaa/posts/3645838352131093>

## Annex 2: List of Focus groups attendance

| Municipality                                           | Name                                                                                                                                                                                                              | No. of male (33) | No. of Female (19) |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------|
| Municipality of AL Bureij<br><br>19 January 2021       | 1. Ms. Reda El Nabaheen<br>2. Mr. Zaher El mabhough<br>3. Mr. Rami Abu Jrae<br>4. Mr. Mezeid Abu Said<br>5. Ms. maha saleem<br>6. Ms. Sabreen Khamis<br>7. Mr. lyad El sedawi<br>8. Mr. Abed El Rahman El Qashtan | 6                | 2                  |
| Abassan El Jadedda Municipality<br><br>20 January 2021 | 1. Mr. Asad Abu Latifa<br>2. Mr. Khalil Arafat<br>3. Mr. Raed Asfour<br>4. Mr. Naji El Jurf<br>5. Ms. Jihan Abu Anza                                                                                              | 4                | 1                  |
| AL Shoka Municipality<br><br>21 January 2021           | 1. Ms. Ghada Barbakh<br>2. Ms. Amna El Mahmoud<br>3. Ms. Rasha Abu Luli<br>4. Ms. Fatima Jubara<br>5. Ms. Ahlam Abu Zaid<br>6. Mr. Ismail Abu Isnima<br>7. Ms. Ahlam El bayari                                    | 1                | 6                  |
| Khuzaa Municipality<br><br>24 January 2021             | 1. Mr. Fawzi El Najar<br>2. Mr. Mohammed Abu Ali<br>3. Mr. Akram Abu Rook<br>4. Mr. Yousef Ahmed El Najar<br>5. Mr. Thaer Abu Raida<br>6. Mr. Ashraf Qudaih<br>7. Mr. Issa Abu Rook                               | 7                | 0                  |
| Al Nasser Municipality<br><br>25 January 2021          | 1. Mr. Adnan Ramadan El Luli<br>2. Mr. Muhand El masri<br>3. Mr. Omar Abu Razan<br>4. Mr. Yousef Abu Muamer<br>5. Mr. Ahmed Abu Juda<br>6. Ms. Samaher Abu Srar<br>7. Ms. Amal Abed<br>8. Mr. Jaber Shaat         | 6                | 2                  |
| Al Qarara Municipality<br><br>26 January 2021          | 1. Ms. sawsan Khashan<br>2. Ms. Nada Khashan<br>3. Mr. Mohammed Abu Sumia<br>4. Mr. Hazem Abu Hadaf<br>5. Mr. Yousef El Astal<br>6. Mr. Yousef Abu lehia<br>7. Mr. Ahmed Smieri<br>8. Mr. Azmi Fayad              | 6                | 2                  |

| Municipality                          | Name                                                                                                                                                                                                               | No. of male (33) | No. of Female (19) |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------|
| Rafah Municipality<br>27 January 2021 | 1. Ms. Inas Mosa<br>2. Ms. Manar Al Luli<br>3. Ms. Mariam Abu Muhsin<br>4. Ms. Aya Jouda<br>5. Ms. Fayrooz Taem<br>6. Ms. Suha karazoon<br>7. Mr. Zaid Shalhoub<br>8. Mr. Rami Nabil Zatoon<br>9. Mr. Bilal Kassab | 3                | 6                  |

## Annex 3: Household Questionnaires (Water Projects)

## استبانة تقييم مشاريع المياه (تطوير ابار المياه وانشاء محطات تحلية)

|               |                         |
|---------------|-------------------------|
| اسم المشروع   |                         |
| تاريخ الزيارة | الباحث/ة<br>الاجتماعي/ة |

## بيانات الأسرة

|                             |                                                                                                                                                                               |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| عنوان الأسرة                | المحافظة: <input type="checkbox"/> الوسطى <input type="checkbox"/> خانيونس <input type="checkbox"/> رفح <input type="checkbox"/><br>المنطقة: _____، الشارع: _____ الحي: _____ |
| وسيلة الاتصال               | رقم الجوال: _____                                                                                                                                                             |
| اسم المبحوث                 |                                                                                                                                                                               |
| صفة المبحوث                 | <input type="checkbox"/> من سكان الحي <input type="checkbox"/> عضو لجنة حي <input type="checkbox"/> غير ذلك اذكر _____                                                        |
| موقع المنزل بالنسبة للمشروع | <input type="checkbox"/> قريب جدا <input type="checkbox"/> قريب <input type="checkbox"/> بعيد                                                                                 |

## الوضع السابق (قبل المشروع)

|                               |                                                                                                                                                               |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| مصدر المياه المنزلية          | <input type="checkbox"/> بلدية <input type="checkbox"/> بئر خاص <input type="checkbox"/> غير ذلك اذكر _____                                                   |
| مصدر مياه الشرب               | <input type="checkbox"/> بلدية <input type="checkbox"/> شراء من السيارات <input type="checkbox"/> فلتر منزلي <input type="checkbox"/> غير ذلك اذكر _____      |
| هل تصلكم المياه               | <input type="checkbox"/> يوميا <input type="checkbox"/> كل يومين <input type="checkbox"/> كل ثلاث ايام                                                        |
| وقت وصل المياه                | <input type="checkbox"/> كافي <input type="checkbox"/> متوسط <input type="checkbox"/> غير كافي <input type="checkbox"/> لا ادري                               |
| نوعية المياه التي كانت تصلكم  | <input type="checkbox"/> جيدة <input type="checkbox"/> متوسطة <input type="checkbox"/> سيئة <input checked="" type="checkbox"/> لا ادري                       |
| كيف علمت بالمشروع             | <input type="checkbox"/> من خلال البلدية <input type="checkbox"/> من خلال لجنة الحي <input type="checkbox"/> من خلال الجيران <input type="checkbox"/> غير ذلك |
| هل شاركتكم في التخطيط للمشروع | <input type="checkbox"/> نعم بصورة كبيرة <input type="checkbox"/> نعم بصورة قليلة <input type="checkbox"/> لا لم اشارك مطلقاً                                 |

ماذا كان دوركم في المشروع ☐ مشارك بالرأي ☐ مستمع بدون مشاركة ☐ لا ادري

## الوضع الحالي (بعد تنفيذ المشروع)

|                                           |                                                                                                                                    |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| مدي تأثير المشروع على منطقتكم :           | <input type="checkbox"/> ممتاز <input type="checkbox"/> جيد <input type="checkbox"/> لا تأثير                                      |
| مدي الرضا عن تنفيذ المشروع                | <input type="checkbox"/> مستوى رضا عالي <input type="checkbox"/> مستوى رضا متوسط <input type="checkbox"/> مستوى رضا ضعيف           |
| اذا كان مستوى الرضا ضعيف اذكر الاسباب     | <input type="checkbox"/> الازعاء غير كافية <input type="checkbox"/> الازعاء غير كافية طوال وقت الليل <input type="checkbox"/> اخرى |
| اذا كان مستوى الرضا ضعيف اذكر الاسباب     | <input type="checkbox"/> الازعاء غير كافية <input type="checkbox"/> الازعاء غير كافية طوال وقت الليل <input type="checkbox"/> اخرى |
| هل شعرتم بتغيير في كمية المياه التي تصلكم | <input type="checkbox"/> نعم <input type="checkbox"/> لا <input type="checkbox"/> لا ادري                                          |
| هل شعرتم بتحسن نوعية المياه التي تصلكم    | <input type="checkbox"/> نعم <input type="checkbox"/> لا <input type="checkbox"/> لا ادري                                          |

توصيات المبحوث:

ملاحظات خاصة بالباحث/ة الميداني

## Annex 4: Household Questionnaires (Road intersections Lighting Projects)

### استبانة تقييم مشاريع أنارة مفترقات الطرق بالطاقة الشمسية

|               |                         |
|---------------|-------------------------|
| اسم المشروع   |                         |
| تاريخ الزيارة | الباحث/ة<br>الاجتماعي/ة |

#### بيانات الأسرة

|                                   |                                                                                                                                                      |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| عنوان الأسرة                      | المحافظة: <input type="checkbox"/> الوسطى <input type="checkbox"/> خانيونس <input type="checkbox"/> رفح<br>المنطقة: _____، الشارع: _____ الحي: _____ |
| وسيلة الاتصال                     | رقم الجوال: _____                                                                                                                                    |
| اسم المبحوث                       |                                                                                                                                                      |
| صفة المبحوث                       | <input type="checkbox"/> من سكان الحي <input type="checkbox"/> سائق <input type="checkbox"/> عضو لجنة حي <input type="checkbox"/> غير ذلك اذكر _____ |
| موقع المنزل بالنسبة لمفترق الطريق | <input type="checkbox"/> قريب جدا <input type="checkbox"/> قريب <input type="checkbox"/> بعيد                                                        |

#### الوضع السابق (قبل المشروع)

- هل كان هناك اي اضاءة للشوارع : ☐ نعم طوال الوقت ☐ نعم بعض الوقت ☐ لا بالمطلق
- نوع الاضاءة السابقة (ان وجدت) ☐ ممتازة ☐ جيدة ☐ ضعيفة
- هل كان هناك حوادث طرق قبل المشروع ☐ نعم ☐ لا ☐ لا ادري
- كيف علمت بالمشروع ☐ من خلال البلدية ☐ من خلال لجنة الحي ☐ من خلال الجيران ☐ غير ذلك
- هل شاركتكم في التخطيط للمشروع ☐ نعم ☐ لا ☐ لا ادري
- ماذا كان دوركم في المشروع ☐ مشارك بالرأي ☐ مستمع بدون مشاركة ☐ لا ادري

#### الوضع الحالي (بعد تنفيذ المشروع)

- مدي تأثير المشروع على منطقتكم : ☐ ممتاز ☐ جيد ☒ لا تأثير
- مدى الرضا عن تنفيذ المشروع ☐ مستوى رضا عالي ☐ مستوى رضا متوسط ☐ مستوى رضا ضعيف
- اذا كان مستوى الرضا ضعيف اذكر الاسباب ☐ الاضاءة غير كافية ☐ الاضاءة غير كافية طوال الليل
- هل تعتقد بأن المشروع سيقفل من حوادث الطرق ☐ بمقدار كبيرة ☐ بمقدار متوسط ☐ لا تأثير
- هل تعتقد بأن المشروع سيزيد من الشعور بالأمان ☐ بمقدار كبيرة ☐ بمقدار متوسط ☐ لا تأثير
- هل تعتقد بأن المشروع سيشجع التنمية في المنطقة ☐ بمقدار كبيرة ☐ بمقدار متوسط ☐ لا تأثير
- هل تعتقد بأن المشروع سيشجع انشاء مشاريع صغيرة ☐ بمقدار كبيرة ☐ بمقدار متوسط ☐ لا تأثير

|                                 |
|---------------------------------|
| توصيات المبحوث:                 |
| ملاحظات خاصة بالباحث/ة الميداني |

## Annex 5: Household Questionnaires (Public Building Projects)

## استبانة تقييم مشاريع المباني العامة والبلدية

|               |                         |
|---------------|-------------------------|
| اسم المشروع   |                         |
| تاريخ الزيارة | الباحث/ة<br>الاجتماعي/ة |

## بيانات الأسرة

|                             |                                                                                                                                                                               |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| عنوان الأسرة                | المحافظة: <input type="checkbox"/> الوسطى <input type="checkbox"/> خانيونس <input type="checkbox"/> رفح <input type="checkbox"/><br>المنطقة: _____، الشارع: _____ الحي: _____ |
| وسيلة الاتصال               | رقم الهاتف: _____، رقم الجوال: _____ 059، جوال _____ بديل: _____ 059                                                                                                          |
| اسم المبحوث                 |                                                                                                                                                                               |
| صفة المبحوث                 | <input type="checkbox"/> من سكان الحي <input type="checkbox"/> سائق <input type="checkbox"/> عضو لجنة حي <input type="checkbox"/> غير ذلك اذكر _____                          |
| موقع المنزل بالنسبة للمشروع | <input type="checkbox"/> قريب جدا <input type="checkbox"/> قريب <input type="checkbox"/> بعيد                                                                                 |

## الوضع السابق (قبل المشروع)

- هل كان متاح لكم قاعة متعددة الاغراض لاستخدام الجمهور ☐ نعم طوال الوقت ☐ نعم بعض الوقت ☐ لا بالمطلق
- نوع القاعة السابقة (ان وجدت) ☐ ممتازة ☐ جيدة ☐ ضعيفة
- هل كان هناك حاجة للمشروع ☐ نعم ☐ لا ☐ لا ادري
- كيف علمت عن المشروع ☐ من خلال البلدية ☐ من خلال لجنة الحي ☐ من خلال الجيران ☐ غير ذلك
- هل شاركتكم في التخطيط للمشروع ☐ نعم ☐ لا ☐ لا ادري
- ماذا كان دوركم في المشروع ☐ مشارك بالرأي ☐ مستمع بدون مشاركة ☐ لا ادري

## الوضع الحالي (بعد تنفيذ المشروع)

- مدى تأثير المشروع على منطقتكم : ☐ ممتاز ☐ جيد ☐ لا تأثير
- مدى الرضا عن تنفيذ المشروع ☐ مستوى رضا عالي ☐ مستوى رضا متوسط ☐ مستوى رضا ضعيف
- اذا كان مستوى الرضا ضعيف اذكر الاسباب ☐ الاضاءة غير كافية ☐ الاضاءة غير كافية طوال وقت الليل
- هل تعتقد بأن المشروع سيزيد من المشاركة المجتمعية ☐ بمقدار كبيرة ☐ بمقدار متوسط ☐ لا تأثير
- هل تعتقد بأن المشروع سيشجع من زيادة التواصل مع البلدية ☐ بمقدار كبيرة ☐ بمقدار متوسط ☐ لا تأثير
- هل تعتقد بأن المشروع سيساهم في تحسين الخدمات ☐ بمقدار كبيرة ☐ بمقدار متوسط ☐ لا تأثير
- هل تعتقد بأن المشروع سيساهم في زيادة مشاركة الشباب ☐ بمقدار كبيرة ☐ بمقدار متوسط ☐ لا تأثير
- هل تعتقد بأن المشروع سيساهم في تحسين زيادة مشاركة المرأة ☐ بمقدار كبيرة ☐ بمقدار متوسط ☐ لا تأثير

توصيات المبحوث:

ملاحظات خاصة بالباحث/ة الميداني

## Annex 6: Guiding Questions for Interviewing MDLF Senior Staff

| Criteria                    | Objectives                                                                                                                                                                        | Questions (Arabic)                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Relevance<br>الملائمة       | To assess the relevance of the project to the National Policy Agenda (2017-2022) and priorities, relevance with the requirements of the beneficiaries, etc.                       | <p>ما مدى ملائمة تدخلات المشروع وتطابقها مع الأولويات الوطنية والمحلية؟</p> <p>ما مدى ملائمة تدخلات المشروع وتطابقها مع احتياجات المناطق المهمشة؟</p> <p>هل تعتقد ان إنجاز النتائج الفعلية والمخرجات تتطابق مع أهداف المشروع؟</p> <p>ما هي الخطوات التي قمتم بها للتأكد من ملائمة التدخلات لاحتياجات المناطق المهمشة السكان؟</p> <p>ما هي الخطوات التي تمت لأشراك السكان المحليين والجهات ذات العلاقة في التخطيط للمشروع؟</p> |
| Efficiency<br>الكفاءة       | To assess the efficiency of the project in achieving its expected results. This will entail analysis of the delivery of actual outcomes, outputs against the expected targets.    | <p>ما هي المعايير المتبعة للتأكد من كفاءة المشاريع التي تم اختيارها؟</p> <p>ما هي المعايير المتبعة في اختيار المناطق المستهدفة؟</p> <p>ما هي الاجراءات المتبعة لتصميم والإشراف والتنفيذ للمشاريع؟</p> <p>هل كانت كفاءة المشاريع كما هي محددة في الاهداف؟</p> <p>هل المبالغ التي تم استثمارها في التدخلات حققت كفاءة المشروع؟</p> <p>ما هي التحديات والصعوبات التي واجهتكم في تحقيق كفاءة المشروع؟</p>                         |
| Effectiveness<br>الفعالية   | To assess the effectiveness of the project in achieving its expected results. This will entail analysis of the delivery of actual outcomes, outputs against the expected targets. | <p>ما هي المعايير المتبعة للتأكد من فعالية المشاريع التي تم اختيارها؟</p> <p>هل فعالية التدخل تحقق الاهداف المرجوة؟</p> <p>ما هي التحديات والصعوبات التي واجهتكم في تحقيق فعالية المشروع؟</p>                                                                                                                                                                                                                                 |
| Impacts<br>الاثار           | To assess the impacts of the project on targeted beneficiaries, local communities, local authorities and other stakeholders.                                                      | <p>ما هي اثار المشروع على المناطق المهمشة؟</p> <p>ما هي اثار المشروع على السكان المحليين؟</p> <p>ما هي اثار المشروع على الهيئات المحلية؟</p> <p>ما هي اثار المشروع كما كان محط لها وحققت الاهداف المرجوة؟</p>                                                                                                                                                                                                                 |
| Sustainability<br>الاستدامة | To assess the sustainability of the project.                                                                                                                                      | <p>ما هي المعايير المتبعة للتأكد من استدامة التدخلات؟</p> <p>هل سيكون هناك استدامة للتدخلات وكيف؟</p> <p>ما هي الخطوات المتبعة للتأكد من استدامة التدخل بعد انتهاء المشروع؟</p> <p>ما هي الدروس المستفادة من المشروع؟</p>                                                                                                                                                                                                     |

## Annex 7: Guiding Questions for Interviewing Municipal Senior Staff (Mayer or his deputy)

| Criteria                    | Objectives                                                                                                                                                                        | Questions (Arabic)                                                                                                                                                                                                                                                                                                              |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Relevance<br>الملائمة       | To assess the relevance of the project to the national policy agenda and priorities, relevance with the requirements of the beneficiaries, etc.                                   | ما مدى ملائمة تدخلات المشروع وتطابقها مع الولويات بلديتكم؟<br>ما مدى ملائمة تدخلات المشروع وتطابقها مع احتياجات المناطق المهمشة في بلديتكم؟<br>ما هي الخطوات التي قمتم بها للتأكد من ملائمة التدخلات لاحتياجات المناطق المهمشة السكان؟<br>ما هي الخطوات التي تمت لاشراك السكان المحليين والجهات ذات العلاقة في التخطيط للمشروع؟ |
| Efficiency<br>الكفاءة       | To assess the efficiency of the project in achieving its expected results. This will entail analysis of the delivery of actual outcomes, outputs against the expected targets.    | ما هي المعايير المتبعة للتأكد من كفاءة المشاريع التي تم اختيارها؟<br>ما هي المعايير المتبعة في اختيار المناطق المستهدفة؟<br>ما هي التحديات والصعوبات التي واجهتكم في تحقيق كفاءة المشروع؟                                                                                                                                       |
| Effectiveness<br>الفعالية   | To assess the effectiveness of the project in achieving its expected results. This will entail analysis of the delivery of actual outcomes, outputs against the expected targets. | ما هي المعايير المتبعة للتأكد من فعالية المشاريع التي تم اختيارها؟<br>هل فعالية التدخل تحقق الاهداف المرجوة؟<br>ما هي التحديات والصعوبات التي واجهتكم في تحقيق فعالية المشروع؟                                                                                                                                                  |
| Impacts<br>الاثار           | To assess the impacts of the project on targeted beneficiaries, local communities, local authorities and other stakeholders.                                                      | ما هي اثار المشروع على المناطق المهمشة؟<br>ما هي اثار المشروع على السكان المحليين؟<br>ما هي اثار المشروع على بلديتكم؟                                                                                                                                                                                                           |
| Sustainability<br>الاستدامة | To assess the sustainability of the project.                                                                                                                                      | هل لدى البلدية الامكانيات الفنية لاستدامة المشروع؟<br>هل لدى البلدية الإمكانيات المادية لعمال الصيانة للمشروع؟<br>هل لدى البلدية خطة لتطوير المشروع؟<br>هل لدى البلدية خطة لاعادة تجربة المشروع في مواقع اخرى.                                                                                                                  |

## Annex 8: Guiding Questions for Interviewing Municipal Engineers

| Criteria                            | Objectives                                                                                                                                                                        | Questions (Arabic)                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Relevance<br>الملائمة               | To assess the relevance of the project to the national policy agenda and priorities, relevance with the requirements of the beneficiaries, etc.                                   | <p>ما مدى ملائمة تدخلات المشروع وتطابقها مع الولويات بلديتكم؟</p> <p>ما مدى ملائمة تدخلات المشروع وتطابقها مع احتياجات المناطق المهمشة في بلديتكم؟</p> <p>ما هي الخطوات التي قمتم بها للتأكد من ملائمة التدخلات لاحتياجات المناطق المهمشة السكان؟</p> <p>ما هي الخطوات التي تمت لاشراك السكان المحليين والجهات ذات العلاقة في التخطيط للمشروع؟</p>                   |
| Efficiency<br>الكفاءة               | To assess the efficiency of the project in achieving its expected results. This will entail analysis of the delivery of actual outcomes, outputs against the expected targets.    | <p>ما هي المعايير المتبعة للتأكد من كفاءة المشاريع التي تم اختيارها؟</p> <p>ما هي المعايير المتبعة في اختيار المناطق المستهدفة؟</p> <p>ما هي التحديات والصعوبات التي واجهتكم في تحقيق كفاءة المشروع؟</p> <p>ما هي الخطوات التي اتبعت في تصميم المشاريع؟</p> <p>كيف تم اختيار المقاولين؟</p> <p>كيف تم الاشراف على الاعمال؟</p> <p>كيف تم استلام الاعمال المنجزة؟</p> |
| Effectiveness<br>الفعالية           | To assess the effectiveness of the project in achieving its expected results. This will entail analysis of the delivery of actual outcomes, outputs against the expected targets. | <p>ما هي المعايير المتبعة للتأكد من فعالية المشاريع التي تم اختيارها؟</p> <p>هل فعالية التدخل تحقق الاهداف المرجوة؟</p> <p>ما هي التحديات والصعوبات التي واجهتكم بعد انتهاء المشروع؟</p>                                                                                                                                                                             |
| Impacts<br>الاثار                   | To assess the impacts of the project on targeted beneficiaries, local communities, local authorities and other stakeholders.                                                      | <p>ما هي اثار المشروع على المناطق المهمشة؟</p> <p>ما هي اثار المشروع على السكان المحليين؟</p> <p>ما هي اثار المشروع على بلديتكم؟</p>                                                                                                                                                                                                                                 |
| Sustainability<br>الاستدامة         | To assess the sustainability of the project.                                                                                                                                      | <p>هل لدى البلدية الامكانيات الفنية لاستدامة المشروع؟</p> <p>هل لدى البلدية خطة لتطوير المشروع؟</p> <p>هل لدى البلدية خطة لاعادة تجربة المشروع في مواقع اخرى؟</p>                                                                                                                                                                                                    |
| Lessons Learned<br>الدروس المستفادة |                                                                                                                                                                                   | <p>ما هي الدروس المستفادة من المشروع؟</p> <p>اخبرنا عن قصة نجاح في المشروع؟</p>                                                                                                                                                                                                                                                                                      |

## Annex 9: Guiding Questions for Interviewing Relevant Staff at CMWU

| Criteria                            | Objectives                                                                                                                                                                        | Questions (Arabic)                                                                                                                                                                                                                             |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Relevance<br>الملائمة               | To assess the relevance of the project to the national policy agenda and priorities, relevance with the requirements of the beneficiaries, etc.                                   | ما مدى ملائمة تدخلات المشروع وتطابقها مع الأولويات في مؤسستكم؟<br>ما مدى ملائمة تدخلات المشروع وتطابقها مع احتياجات المناطق المهمشة؟<br>هل كانت التدخلات جزء من خطة الوزارة لتنمية المناطق المهمشة؟<br>هل تم اشراك مؤسستكم في تحديد الأولويات؟ |
| Efficiency<br>الكفاءة               | To assess the efficiency of the project in achieving its expected results. This will entail analysis of the delivery of actual outcomes, outputs against the expected targets.    | ما هي المعايير المتبعة للتأكد من كفاءة المشاريع التي تم اختيارها؟<br>هل تم اشراككم في اختيار المناطق المستهدفة؟<br>هل تم اشراككم في تصميم المشاريع؟<br>هل تم اشراككم في عملية التنفيذ؟ وما هو دوركم؟                                           |
| Effectiveness<br>الفعالية           | To assess the effectiveness of the project in achieving its expected results. This will entail analysis of the delivery of actual outcomes, outputs against the expected targets. | هل كان لكم دور في دراسة وتحديد كفاءة المشروع؟<br>ما هو رأيكم في كفاءة المشروع من حيث تطوير مصادر المياه؟                                                                                                                                       |
| Impacts<br>الاثار                   | To assess the impacts of the project on targeted beneficiaries, local communities, local authorities and other stakeholders.                                                      | ما هي اثار المشروع على المناطق المهمشة؟<br>ما هي اثار المشروع في تحسين امداد السكان بالمياه؟<br>ما هي اثار المشروع في تحسين نوعية المياه المقدمة للسكان؟                                                                                       |
| Sustainability<br>الاستدامة         | To assess the sustainability of the project.                                                                                                                                      | هل ترى بأن هذه المشاريع مستدامة؟ وكيف؟                                                                                                                                                                                                         |
| Lessons Learned<br>الدروس المستفادة | Lessons Learned from the project implementation                                                                                                                                   | ما هي الدروس المستفادة من المشروع؟                                                                                                                                                                                                             |

## Annex 10: Guiding Questions for Interviewing Contractors who implemented the Projects

|                                                                                                                        |                                                                            |
|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| 1. How you had been selected to work on this project?                                                                  | 1. كيف تم اختياركم للعمل في هذا المشروع؟                                   |
| 2. Was the awarding process done as planned?                                                                           | 2. هل تمت عملية الترسية حسب ما هو مخطط له؟                                 |
| 3. What are the difficulties you faced before starting the implementation?                                             | 3. ما هي الصعوبات التي واجهتكم قبل البدء بالتنفيذ؟                         |
| 4. What are the difficulties you faced during implementation?                                                          | 4. ما هي الصعوبات التي واجهتكم اثناء التنفيذ؟                              |
| 5. To what extent does the Local Authorities Loan Fund cooperate in overcoming difficulties?                           | 5. ما مدى تعاون صندوق اقراض الهيئات المحلية في تذليل الصعاب؟               |
| 6. How do local authorities cooperate with you?                                                                        | 6. ما مدى تعاون الهيئات المحلية معكم؟                                      |
| 7. What is the extent of cooperation between the competent authorities?                                                | 7. ما مدى تعاون الجهات ذات الاختصاص معكم؟                                  |
| 8. Are works added to the original contract?                                                                           | 8. هل تم اضافة اعمال للعقد الأصلي؟                                         |
| 9. Have the provisions of the contract been complied with?                                                             | 9. هل تم الالتزام بنصوص العقد معكم؟                                        |
| 10. Have there been any accidents or risks to which the contractor, his workers, or the local population were exposed? | 10. هل حدث اية حوادث أو أخطار تعرض لها المقاول أو عماله أو السكان المحليين |

## Annex 11: Focus Groups Questions

Focus Group Questions on Development of roads intersections using Solar Street lighting and landscaping.

1. مدي تأثير المشروع على منطقتكم
2. مدى الرضا عن تنفيذ المشروع
3. اذا كان مستوى الرضا ضعيف اذكر الاسباب
4. هل تعتقد بأن المشروع سيقفل من حوادث الطرق
5. هل تعتقد بأن المشروع سيزيد من الشعور بالأمان
6. هل تعتقد بأن المشروع سيشجع التنمية في المنطقة
7. هل تعتقد بأن المشروع سيشجع انشاء مشاريع صغيرة
8. ما هي اقتراحاتكم وتوصياتكم

Focus Group Questions on Providing Solar Energy for Water Wells/

1. مدي تأثير المشروع على منطقتكم :
2. مدى الرضا عن تنفيذ المشروع
3. اذا كان مستوى الرضا ضعيف اذكر الاسباب
4. اذا كان مستوى الرضا ضعيف اذكر الاسباب
5. هل شعرت بتغيير في كمية المياه التي تصلكم
6. هل شعرت بتحسين نوعية المياه التي تصلك
7. ما هي اقتراحاتكم وتوصياتكم

Focus Group Questions on Containerized Municipal Brackish Water RO Desalination Plants.

1. مدي تأثير المشروع على منطقتكم :
2. مدى الرضا عن تنفيذ المشروع
3. اذا كان مستوى الرضا ضعيف اذكر الاسباب
4. هل شعرت بتغيير في كمية المياه التي تصلكم
5. هل شعرت بتحسين نوعية المياه التي تصلك
6. هل شعرتكم بتغيير في تكلفة كوب المياه المحلاة
7. ما هي اقتراحاتكم وتوصياتكم

Focus Group Questions on Establishment of a multipurpose Hall and development of the existing cultural center

1. مدي تأثير المشروع على منطقتكم :
2. مدى الرضا عن تنفيذ المشروع
3. اذا كان مستوى الرضا ضعيف اذكر الاسباب
4. هل تعتقد بأن المشروع سيزيد من المشاركة المجتمعية
5. هل تعتقد بأن المشروع سيشجع من زيادة التواصل مع البلدية
6. هل تعتقد بأن المشروع سيساهم في تحسين الخدمات
7. هل تعتقد بأن المشروع سيساهم في زيادة مشاركة الشباب
8. هل تعتقد بأن المشروع سيساهم في تحسين زيادة مشاركة المرأة
9. ما هي اقتراحاتكم وتوصياتكم

## Annex 12: Sample of laboratory test for water quality after the interventions

State of Palestine  
Ministry of Health  
General Administration of P.H.C  
Public Health Lab.



ولة فلسطين  
وزارة الصحة  
الإدارة العامة للرعاية الأولية  
المرافق مختبرات الصحة العامة

### WATER CHEMISTRY REPORT

### تقرير فحص كيمياء مياه

|                                           |                                   |           |                   |                  |
|-------------------------------------------|-----------------------------------|-----------|-------------------|------------------|
| Code No.                                  | رقم البئر                         | Well Name | محطة تحلية الشوكة | سم البئر         |
| Lab. No.                                  | 127/04/2020                       | Sampling  | 12/04/2020        | تاريخ لخذ العينة |
| Collect by                                | اسعد مطرا / شركة عيد السلام ياسين | Area      | خانيونس           | لمنطقة           |
| سم المختبر : محمد القطيب + هيثم ابو عرسية |                                   |           |                   |                  |

| No. | Test                       | Unit              | Result                              | Max value ( PSI) |
|-----|----------------------------|-------------------|-------------------------------------|------------------|
| 1   | Turbidity                  | المكارة NTU       | 0.80                                | 4                |
| 2   | Color                      | اللون             |                                     | 15               |
| 3   | p H                        | رقم الحموضة       | 6.77                                | 6.5-8.5          |
| 4   | E.C                        | التوصيل الكهربائي | Micro mho/cm                        | 2500             |
| 5   | TDS                        | الأجسام الصلبة    | ppm                                 | 1000             |
| 6   | Nitrite                    | نيتريت            | ppm as NO <sub>2</sub> <sup>-</sup> | 0.2              |
| 7   | Nitrate                    | نترات             | ppm as NO <sub>3</sub> <sup>-</sup> | 50               |
| 8   | Ammonia                    | أمونيا            | ppm as NH <sub>3</sub> <sup>+</sup> | 1.5              |
| 9   | Chloride                   | كلوريد            | ppm as Cl <sup>-</sup>              | 250              |
| 10  | Sulphate                   | كبريتات           | ppm as SO <sub>4</sub> <sup>-</sup> | 250              |
| 11  | Total Alkalinity           | القوية الكلية     | ppm as CO <sub>3</sub> <sup>-</sup> | 200              |
| 12  | Total Hardness             | الصلابة الكلية    | ppm as CaCO <sub>3</sub>            | 300              |
| 13  | Calcium                    | كالكسيوم          | ppm as Ca <sup>++</sup>             | 214              |
| 14  | Magnesium                  | مغنسيوم           | ppm as Mg <sup>++</sup>             | 96               |
| 15  | Fluoride                   | فلوريد            | ppm as F <sup>-</sup>               | 1.5              |
| 16  | Potassium                  | بوتاسيوم          | ppm as K <sup>+</sup>               | 25               |
| 17  | Sodium                     | صوديوم            | ppm as Na <sup>+</sup>              | 200              |
| 18  | Total phosphorus           | الفوسفور الكلي    | ppm as P <sup>-</sup>               |                  |
| 19  | D.O                        | الأكسجين الذائب   | ppm as O <sub>2</sub>               | 6-8.5            |
| 20  | Detergent                  | المنظفات          | ppm as ABS                          | 0.5              |
| 21  | Langelier Saturation Index | LSI               |                                     |                  |

ملاحظات : العينة مرسومة الزمان بوقت 12:00 مساءً 12/04/2020

أسامة خضر الخليلي  
مدير المختبر

مدير المختبر

رئيس الشعبة :

Date: 13/04/2020 التاريخ :



وزارة الصحة  
الإدارة العامة للرعاية الأولية  
مختبرات الصحة العامة

\* المختبر مسئول عن نتائج العينات الواردة للمختبر فقط .

\* لا يجوز إعادة إصدار التقرير إلا بموافقة خطية من مدير المختبر .

\* المختبر حاصل على شهادة اعتماد المختبرات ( PSI 17 )



# WATER CHEMISTRY REPORT

## تقرير فحص كيمياء مياه

|                                           |                                  |           |                    |                  |
|-------------------------------------------|----------------------------------|-----------|--------------------|------------------|
| Code No.                                  | رقم البئر                        | Well Name | محطة تحلية القرارة | اسم البئر        |
| Lab. No.                                  | 125/04/2020                      | Sampling  | 12/04/2020         | تاريخ اخذ العينة |
| Collect by                                | اسعد مطر / شركة عبد السلام ياسين | Area      | خانيونس            | المنطقة          |
| اسم المختبر : محمد الخطيب + فؤاد ابو مرسة |                                  |           |                    |                  |

| No. | Test                       | Unit                                              | Result | Max value (PSI) |
|-----|----------------------------|---------------------------------------------------|--------|-----------------|
| 1   | Turbidity                  | المكارة NTU                                       | 0.76   | 4               |
| 2   | Color                      | لون                                               |        | 15              |
| 3   | pH                         | رقم الحموضة                                       | 6.54   | 6.5-8.5         |
| 4   | E.C                        | التوصيل الكهربائي Micro mho/cm                    | 77.0   | 2500            |
| 5   | TDS                        | الأجسام الصلبة ppm                                | 39.0   | 1000            |
| 6   | Nitrite                    | نيتريت ppm as NO <sub>2</sub> <sup>-</sup>        |        | 0.2             |
| 7   | Nitrate                    | نترات ppm as NO <sub>3</sub> <sup>-</sup>         | 7.0    | 50              |
| 8   | Ammonia                    | أمونيا ppm as NH <sub>3</sub> <sup>+</sup>        |        | 1.5             |
| 9   | Chloride                   | كلوريد ppm as Cl <sup>-</sup>                     | 12.0   | 250             |
| 10  | Sulphate                   | كبريتات ppm as SO <sub>4</sub> <sup>-</sup>       | 1.0    | 250             |
| 11  | Total Alkalinity           | القوة الكافية ppm as CO <sub>3</sub> <sup>-</sup> | 11.0   | 200             |
| 12  | Total Hardness             | العسر الكلي ppm as CaCO <sub>3</sub>              | 4.0    | 300             |
| 13  | Calcium                    | كالكسيوم ppm as Ca <sup>++</sup>                  |        | 214             |
| 14  | Magnesium                  | مغنسيوم ppm as Mg <sup>++</sup>                   |        | 95              |
| 15  | Fluoride                   | فلوريد ppm as F <sup>-</sup>                      |        | 1.5             |
| 16  | Potassium                  | بوتاسيوم ppm as K <sup>+</sup>                    |        | 25              |
| 17  | Sodium                     | صوديوم ppm as Na <sup>+</sup>                     |        | 200             |
| 18  | Total phosphorus           | الفوسفور الكلي ppm as P <sup>-</sup>              |        |                 |
| 19  | D.O                        | الأكسجين الذائب ppm as O <sub>2</sub>             |        | 6-8.5           |
| 20  | Detergent                  | المنظفات ppm as ABS                               |        | 0.5             |
| 21  | Langelier Saturation Index | LSI                                               |        |                 |

ملاحظات : العينة كيميائية سليمة - لم يصب اضرار بالباكتريا 0378249

مدير المختبر : فاضل الخطيب

مدير مختبر الصحة العامة

FLAC



التاريخ : 13/04/2020 رئيس الشعبة :

\* المختبر مسئول عن نتائج العينات الواردة للمختبر فقط .

\* لا يجوز إعادة إصدار التقرير إلا بموافقة خطية من مدير المختبر .

\* المختبر حاصل على شهادة اعتماد المختبرات ( PSI 17 )



# WATER CHEMISTRY REPORT

# تقرير فحص كيمياء مياه

|                             |                                  |                     |                  |             |
|-----------------------------|----------------------------------|---------------------|------------------|-------------|
| Code No.                    | رقم البئر                        | Well Name           | محطة تحلية خزاعة | اسم البئر   |
| Lab. No.                    | 126/04/2020                      | رقم العينة بالمختبر | Sampling         | 12/04/2020  |
| Collect by                  | أسعد مطر / شركة عبد السلام ياسين | اسم أخذ العينة      | Area             | خانيونس     |
| محمد الخطيب + هيثم أبو مرسة |                                  |                     |                  | اسم الفحص : |

| No. | Test                       | Unit              | Result                              | Max value ( PSI) |
|-----|----------------------------|-------------------|-------------------------------------|------------------|
| 1   | Turbidity                  | المكارة NTU       | 0.57                                | 4                |
| 2   | Color                      | اللون             |                                     | 15               |
| 3   | p H                        | رقم الحموضة       | 6.16                                | 6.5-8.5          |
| 4   | E.C                        | التوصيل الكهربائي | 19.0                                | 2500             |
| 5   | TDS                        | الأجسام الصلبة    | 10.0                                | 1000             |
| 6   | Nitrite                    | نيتريت            | ppm as NO <sub>2</sub> <sup>-</sup> | 0.2              |
| 7   | Nitrate                    | نترات             | ppm as NO <sub>3</sub> <sup>-</sup> | 50               |
| 8   | Ammonia                    | أمونيا            | ppm as NH <sub>3</sub> <sup>+</sup> | 1.5              |
| 9   | Chloride                   | كلوريد            | ppm as Cl <sup>-</sup>              | 250              |
| 10  | Sulphate                   | كبريتات           | ppm as SO <sub>4</sub> <sup>-</sup> | 250              |
| 11  | Total Alkalinity           | القوة القلوية     | ppm as CO <sub>3</sub> <sup>-</sup> | 200              |
| 12  | Total Hardness             | العسر الكلي       | ppm as CaCO <sub>3</sub>            | 300              |
| 13  | Calcium                    | كالكسيوم          | ppm as Ca <sup>++</sup>             | 214              |
| 14  | Magnesium                  | مغنسيوم           | ppm as Mg <sup>++</sup>             | 95               |
| 15  | Fluoride                   | فلوريد            | ppm as F <sup>-</sup>               | 1.5              |
| 16  | Potassium                  | بوتاسيوم          | ppm as K <sup>+</sup>               | 25               |
| 17  | Sodium                     | صوديوم            | ppm as Na <sup>+</sup>              | 200              |
| 18  | Total phosphorus           | الفوسفور الكلي    | ppm as P <sup>-</sup>               |                  |
| 19  | D.O                        | الأكسجين الذائب   | ppm as O <sub>2</sub>               | 6-8.5            |
| 20  | Detergent                  | المنظفات          | ppm as ABS                          | 0.5              |
| 21  | Langelier Saturation Index | LSI               |                                     |                  |

ملاحظات : العينة مبدئية الإرسال لمختبر 0378249

التاريخ : 13/04/2020 رئيس الشعبة :

مختبر مسؤول عن نتائج العينات الواردة للمختبر فقط

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\* المختبر حاصل على شهادة اعتماد المختبرات ( PSI 17 )

مدير المختبر :

مدير المختبر :

وزارة الصحة  
الإدارة العامة للرعاية الأولية  
Public Health Lab.

Rev No. 02 PHL-09-01 page 1/1 PHL - Tel 2813101