KNOWING WHAT WORKS

Central project evaluation

Support of Refugee-Hosting Communities in Solid Waste Management (ADHOC) II, Jordan

Project number 2016.2165.5

Evaluation Report

On behalf of GIZ by Geert Engelsman (JaLogisch Consulting GmbH) and Amer Jabarin (independent consultant)

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Evaluator/s:
Geert Engelsman, JaLogisch Consulting GmbH, Lead Evaluator
Amer Jabarin, independent Jordanian consultant, Co-Evaluator

Author/s of the evaluation report:
Geert Engelsman and Amer Jabarin

Consulting firm:
JaLogisch Consulting GmbH
Grazerstrasse 23B, 8045, Graz
T: +43 664 1410 417
E: gengelsman@jalogisch.com

Coordination and management:
Claudia Kornahrens, GIZ, Head of Section
Benjamin Braeuer, GIZ, Evaluation Manager
Central Project Evaluation Section
GIZ Corporate Unit Evaluation

Responsible:
Martha Gutierrez, GIZ, Director of Corporate Unit Evaluation

Editing:
International Correspondents in Education (ICE)

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Deutsche Gesellschaft für
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Registered offices:
Bonn and Eschborn
Friedrich-Ebert-Allee 32 + 36
53113 Bonn, Germany
T: +49 228 44 60-0
F: +49 228 44 60-17 66

E: evaluierung@giz.de
I: www.giz.de/evaluierung
www.youtube.com/user/GIZonlineTV
https://twitter.com/giz_gmbh

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Contents

List of figures

List of photos

List of tables

List of boxes

Abbreviations

BMZ	German Federal Ministry for Economic Cooperation and Development
DAC	Development Assistance Committee
DTG	Direct target group
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
ITG	Indirect target group
KfZ	German Development Bank
MOPIC	Ministry of Planning and International Cooperation
NGO	Non-governmental organisation
OECD	Organisation for Economic Co-operation and Development
OS	Other stakeholders
MoLA	Ministry of Local Administration, Jordan
SWM	Solid waste management

The project at a glance

Jordan: Support of Refugee-Hosting Communities in Solid Waste Management (ADHOC) II

Project number	2016.2165.5
Creditor reporting system code(s)	43030 (40%) – Urban development and management 14050 (60%) - Waste management/disposal
Project objective	The execution of municipal solid waste management tasks in selected refugee-hosting municipalities is improved. To that end, the project aimed to: • enhance the planning and management of municipal solid waste collection, • ensure more efficient and effective use of the available solid waste management infrastructure (especially the waste collector trucks) and • increase the capacity of the Ministry of Local Administration to monitor and steer the municipal solid waste management sector in Jordan. The project's focus was on alleviating short-term problems whilst building the basis for structural and sustainable solutions based on existing municipal systems.
Project term	July 2017 – November 2021
Project value	EUR 6,264,466
Commissioning party	German Federal Ministry for Economic Cooperation and Development (BMZ)
Lead executing agency	Ministry of Local Administration, Jordan
Implementing organisations (in the partner country)	-
Other development organisations involved	Not applicable
Target group(s)	The Ministry of Local Administration and the municipalities of Irbid, Ramtha, Mafraq, Russeifa and Karak in Jordan
Development cooperation (DC) programme	Not applicable
Implementing organisations of the DC programme	Not applicable
Organisation responsible for implementing and coordinating the DC programme	Not applicable
Reporting year of CPE	2022
Sample year of CPE	2018

1 Evaluation objectives and questions

This chapter describes the purpose of the evaluation, the standard evaluation criteria, and additional stakeholders' knowledge interests and evaluation questions.

1.1 Evaluation objectives

Central project evaluations of projects commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ) fulfil three basic functions: they support evidence-based decisions, promote transparency and accountability, and foster organisational learning within the scope of contributing to effective knowledge management. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH structures the planning, implementation and use of evaluations so that the contribution the evaluation process and the evaluation findings make to these basic functions is optimised (GIZ, 2018a).

The central project evaluation of the Support of Refugee-Hosting Communities in Solid Waste Management, Jordan project (hereafter referred to as 'the project' or 'ADHOC II') was part of the GIZ Corporate Unit Evaluation's random sample of 80 to 100 evaluations conducted each year on projects that are coming to an end (of a particular phase). The evaluation constituted a final evaluation of ADHOC II.

1.2 Evaluation questions

The project was assessed on standardised evaluation criteria and questions to ensure comparability by GIZ. These standards are based on the Organisation for Economic Co-operation and Development (OECD)/Development Assistance Committee (DAC) evaluation criteria (updated 2020) for international cooperation and the evaluation criteria for German bilateral cooperation (in German): **relevance, coherence, efficiency**, **effectiveness**, **impact** and **sustainability**.

Specific assessment dimensions and analytical questions were derived from this framework. These form the basis for all central project evaluations in GIZ and can be found in the **evaluation matrix** (see Annex 1). In addition, contributions to the 2030 Agenda for Sustainable Development and its principles were taken into account as well as cross-cutting issues such as gender, the environment, conflict sensitivity and human rights. Also, aspects regarding the quality of implementation are included in all OECD DAC criteria.

To further the utility and usage of central project evaluations, the evaluation process enabled key stakeholders in the project to express their evaluation interests and formulate specific evaluation questions. Most stakeholders (the project team, GIZ's regional department, the Jordanian Ministry of Local Administration and the five supported municipalities) expressed a general interest in the evaluation without translating this into specific evaluation questions. GIZ's country director for Jordan formulated two questions that went over and beyond the standard evaluation questions. These are listed and explained in Table 1.

As a follow-up to the BMZ 2030 Reform Strategy, BMZ decided to phase out its involvement in the solid waste management sector in Jordan. There is no formal follow-up project to ADHOC II. However, a new project entitled Solid Waste Management, Jordan (PN 2020.2028.7) is to wrap up the work and consolidate the impacts of both ADHOC II and the Climate and Resource Conservation through Recycling (CIRCLE) project. The latter project supports the Greater Amman Municipality in recycling waste and introducing a circular economy. The appraisal mission for the new project (Solid Waste Management, Jordan) was conducted in spring 2021; the BMZ offer is pending BMZ approval. (GIZ, 2021b; 2021c)

Table 1: Knowledge interests of specific stakeholder groups

Evaluation stakeholder group	Knowledge interests in evaluation/additional evaluation questions	Relevant section in this report
GIZ country director for Jordan	GIZ's management expressed a need to be more honest about what GIZ can and has achieved in its development work. The project operated during the ongoing COVID-19 pandemic. The country director wondered to what extent the COVID-19 pandemic affected the results achievement. **Evaluation question:** To what extent has the COVID-19 pandemic influenced the development results of ADHOC II?	Section 4.4 Effectiveness
GIZ country director for Jordan	The country director observed that the 5 supported municipalities possess limited institutional capacity and expressed concern about the sustainability of the project's results. At the same time, waste collection is critical, and non-collection affects climate change and environmental pollution. The country director wondered about the possibility of mainstreaming solid waste management across GIZ's country portfolio: to see it as a cross-cutting theme rather than a sector intervention. **Evaluation question:** To what extent can solid waste management be mainstreamed across GIZ's water, environment, employment or finance clusters?	Section 4.8 Follow-on project and mainstreaming of municipal SWM

2 Object of the evaluation

This chapter defines the evaluation object, including the theory of change, and results hypotheses.

2.1 Definition of the evaluation object

Background

Following the start of the Syrian civil war in 2011, many Syrians fled to Jordan. As of 31 July 2021, the United Nations High Commission for Refugees registered 669,497 Syrian refugees in Jordan (UNHCR, 2021). The Jordanian Government estimates that the real number is double this amount: 1.36 million Syrian refugees (MOPIC, 2020).[1] This accounts for between 6.5% and 12.75% of the Jordanian population.[2] As most refugees reside in urban centres – outside of refugee camps – the percentage of refugees is much higher in Jordan's cities (MOPIC, 2020; Betts & Collier, 2017; BMZ, 2018). See Table 2 for three examples of cities supported by the project. It is expected that the population of Syrian refugees in Jordan will grow by 3% annually (MOPIC, 2020).

[1] These numbers have remained stable over the last few years. The German Country Strategy for Bilateral Development Cooperation in Jordan (from 2018) refers to 666,000 UN-registered refugees and a Jordanian government estimate of 1.3 million Syrian refugees (BMZ, 2018).

[2] The Jordanian population was 10.2 million people in 2020 (World Bank, 2021).

Table 2: Number of refugees in three northern towns in Jordan.

Jordanian town	Total population	Number of refugees	Percentage of refugees
Irbid	736,000	210,000	28.5%
Ramtha	194,000	94,000	48.5%
Mafraq	140,000	63,000	45.0%

Source: (BMZ, 2018)

The large influx of refugees strained the already stretched public services in Jordan. For example, it resulted in 340 tons of additional solid waste per day (Aldayyat, Saidan, Saleh, Hamdan, & Linton, 2019). This equalled nearly 10% of the daily municipal waste generated in Jordan in 2019 (Aldayyat, Saidan, Saleh, Hamdan, & Linton, 2019). For the refugee-hosting communities, it was difficult to handle this increase in solid waste and maintain public hygiene (GIZ, 2017b). In 2014, Germany began supporting four refugee-hosting communities with their solid waste collection and management (ADHOC project, PN 2013.2298.1). This was a direct response to the Syrian refugee crisis and Jordan's call for support. In 2018, the project entered a second phase. It is this second phase of the project that is the subject of this evaluation.

Project under evaluation

Objective. The project sought to assist five refugee-hosting municipalities in collecting the increased amounts of residential and commercial solid waste. This translated into the following formal objective statement: 'the execution of municipal solid waste management tasks in the selected refugee-hosting municipalities is improved' (GIZ, 2017b). The focus thereby lay on providing short-term relief in solid waste collection 'whilst building the basis for structural and sustainable solutions' (GIZ, 2017b).

Scope. The project consisted of three intervention areas – the project sought to contribute to:

- improved municipal management of the municipal solid waste sector,
- effective and efficient use of the municipal solid waste management fleet and workshop and
- enhanced capacity of the Ministry of Local Administration to monitor and steer the municipal solid waste management sector in Jordan (GIZ, 2019a).

Budget. The project's original budget was €3 million (GIZ, 2017b). In 2017, Germany committed an additional €3.1 million to the project (GIZ, 2019a). In 2020, budgetary savings of €164,466 from the predecessor project were added to the project (GIZ, 2020a). The total budget was therefore €6,264,466.

Timeline. The project was scheduled for three years: from 1 July 2017 to 30 June 2020 (GIZ, 2017b). After the additional budget of €3.1 million was pledged to the project, the project duration was extended by one year (GIZ, 2019a). In 2020, another five months were added to overcome the delays stemming from the health-, travel- and work-related impacts of the COVID-19 pandemic and the government's response thereto. The final project duration was four years and five months, from 1 July 2017 to 30 November 2021 (GIZ, 2020a; 2021f).

Direct target groups. The project supported five refugee-hosting communities in Jordan: three in the north (Irbid, Mafraq and Ramtha), one bordering the capital Amman (Russeifa), and one in the south (Karak). In addition, the project assisted the Ministry of Local Administration in strengthening its supervision and steering of the municipal solid waste management sector in Jordan.

Indirect target groups. The project was to contribute to improved municipal waste collection and benefit residents and refugees alike in Irbid, Mafraq, Ramtha, Russeifa and Karak.

Organisation. The project was implemented by a dedicated GIZ project team, consisting of an international team leader, one local GIZ employee and one long-term local consultant (INT GIZ 2,3,4,8). The project team received support for specific tasks from short-term national and international experts: either consultants or GIZ headquarters staff (GIZ, 2021d). This set-up was in line with the original BMZ offer, with one exception (GIZ, 2017b). The project originally envisaged placing an integrated expert within the Solid Waste Management (SWM) department in the Ministry of Local Administration (GIZ, 2017b). However, the Ministry of Local Administration did not accommodate this arrangement (INT GIZ 3).

2.2 Results model including hypotheses

Theory of change

The project supported the municipalities with advice and training, as well as the procurement of equipment and spare parts for maintaining the municipal solid waste collection fleet. This support was to improve the municipalities' planning and management of municipal solid waste collection, build up the necessary human and organisational capacity, equip the municipal workshops and enable the workshops to maintain the waste collection fleet. In addition, the project sought to enhance the capacity of the Ministry of Local Administration to monitor and steer the municipal solid waste management sector. The support was expected to bear fruit based on four observations (GIZ, 2017b; 2019a) (INT GIZ 2,3; OS 3,9,12).

- The municipalities expressed 'a need' for support, being unable to handle the increase in solid waste.
- The municipalities and the ministry 'expected' support as the Syrian refugee crisis was not of their making.
- The municipal mayors had 'an interest' in providing adequate solid waste management services as providing such services constitutes an explicit task of municipal government.
- The National Solid Waste Management Strategy (hereafter the National SWM Strategy) 'required' municipal governments to implement many of the project activities and outputs.

Results hypotheses

Based on the project's rationale, results matrix and above observations, the evaluation team deduced three results hypotheses and two impact hypotheses.[3]

- **Results hypothesis 1** (R1)
  If the project provides technical, process and organisational advice and training to the municipal environmental and fleet management departments (or their equivalent) and their staff (*activity, direct target groups*),
  then these departments will professionalise their organisation and business processes (route planning, use of waste collector trucks), develop municipal SWM plans (in a gender-sensitive and participatory manner), and design a new tariff (collection) system for commercial waste,
  because these departments see the need for, have an interest in, and are required to adopt these plans, processes and tariff system,
  thereby improving the preconditions for SWM service delivery by the responsible municipal departments (*output*), leading to the improved execution of municipal solid waste management tasks in the supported refugee-hosting municipalities (*outcome*),
  because municipalities formally adopt municipal waste management plans, and the responsible departments have the capacity, tenacity, incentive and mandate to implement these plans.

[3] In essence, the results hypotheses complete the 'if-then statements' implicitly included in the results framework with the 'because' part of the argument, resulting in 'if-then-because' statements. The methodological approach for reconstructing the theory of change and devising the results hypotheses is based on (Leeuw, 2003; Morra & Rist, 2009; Patton, 2002).

- **Results hypothesis 2** (R2)
  If the project provides technical and process advice to the municipal environmental and fleet management departments (or their equivalent) and workshops, and procures equipment and spare parts for the municipal workshops (*activity, direct target groups*),
  then new SWM standards and processes will be introduced in Irbid municipality (for business processes and environmental and labour protection), (digital) maintenance plans for waste collector trucks and digital fleet management systems will be introduced in the municipalities, and workshops will be supplied with equipment and spare parts,
  because the municipal departments and workshops see the need for, have an interest in, and are required to adopt quality standards/processes and/or digital management systems, and the procurement of equipment and spare parts is done successfully,
  thereby improving the maintenance of waste collector trucks in the municipalities (*output*), leading to the improved execution of municipal solid waste management tasks in the supported refugee-hosting municipalities (*outcome*),
  because the municipal workshops have the capacity, tenacity and incentive to maintain the waste collector trucks and the municipal departments deploy these trucks effectively and efficiently.

- **Results hypothesis 3** (R3)
  If the project provides management, technical and methodological advice to the Ministry of Local Administration (*activity, direct target groups*),
  then the Ministry of Local Administration will further develop its SWM department and staff, introduce an operations plan for the SWM department, and develop an intermunicipal benchmarking (monitoring) system on solid waste management,
  because the ministerial SWM department sees the need for, has an interest in and is required to build this capacity, develop the operations plan and adopt an intermunicipal benchmarking system,
  thereby improving the preconditions in the Ministry of Local Administration for monitoring and steering municipal solid waste management (*output*), leading to the improved execution of municipal solid waste management tasks in the supported refugee-hosting municipalities (*outcome*),
  because the ministerial SWM department has the capacity, tenacity, incentive and mandate to benchmark municipal SWM services and actively steer the municipal SWM sector.

- **Impact hypothesis 1** (I1)
  If the supported refugee-hosting municipalities are able to collect the increased amount of solid waste (stemming from the influx of refugees),
  then this will result in less soil and groundwater pollution and better public hygiene,
  because there is less solid and organic litter on the ground that could be a source of pollution and disease.

- **Impact hypothesis 2** (I2)
  If municipal solid waste collection in the supported refugee-hosting municipalities improves,
  then this will lead to reduced tension and conflict between residents and refugees,
  because one source of potential tension – an unsatisfactory solid waste collection service that residents may associate with the influx of refugees – is taken away (is removed).

System boundary

The project addressed solid waste 'collection' in 'five' refugee-hosting communities: Irbid, Mafraq, Ramtha, Russeifa, and Karak. The project did not deal with waste 'disposal'. In addition, the project supported the Ministry of Local Administration with its internal business processes and the monitoring and steering of municipal solid waste collection. The project was not involved in strategy or policy development for solid waste management in Jordan.

Risks

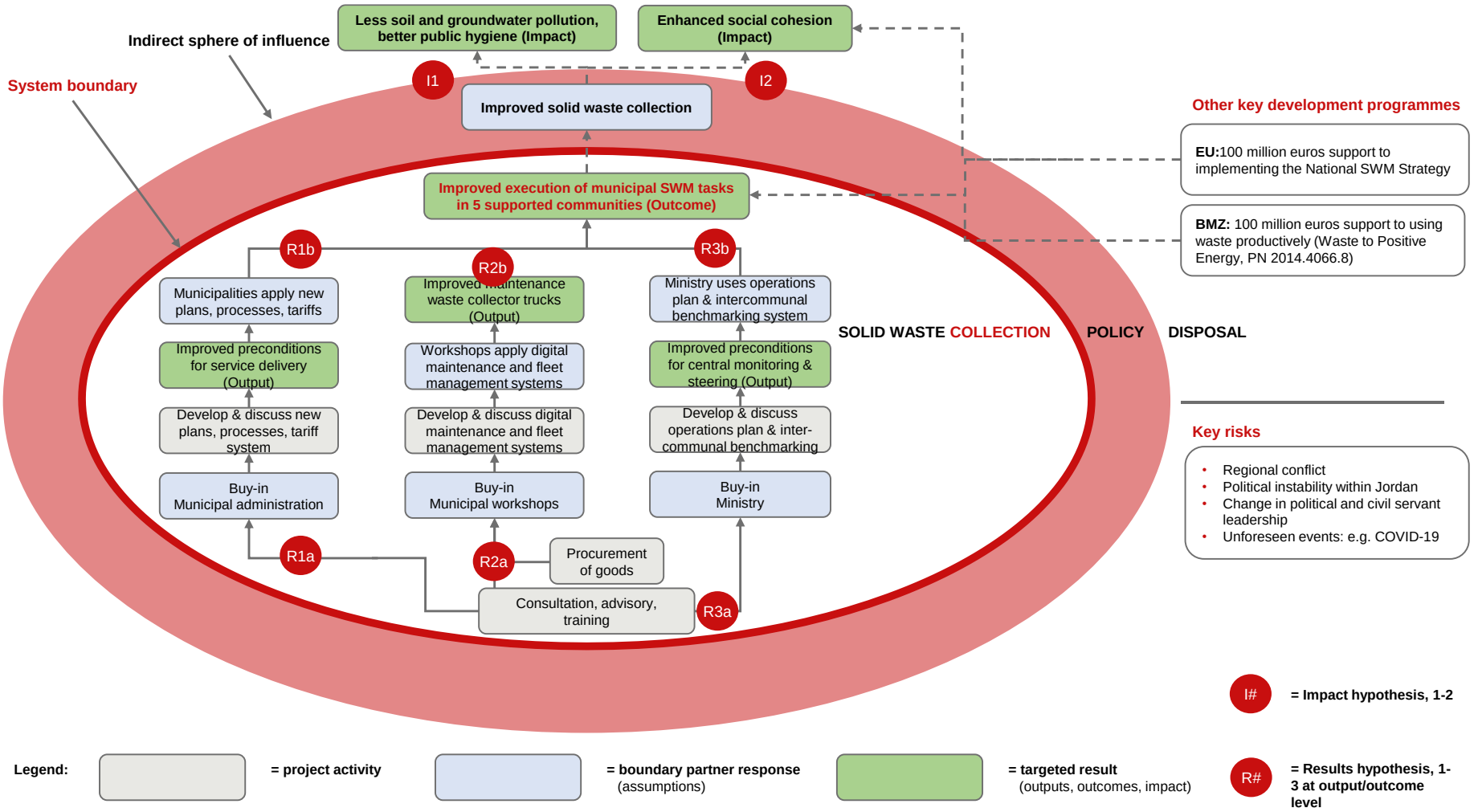
In this report, risks are defined as 'external events', outside the influence of the project, which affect the ability of the project to implement its activities or achieve its objectives. The key risks to the project arose from:

- geopolitical instability and regional conflict in the Middle East, which could hamper the ability of the project to operate or divert the attention of the project's direct target groups away from the project,
- political instability within Jordan, which again could divert the attention of the project's direct target groups away from the project,
- changes in the political and civil servant leadership in the supported municipalities or the Ministry of Local Administration – such a change in personnel could result in a brain drain and/or the need to rebuild relations and trust with the project's counterparts and
- unforeseen events, such as the COVID-19 pandemic, which could hamper project implementation.

Results model

Figure 1 offers a graphical representation of the theory of change, the results hypotheses, the system boundary, key related development programmes and the major risks to the project. This results model was constructed by the evaluation team, based on the above building blocks and in accordance with the Corporate Unit Evaluation's guidelines. This graphical representation goes beyond the results model that was prepared by the project team (GIZ, 2019b), which offers a stylised representation of just the results matrix.

Figure 1: Current results model (December 2021), adapted during evaluation.



3 Evaluability and evaluation process

This chapter clarifies the data availability and quality and the evaluation process.

3.1 Evaluability: data availability and quality

This section covers the following aspects:

- availability of essential documents,
- monitoring and baseline data including partner data, and
- partner and secondary data.

Availability of essential documents

All relevant project documents and available information were shared with the evaluation team with one exception: the project team did not receive the calculations of the baseline- and end-values of outcome indicator 1 'Cost coverage ratio improved by 10% in Irbid and Mafraq'. As explained in section 4.4, the evaluation has not used the data on this indicator in its evaluative judgment of the project.

Monitoring and baseline data

The project's results matrix constituted the project's monitoring and reporting tool. The baseline data for the results indicators were partly set and partly reconfirmed during the mid-term review of the project in 2019 (GIZ, 2019a). The data on most outcome- and output-level indicators were collected by the project team on an annual basis and reported on in the project's annual reports (GIZ, 2021a). Data on a few outcome and output indicators were collected and calculated only at the project end. The project's completion report included the results matrix with the end-values of all outcome and output indicators (GIZ, 2021e). The latest results matrix is submitted to the Corporate Unit Evaluation, as a separate document, together with this evaluation report.

Partner and secondary data

Neither the five supported municipalities nor the Ministry of Local Administration nor the Jordanian Department of Statistics collected quantitative data on relevant indicators for this evaluation on waste collection (collection rate and cost coverage rate) and impacts (social cohesion and municipal soil and water pollution) (INT DTG 4,6,8; GIZ 2,3; OS 6). The evaluation made a qualitative assessment of the project's performance based on the six OECD DAC evaluation criteria.

3.2 Evaluation process

This section covers the following aspects:

- milestones of the evaluation process,
- involvement of stakeholders,
- selection of interviewees,
- data analysis process,
- roles of international and local evaluators, and
- context and conflict sensitivity within the evaluation process.

Figure 2: Milestones of the evaluation process

Involvement of stakeholders and selection of interviewees

At the evaluation start, the evaluation team interviewed representatives from the direct target group (DTG): the supported municipalities and the Ministry of Local Administration. The representatives were the project's focal points in the municipalities and the ministry. They all held senior administrative positions in their respective organisations. The evaluation inquired into the interest of these stakeholders in the evaluation and any specific evaluation questions that they might have. (The direct target group expressed a general interest in the evaluation but formulated no specific evaluation questions.)

During the field mission, the evaluation team interviewed the direct target group members. The allotted time for the field mission did not allow for all five supported municipalities to be visited. The evaluation team 'purposefully selected' four out of five municipalities. The selection criteria were:

- geographic spread (a municipality from the north, middle and south of the country),
- municipal size (including the largest and smallest municipality) and
- an atypical case (a municipality, Russeifa, which according to the project team, displayed little buy-in into the project).

This resulted in the selection of Irbid, Mafraq, Ramtha and Russeifa for a field visit and on-the-ground interviews.

In each municipality, the evaluation team interviewed the executive manager (or the financial manager in Mafraq), the heads of the environmental and fleet departments and the heads of the municipal workshops. Again, these key informants were purposefully selected. The selection criteria were:

- management representation and
- cooperation with the project.

The same selection principles were used for the Ministry of Local Administration. The evaluation team interviewed the secretary general and the head of the SWM department.

To capture the perspective of the indirect target group (ITG) – the residents and refugees – the evaluation team interviewed both residents and refugees directly as well as representatives of non-governmental organisations (NGOs) who work with residents and/or refugees. The evaluation team interviewed five residents and three Syrian refugees living in the supported municipalities. These residents and refugees were partly identified through the evaluation team's contacts with NGOs (availability and snowball sampling) and partly approached 'on the street' (availability sampling with a willingness to participate in a conversation). In addition, the evaluation interviewed six representatives from NGOs either as community or refugee representatives. These NGOs were different from the NGOs that linked the evaluation team to the residents and Syrian refugees. The latter NGOs were identified through the evaluation team's network (availability and snowball sampling).

The third category of key informants involved in the evaluation were 'other stakeholders' (OS), including the Ministry of Environment, the Department of Statistics, a Joint Service Council (responsible for waste disposal/landfills), international development partners and national SWM experts. These stakeholders were selected through purposeful sampling. The selection criteria were:

- an active role in (supporting) municipal SWM,
- expertise on municipal SWM in Jordan, or
- potential source of information on municipal SWM in Jordan.

Finally, the evaluation team engaged with GIZ management and staff in the GIZ country office in Amman. These key informants were selected based on their responsibilities in managing and implementing the GIZ (SWM) portfolio (purposeful sampling).

The evaluation team invited the Ministry of Local Administration to the evaluation debriefing at the end of the field mission. The ministry expressed a preference to receive the written evaluation report.

The number (56) and different categories (4) of stakeholders offered the evaluation a diverse set of perspectives on the municipal SWM sector and the project. It constitutes a solid basis for passing a qualitative evaluative judgment on ADHOC II. The female representation among the local stakeholders was 20% (but 50% among the executive managers who were interviewed in the four municipalities that were visited). This signals the relatively low representation of women in the Jordanian SWM sector.

Table 3: List of evaluation stakeholders and selected participants

Organisation/company/ target group	Overall number of persons involved in evaluation (including gender disaggregation)	No. of interview participants	No. of focus group participants	No. of workshop participants	No. of survey participants
BMZ*	1 (1f)	1			
Country manager					
GIZ	14 (6f, 8m)	14			
GIZ project team, GIZ headquarters in Germany					
Direct target group	13 (2f, 11m)	13			
Municipalities: Irbid, Karak, Mafraq, Russeifa; Ministry of Local Administration					
Indirect target group	14 (3f, 11m)	14			
Refugees, residents, NGO representatives					
Other stakeholders	14 (5f, 9m)	14			
Government agencies, international development partners, and international and national SWM experts					
Total	56 (17f, 39m)	56			
* In this evaluation report, the BMZ representative falls under 'other stakeholders' (OS). Note: f = female; m = male					

Data analysis process

The evaluation applied a variety of data analysis techniques for answering the evaluation questions. First, the evaluators interacted with the collected data with an open mind: identifying emerging themes and patterns. This 'inductive analysis' took place during the data collection when the evaluators made sense of the collected data. It entailed immediate reflection by the evaluators after individual (sets of) meetings, both individually and collectively. After the field mission, the collected data were scrutinised by both evaluators on their potential

answers to the evaluation questions – a so-called 'deductive analysis' (a structured analysis of the collected data based on the evaluation questions and assessment criteria).

As part of the deductive analysis, the evaluation team conducted a contribution analysis. A contribution analysis (Mayne, 2008) answers the following five questions: (i) are the assumptions underlying the theory of change plausible and uncontested? (ii) did the envisaged activities take place? (iii) is there evidence that the assumed changes in behaviour, decisions and actions occurred in practice? (iv) were the envisaged results achieved? (v) could other contextual factors have reasonably and significantly contributed to the results? The answers to these five questions help determine whether the project contributed to the observed outcomes and impacts.

The evaluation also conducted an efficiency analysis. Based on the follow-the-money approach and the outcomes of the Corporate Unit Evaluation's efficiency tool, the evaluation answered the following two main efficiency questions: could the same results have been achieved with fewer resources or could better results have been achieved through a different allocation of resources?

In drawing conclusions from the above analyses, the evaluation applied the principle of triangulation across data sources and evaluators. Triangulation across data sources means that findings and conclusions rest on data that stem from different categories of key informants and/or documents. Triangulation across evaluators means that both evaluators reached the same findings and conclusions based on the collected data. As per requirement, the evaluation report references all data to evidence the triangulation across data sources and ensure traceability.

Finally, the evaluation will subject the draft evaluation report to a critical review by the GIZ Corporate Unit Evaluation and the project team. The evaluation team will also invite the project team to solicit feedback from the direct target group: the Ministry of Local Administration and the five supported municipalities. The purpose of this review is to ensure that the evaluation report is factually correct, logically sound, reasonable and understandable.

Roles of international and local evaluators

The evaluation was conducted by a two-person team: a team leader/evaluation specialist and a local SWM/environmental specialist. The detailed division of labour was spelled out in the inception report. Whilst the team leader led on the evaluation process and methodology, the national evaluator ensured the contextualisation of the evaluation. The two team members conducted the field mission and nearly all interviews together. They engaged in-depth on the evaluation's findings, conclusions and recommendations during and after the field mission. The evaluation report represents the outcome of these exchanges.

Context and conflict sensitivity within the evaluation process

During the inception phase, the evaluation team discussed the potential conflict sensitivity of the evaluation (process) with the project team, the GIZ country manager, the Ministry of Local Administration and the supported municipalities. These stakeholders reckoned that the evaluation process would in and by itself not be sensitive. This bore out during the field mission where, at no times, a situation of conflict or sensitivity arose.

4 Assessment according to OECD DAC criteria

This chapter analyses and discusses the results of the project according to the OECD DAC criteria, and also includes an analysis and assessment of the predecessor project.

4.1 Impact and sustainability of predecessor projects

This section analyses and assesses the impact and sustainability of the predecessor project: Support of Refugee-Hosting Communities in Solid Waste Management, Jordan (PN 2013.2298.1).

Summarising assessment of predecessor project

ADHOC I and II covered mostly the same ground. They both helped the supported municipalities – through the procurement of equipment and spare parts, better maintenance and optimised waste collection routes – to collect the increased amounts of solid waste stemming from the influx of Syrian refugees. In this, they were successful with most if not all solid waste being collected in the five supported municipalities. The biggest 'visible' gains were made under ADHOC I when uncollected waste was again being collected.

The predecessor project laid the basis for ADHOC I and II's contribution to public hygiene, environmental protection and social cohesion in the supported municipalities. Neither ADHOC I nor II were able to secure the sustainability of these impacts. Section 4.7 details the reasons. In short, the municipalities lack resources and authority. Accordingly, they have neither the capacity nor the incentive to manage municipal solid waste collection in an economically sustainable way.

Analysis and assessment of predecessor project

As noted in section 2.1, the predecessor project formed a direct response to the Syrian refugee crisis and Jordan's call for support. With Jordanian municipalities not able to maintain, repair and manage the waste collector trucks and with only some waste being collected, the project sought 'to improve municipal solid waste collection' (GIZ, 2014; 2019c). The immediate objective was to provide relief: 'it constituted more a humanitarian aid intervention than a development cooperation project' (INT GIZ 3).

Most key informants at the municipal level observed that the municipalities were able to collect the increased amount of waste stemming from the influx of refugees (INT DTG 1,2,3,4,7,8; ITG 2,3,4,7,8,10; OS 2) (Envero GmbH, 2019). Several key informants noted that the biggest 'visible' gains were made during the period 2014–2018, i.e. under ADHOC I (INT DTG 1,2,4,7; ITG 2,7). As under ADHOC II, the original project procured equipment and spare parts for the municipal workshops, introduced regular maintenance of the waste collector trucks and optimised the routing of the waste collector trucks. This support allowed the municipalities to keep a substantial number of waste collector trucks operational, use them more efficiently and collect the increased amounts of waste stemming from the influx of Syrian refugees.

Through improved solid waste collection, ADHOC I (like ADHOC II) sought to improve public hygiene, reduce groundwater and soil pollution, and reduce tension and conflict between residents and refugees (GIZ, 2014). The key informants at the municipal level were adamant that residents and refugees live in harmony. There are no (major) tensions between the two groups (INT DTG 1,2,4,7,8; ITG 2,7,8,9,10). Section 4.5 shows that there are several contributing factors (including sharing the same language and culture and having family ties). Still, with the collection of most (if not all) solid waste, ADHOC I (and later ADHOC II) helped remove one potential source of tension. The project contributed to a continued peaceful co-existence between residents and refugees in Jordan.

The collection of increased amounts of solid waste also contributed – quasi-automatically – to the other impact objectives: public hygiene and environmental protection. Most key informants were not very conscious of this link, although several appreciated the cleaner streets stemming from the improved waste collection (INT DTG 1,4,8; ITG 2).

The sustainability of above results has proved to be problematic. The effectiveness of ADHOC I and II rests on the same type of support to the municipalities: the procurement of equipment and spare parts, better maintenance, and optimised waste collection routes (see section 4.4). Accordingly, the sustainability of ADHOC I's results equally depends on the same conditions. Section 4.7 offers a detailed analysis. The bottom line is that the supported municipalities lack resources and authority. Accordingly, they have neither the capacity nor the incentive to manage municipal solid waste collection in an economically sustainable way.

Photo 1: The project helped to keep waste collector trucks running

Source: Geert Engelsman and GIZ/Fabian Brandt

Methodology for assessing predecessor project

Table 4: Methodology for predecessor project

Assessment dimension: predecessor project	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
Impact of the predecessor project	The project sought – through improved municipal solid waste collection – to improve public hygiene, reduce groundwater and soil pollution, and reduce tension and conflict between residents and refugees (GIZ, 2014).	**Evaluation design**: • Direct quantitative and qualitative inquiry • Contribution analysis **Empirical methods:** • Document analysis • Key informant interviews • Street interviews	There are limited to no quantitative data available at the outcome and impact level. The evaluation relied on qualitative data from interviews.
Sustainability of the predecessor project	The OECD DAC defines sustainability as 'the extent to which the net benefits of the intervention continue or are likely to continue' (OECD/DAC, 2019).	**Evaluation design:** • Direct quantitative and qualitative inquiry **Empirical methods:** • Document analysis • Key informant interviews • Street interviews	The project under evaluation continued the main activities of the predecessor project. This made it difficult for key informants to distinguish between the projects.

4.2 Relevance

This section analyses and assesses the relevance of the ADHOC II project. It is structured according to the assessment dimensions in the GIZ project evaluation matrix (see Annex 1).

Summary assessment and rating of relevance

Table 5: Rating of OECD DAC criterion: relevance

Criterion	Assessment dimension	Score and rating
Relevance	Alignment with policies and priorities	30 out of 30 points
	Alignment with the needs and capacities of the beneficiaries and stakeholders	20 out of 30 points
	Appropriateness of the design*	5 out of 20 points
	Adaptability – response to change	20 out of 20 points
Relevance total score and rating		Score: **75 out of 100 points** Rating: Level 3: moderately successful

ADHOC II is aligned with Jordan's National SWM Strategy. The short-term goal of this strategy was to collect the increased amounts of solid waste stemming from the influx of Syrian refugees. ADHOC II supported this goal. One reason for doing so was to help maintain political stability in Jordan, which was both a government and a BMZ objective. Importantly, the project met the needs of the supported municipalities, which found themselves short of the resources and authority needed to deal with the extra waste.

The project was less well tuned to the needs and capacities of the SWM department in the Ministry of Local Administration. The department extended limited resources and priority to strengthening its monitoring and steering function on municipal solid waste collection. Moreover, the project – even in its design – failed to address the root causes of the municipalities' inability to deal with the increase in solid waste from the influx of Syrian refugees. These root causes relate to the limited resources and authority vested in municipalities in Jordan.

Finally, the evaluation faced a contradiction. The interviews made clear that the project's support for the municipalities was relevant and appreciated by the municipal governments, residents and refugees alike. At the same time, key informants observed that (many) residents took little care of the waste collection bins, sometimes dumped their waste beside the bins, and occasionally resorted to burning their waste. They noted an urgent need for a change in behaviour amongst Jordanian citizens in their disposal of waste.

In total, the relevance of the project is rated Level 3: moderately successful, with 75 out of 100 points.

Analysis and assessment of relevance

The OECD DAC defines relevance as 'the extent to which the intervention objectives and design respond to beneficiaries', global, country and partner/institution needs, policies, and priorities, and continue to do so if circumstances change' (OECD/DAC, 2019). This definition contains multiple dimensions. The GIZ Corporate Unit Evaluation distinguishes four (see GIZ project evaluation matrix, Annex 1). These are, in short, the project's:

- alignment with government policies and BMZ priorities,
- alignment with the direct and indirect target group needs and capacities,
- the appropriateness of the design and

- responsiveness to changes in the context.

The following subsections evaluate each dimension in turn.

Relevance dimension 1: Alignment with policies and priorities

The first dimension of the relevance criterion concerns the project's alignment with government policies and BMZ priorities. Accordingly, this subsection reviews the project's alignment with government policies and BMZ priorities, respectively. The GIZ project evaluation matrix (see Annex 1) also inquires to what extent the project takes 'account of the relevant political and institutional environment ...[and] ... conflict context'. This report addresses these questions when reviewing the appropriateness of the project design – see below dimension 3 of the relevance criterion.

In 2015, the Jordanian Government adopted the National SWM Strategy. The strategy distinguished between short-, medium- and long-term goals for the solid waste sector in Jordan. In the short run (2015–2019), the strategy sought to resolve the immediate problems in waste collection and disposal emerging from the Syrian refugee crisis. In the medium term (2020–2024), the strategy envisaged expanding access to uncovered areas and closing illegal and substandard landfills. In the long run (2025–2034), the strategy aimed for 'a modern and integrated solid waste management sector ... based on the three R's approach (Reduce – Reuse – Recycle)' (Ministry of Local Administration, 2015).

The formal objective of ADHOC II was that 'the execution of municipal solid waste management tasks in the selected refugee-hosting municipalities is improved' (GIZ, 2017b). In practice, this meant that the project was to build on ADHOC I and continue to help the five supported refugee-hosting municipalities collect the increased amount of solid waste stemming from the influx of Syrian refugees. The project was explicitly designed to resolve the immediate problems in waste collection emerging from the Syrian refugee crisis and thereby to help implement the National SWM Strategy.

The project's focus lay on providing short-term relief in solid waste collection, whilst at the same time 'building the basis for structural and sustainable solutions' (GIZ, 2017b). For this reason, the project also included measures to strengthen the municipal management of the solid waste sector and support the Ministry of Local Administration in strengthening its monitoring and steering of the municipal solid waste management sector. These measures aligned with the institutional set-up of the municipal solid waste sector in Jordan. The municipalities are responsible for organising municipal solid waste collection and the ministry has an oversight role and is to ensure that municipalities carry out their legal duties (Ministry of Environment, 2020).

BMZ's priorities can be gleaned from its Jordanian Country Strategy for Bilateral Development Cooperation. The strategy's overall objective was to maintain Jordan as a 'stability anchor' in the region (BMZ, 2018). This was to be achieved by supporting longer-term local reform processes as well as short-term interventions to improve the situation of refugees and hosting communities. The country strategy thereby focused on, among other things, solid waste collection. ADHOC II sought to help municipalities with the collection of increased amounts of solid waste stemming from the Syrian refugee crisis. The project sought to remove one potential source of conflict between residents and refugees and to contribute to social cohesion in the municipalities and, ultimately, to political stability (GIZ, 2014; 2017b). ADHOC II constituted a short-term intervention to improve the situation of refugees that was to contribute to political stability as envisaged by the BMZ country strategy.

The above three paragraphs show that the project was aligned with both government policies and BMZ priorities. The evaluation team assigns 30 out of 30 points for the project's alignment with policies and priorities.

Relevance dimension 1 – Alignment with policies and priorities – scores **30 out of 30 points.**

Relevance dimension 2: Alignment with the needs and capacities of the beneficiaries and stakeholders

The second dimension of the relevance criterion covers the project's alignment with the needs and capacities of the direct and indirect target groups. The project supported five refugee-hosting municipalities in strengthening their municipal solid waste collection. Within these municipalities, the project supported the municipal fleet and environmental departments, as well as the municipal workshops (responsible for the actual solid waste collection and maintaining the waste collector fleet). In addition, the project supported the SWM department in the Ministry of Local Administration to improve its monitoring and steering of the municipal solid waste sector. These represent the project's direct target groups. As noted above, the project was to result in improved solid waste collection in the five supported municipalities. This improved solid waste collection was to benefit the municipalities' residents and refugees alike. The municipalities' residents and refugees formed the project's indirect target groups.

The supported municipalities noted that the supply of equipment and spare parts, the introduction of regular maintenance and the optimisation of the routing of the waste collector trucks (i) met their direct needs to keep their waste collector fleet operational and the municipality capable of collecting most (if not all) waste and (ii) corresponded to their lack of resources to invest themselves in the upkeep of the waste collector trucks and the collection of municipal solid waste (INT DTG 1,2,3,4,5,6,8). This was confirmed by other key informants to the evaluation (INT DTG 7,12; OS 7). Some municipalities recognised the value of the new municipal SWM plans as strategic guiding documents (INT DTG 4,6,8). They did not, however, express a particular need for a review of the commercial waste collection fees or a digital customer feedback system. Systems for establishing and collecting commercial solid waste collection fees (INT DTG 3,4,8,12; OS 3; GIZ 2,3) and for collecting customer feedback were already in place even if the latter was available only in rudimentary form (INT DTG 3,6; GIZ 3).

The SWM department in the Ministry of Local Administration observed that (i) it had its hands full with a large EU support programme which allowed the department to implement the National SWM Strategy and (ii) the primary responsibility for municipal solid waste collection lies with the municipalities. Implicitly, the department signalled that the project's support for building the department's organisational capacity and introducing an intermunicipal benchmarking system (neither of which came to fruition, see section 4.4) were not the department's top priorities, nor were they attuned to the department's limited capacity (DTG 7,12; GIZ 2,3).

The evaluation could infer indirectly from all the interviews that the collection of the extra amounts of solid waste was both needed and appreciated. In other words, the project was aligned with the needs of residents and refugees for clean streets and public hygiene. Nonetheless, several key informants observed that there is an urgent need for a change in behaviour amongst Jordan's urban dwellers as many do not care how, when and where they dispose of their waste or do not take care of the communal waste bins (INT DTG 8; ITG 7; OS 8,14; GIZ 5). Moreover, the evaluation observed that the backstreets and vacant land in the supported municipalities remain littered with (plastic) waste and that, occasionally, citizens still resort to the burning of waste (field observation). These observations do not reduce, but rather reinforce the need for high-quality solid waste collection in Jordan.

In sum, the project was well aligned with the needs and capacities of residents and refugees; mostly aligned with the needs and capacities of the supported municipalities; and not really aligned with the needs and capacities of the SWM department in the Ministry of Local Administration. The evaluation team assigns 20 out of 30 points to the project's alignment with the needs and capacities of the direct and indirect target groups.

Relevance dimension 2 – Alignment with the needs and capacities of the beneficiaries and stakeholders – scores **20 out of 30 points.**

Relevance – Dimension 3: Appropriateness of the design

This third dimension of the relevance criterion inquires whether the project design was appropriate and considered the political and institutional context of Jordan. The project built on three intervention areas:

- improving the municipal management of solid waste collection and disposal,
- promoting the effective and efficient use of the municipal waste collector trucks and
- enhancing the capacity of the Ministry of Local Administration to monitor and steer the municipal solid waste management sector.

The accompanying activities (reviewed in the previous subsection) made sense and, over time, will be part and parcel of any municipal solid waste management improvement process.

Still, by focussing on improved business processes for, and the technical capacity of, the supported municipalities and the Ministry of Local Administration, the project passed over two other critical elements of development effectiveness: addressing the 'root causes of underperformance' and linking the support to existing reform efforts and a 'qualified demand for support'.[4]

The BMZ offer spelled out why the municipalities were unable to cope with the refugee crisis and the reasons for the increase in solid waste: these included the municipalities' lack of qualified staff and adequate equipment, lack of appropriate maintenance and repair of waste collector trucks, and insufficient planning and funds, amongst others (GIZ, 2017b). The BMZ offer did not explain why the municipalities were lacking in these areas. These were or are not the 'causes' of underperformance, but rather 'symptoms' of deeper-rooted problems. The 'root causes' of underperformance and the ability to respond adequately to the refugee crisis continue to be the lack of 'resources and autonomy' of the municipalities. They are beholden to the central government (the Ministry of Local Administration and the Ministry of Finance), which approves their organisational structure, staff levels and capital budgets. The municipalities are not empowered to be part of the implementation and realisation of the National SWM Strategy (INT DTG 3,4,6,7,8; OS 4,8; GIZ 1,2,3). This lack of resources and autonomy prevents the municipalities from taking full responsibility and formulating – on their own account and initiative – an adequate response to the increase in solid waste stemming from the refugee crisis.

The project's theory of change (see section 2.2) further rested on the general observation that the municipalities expressed a need and an expectation for support, have an interest in delivering good quality solid waste management services, and are required to do so by way of the Local Government Act and the National SWM Strategy. The theory of change did not identify local reform actors who are taking an interest in improving the municipal solid waste management sector, defining a reform programme, had freed up local resources for such reforms, had started implementing reforms, and had a clear vision of the external support needed to implement the full set of reforms. The theory did not reveal the presence of such local reform actors, their interest, incentives, capacity and tenacity to implement reforms, and their qualified demand for support.

In short, the project design and the underlying theory of change were overly 'technical assistance oriented' and glanced over other key aspects for making the support work, in particular the political economy of the solid waste sector and building on local reform efforts. The evaluation team assigns 5 out of 20 points for the appropriateness of the project design.

Relevance dimension 3 – Appropriateness of the design – scores **5 out of 20 points.**

[4] A qualified demand entails that local reform actors acknowledged the development challenge, have defined a reform agenda, committed (significant) own resources to the implementation of the reform agenda; proceeded – on their own initiative and volition – with the envisaged reforms; and, identified concrete and well-motivated areas for external support.

Relevance dimension 4: Adaptability – response to change

The final dimension of the relevance criterion inquires to what extent the project responded to changes in the context.

The project originally envisaged the promotion of intercommunal cooperation in the maintenance and repair of waste collector trucks (GIZ, 2017b). As a result of the realities found on the ground and after a mid-term review of the project, these efforts were abandoned: neither the political will, municipal staff resources nor the legal structure were in place, or likely to emerge within the project duration, for intermunicipal cooperation. Instead, the project refocussed on improving the effective and efficient use of the municipal workshops and waste collector trucks. The results matrix was updated accordingly (GIZ, 2019a) (INT GIZ 2,3; OS 7,9).

The major change in the project context was, of course, the emergence of the COVID-19 pandemic. Jordan has been hit hard by the pandemic, both healthwise and economically. As of 6 December 2021, Jordan recorded 981,767 confirmed coronavirus infections (almost 10% of the population) and 11,787 coronavirus deaths (Johns Hopkins University of Medicine, 2021). The World Bank estimated that the Jordanian economy contracted by 1.6% in 2020, and that the unemployment rate stood at 24.7% (youth unemployment rate: 50%) in the fourth quarter of 2020 (World Bank, 2021). The government imposed work and travel restrictions on multiple occasions to contain the pandemic and keep the Jordanian healthcare sector functioning (INT DTG 1,3,7; OS 3; GIZ 2,3; field observation).

The work and travel restrictions worked out differently for the different project components. The project was able to supply the municipalities with equipment and spare parts; support the refurbishment of the Irbid and Karak workshops; introduce maintenance plans; optimise the routing of the waste collector trucks; and help to prepare municipal SWM plans. The pandemic was also not the main reason for not delivering on the envisaged introduction of a new commercial solid waste collection system and the digital customer feedback system (see section 4.4).

In contrast, the work and travel restrictions were one of the main stumbling blocks for the project not being able to build up rapport with the SWM department at the Ministry of Local Administration. Consequently, little progress was made on building organisational capacity of the department and introducing an intermunicipal benchmarking system (see section 4.4). The work and travel restrictions did not allow the project to root a long-term advisor in the SWM department (INT DTG 12; GIZ 2,3). It was envisaged that this long-term advisor would help the department with its organisational plan and the intermunicipal benchmarking system (GIZ, 2017b) (INT GIZ 2,3).

The project was by and large capable of dealing with changes in context in general and the COVID-19 pandemic in general. Of course, the pandemic had an influence on work processes and progress. It appears, however, that it was not the main cause of the project failing to achieve all its outputs (see section 4.4). There are therefore no indications that the project should have dealt differently with the COVID-19 pandemic. The evaluation team assigns 20 out of 20 points on the project's responsiveness to change.

Relevance dimension 4 – Adaptability – response to change – scores **20 out of 20 points.**

Methodology for assessing relevance

Table 6: Methodology for assessing OECD DAC criterion: relevance

Relevance assessment dimensions	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
Alignment with policies and priorities	German development priorities (BMZ country strategy) Jordan's SWM priorities (National SWM Strategy and law)	**Evaluation design:** - Direct inquiry **Empirical methods:** - Document analysis - Key informant interviews	The objectives and priorities of BMZ and the Jordanian Government are well defined and documented.
Alignment with the needs and capacities of the beneficiaries and stakeholders	The needs and capacities of the direct and indirect target groups	**Evaluation design:** • Direct inquiry **Empirical methods:** • Document analysis • Key informant interviews	Qualitative data are good due to the number and diversity of key informants.
Appropriateness of the design	The project's results matrix and underlying theory of change (see section 2.2)	**Evaluation design:** • Theory-based evaluation **Empirical methods:** • Document analysis • Key informant interviews	The BMZ offer, the results matrix and the project team offered detailed information on the project's theory of change (see section 2.2 and preliminary assessment below).
Adaptability – response to change	Identification of main changes in the context and the extent to which the project responded to these changes	**Evaluation design:** • Context mapping **Empirical methods:** • Document analysis • Key informant interviews	Qualitative data are good due to the number and diversity of key informants.

Conflict sensitivity in the project design

Table 7: Dividers/escalating factors in the project context

Which dividers/escalating factors were identified in the project context?	Addressed by the project? (yes/no)	If addressed, how is it considered by the project design?
Inadequate solid waste collection in the Jordanian municipalities (GIZ, 2017b)	Yes	The project objective (outcome statement) was to improve the execution of SWM in the 5 supported municipalities. The project thus sought to contribute to deescalate lingering tension between residents and refugees about their access to economic opportunities and public resources (see also section 2.1 and section 4.5).

Table 8: Connectors/deescalating factors in the project context

Which deescalating factors/connectors were identified in the project context?	Addressed by the project? (yes/no)	If addressed, how is it considered by the project design?
Proper solid waste collection and disposal for all residents and refugees	Yes	See Table 7

4.3 Coherence

This section analyses and assesses the coherence of the project. It is structured according to the assessment dimensions in the GIZ project evaluation matrix (see Annex 1).

Summary assessment and rating of coherence

Table 9: Rating of OECD DAC criterion: coherence

Criterion	Assessment dimension	Score and rating
Coherence	Internal Coherence	35 out of 50 points
	External Coherence	35 out of 50 points
Overall score and rating		Score: **70 out of 100 points** Rating: Level 3: moderately successful

Whether internally within the GIZ solid waste management portfolio, or externally with the solid waste sector projects of other development partners, most projects target a specific and different part of the municipal SWM system, from planning to operations, from generation to collection, from recycling to disposal. Most development cooperation projects in the municipal SWM sector in Jordan are therefore complementary. Collectively, they contribute – in a broad sense – to a more comprehensive municipal SWM system. The evaluation did not identify synergies between projects in the sense that more was achieved with the same amount of resources (yield maximisation) or fewer resources were needed to achieve the envisaged objectives (cost minimisation). In algebra terms, in the municipal SWM sector, '1 + 1 = 2 (and not 3)'. As complementarity is a must and synergy desirable, **the coherence of the project is rated Level 3: moderately successful, with 70 out of 100 points.**

Analysis and assessment of coherence

The OECD DAC defines coherence as 'the compatibility of the intervention with other interventions in [the] country' (OECD/DAC, 2019). The OECD DAC differentiates between internal and external coherence. Internal coherence 'addresses the synergies and interlinkages between the intervention and other interventions carried out by the same institution(s)'. If interpreted narrowly, this would entail only GIZ. It is common practice, however, to include all BMZ-funded projects (in the same sector), including those carried out by the German Development Bank, KfW. External coherence 'considers the consistency of the intervention with other actors' interventions in the same context' (or sector). As with internal coherence, this dimension inquires into the complementarity of and synergy between, in this case, ADHOC II and interventions from the government and other development organisations. This section evaluates the internal and external coherence of ADHOC II.

Coherence dimension 1: Internal Coherence

During ADHOC II, KfW and GIZ's SWM Cluster implemented four additional SWM projects in parallel. Two of these projects –Solid Waste Management for the Greater Amman Municipality and Climate and Resource Conservation through Recycling – targeted the Greater Amman Municipality and relatively advanced solid waste collection and recycling systems. One project – the Support for UNRWA[5] Solid Waste Management Strategy – focused on introducing SWM plans and systems in Jordan's refugee camps. These three projects thus focussed on other geographic areas, SWM systems, and target groups than ADHOC II.

[5] United Nations Relief and Works Agency for Palestine Refugees

The fourth project – Waste to Positive Energy – focused on partly the same municipalities as the ADHOC II project: Irbid, Ramtha and Mafraq (GIZ, 2018b; 2021g) (INT GIZ 1,2,3,13). It is here that complementarities, synergies, overlaps and even conflicts could exist. Waste to Positive Energy seeks to introduce 'labour-intensive collection and processing of recyclables' in 12 refugee-hosting municipalities in Jordan (GIZ, 2018b). The starting point for recycling is waste separation. This could affect the collection of waste and thereby affect ADHOC II.

The interviews evidenced that the two projects barely touch each other. Waste to Positive Energy focuses on waste sorting (in dedicated sorting/composting plants and based on cash-for-work schemes) and is for now limited to the waste collection from commercial areas in 12 municipalities and from two refugee camps (INT GIZ 1,2,3; OS 3). Waste to Positive Energy also organises municipality-level dialogues between residents and refugees (GIZ, 2020b). These dialogues are organised by profession (including shopkeepers, housewives and imams), last for one year and involve monthly meetings. These dialogues aim to enhance social cohesion and prevent conflict between residents and refugees, which is also an aim of ADHOC II. The dialogues are implemented by Waste to Positive Energy and there is no connection with the ADHOC II project. The two projects thus each contribute to social cohesion between residents and refugees in their own way and no synergies have been identified as to how the projects could complement each other on this front (INT ITG 9, GIZ 1,2,3).

Still, the Waste to Positive Energy project asserted that it does benefit from (i) the improved waste collector fleet in Irbid, Ramtha and Mafraq which also helps to collect the sorted waste from the commercial areas in these municipalities, and (ii) the preparation of the municipal SWM plans, which highlights the (lacking) capacities of municipalities and the investment needs (INT GIZ 1). Moreover, Waste to Positive Energy built a transfer station in Irbid from which the collected waste can be transported to landfill with larger trucks. This investment helped Irbid (and ADHOC) to optimise the use of the waste collector fleet in Irbid (INT GIZ 1).

In sum, the GIZ and KfW solid waste management projects mostly target different geographic areas and different solid waste processing and value chain segments. ADHOC II and Waste to Positive Energy operate, in part, in the same refugee-hosting municipalities. They benefit from each other's investments to a limited extent, but in practice operate mostly in parallel.

The OECD DAC criterion of internal coherence distinguishes between complementarity of and synergies between interventions. In terms of supporting municipal solid waste management, all these projects are broadly complementary. The evaluation did not identify synergies between these projects (whereby, by working together, two or more projects realise efficiency gains or achieve greater development outcomes than they could achieve on their own). Based on the evaluators' experiences, synergies between projects are quite rare in development cooperation. Avoiding overlap and being complementary (in the sense of targeting different parts of the solid waste management system) is already good. The evaluation therefore assigns relatively more weight to being complementary than being synergetic. Based on this reasoning, the evaluation team assigns 30 out of 50 points for the internal coherence of ADHOC II, signalling that the KfW/GIZ projects were complementary, but not synergetic.

Coherence dimension 1 – Internal Coherence – scores **35 out of 50 points**.

Coherence dimension 2: External Coherence

BMZ and the EU are the biggest donors in the SWM sector in Jordan. Each implement a portfolio of projects worth over €100 million. The BMZ-funded portfolio was explained above (under internal coherence). The EU's support is geared towards the implementation of the National SWM Strategy. This support is thereby not focused on resolving short-term challenges in waste collection (as is the case with ADHOC II), but rather on modernising landfills (waste disposal), promoting a circular economy (waste recycling), changing citizens'

behaviour (waste generation and disposal), improving regulation (environmental policies) and strengthening environmental monitoring (waste disposal and recycling), amongst others (GIZ, 2018b) (OS 4,12; GIZ 1).

The EU activities were mostly complementary to ADHOC in the broad sense that all activities strengthen Jordan's municipal SWM. The evaluation did not identify concrete complementarities or synergies. The EU support consisted of budget support, earmarked grant funding and technical assistance. ADHOC helped the Ministry of Local Administration (at its request) to meet some of the milestones for the release of EU budget support. This included preparing municipal SWM plans (which was within its scope of work) and operational plans for some Joint Service Councils (regional organisations responsible for waste disposal). This last piece of work lay outside ADHOC II's original scope of work and was undertaken to show goodwill to the Ministry of Local Administration (INT OS 4,5; GIZ 2,3) (GIZ, 2021e; Irbid JSC, 2021).

The support for the municipal SWM sector from other development organisations was either focused on different municipalities (as was the case with Global Affairs Canada) or entailed some complementary measures (such as the procurement of new waste trucks by USAID and Japan International Cooperation Agency, taken into consideration when analysing ADHOC's contribution to the outcome achievements – see section 4.4) (INT DTP 1,3; OS 5,7,8,14).

The project evaluation matrix also inquires into the donor coordination. The evaluation team did not investigate this in any substantial way. It fell victim to the many topics that needed to be discussed with the key informants within a limited time frame. The interviews left the general impression that the informal coordination works (ostensibly under the leadership of the Ministry of Local Administration) and most if not all projects are complementary with each other, but that there is no 'active' International Development Coordination Group in the municipal solid waste sector (INT DTG 7; OS 2,4,8; GIZ 3).

As with internal coherence, the evaluation team concludes that there is broad complementarity of activities between development partners and that these are aligned with the implementation of the National SWM Strategy. At the same time, there are few (if any) direct synergies between the projects. The evaluation team therefore assigns 35 out of 50 points for external coherence.

Coherence dimension 2 – External Coherence – scores **35 out of 50 points.**

Methodology for assessing coherence

Table 10: Methodology for assessing OECD DAC criterion: coherence

Coherence: assessment dimensions	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
Internal coherence	The extent to which the project deliberately complements and achieves synergies with other German development cooperation interventions	**Evaluation design:** • Direct inquiry **Empirical methods:** • Document analysis • Key informant interviews	Qualitative data are good due to the number and diversity of key informants.
External coherence	The extent to which the project deliberately complements and achieves synergies with local reform efforts and international development partner interventions	**Evaluation design:** • Direct inquiry **Empirical methods:** • Document analysis • Key informant interviews	Qualitative data are good due to the number and diversity of key informants.

4.4 Effectiveness

This section analyses and assesses the effectiveness of the ADHOC II project. It is structured according to the assessment dimensions in the GIZ project evaluation matrix (see Annex 1).

Summary assessment and rating of effectiveness

Table 11: Rating of OECD DAC criterion: effectiveness

Criterion	Assessment dimension	Score and rating
Effectiveness	Achievement of the (intended) objectives	20 out of 30 points
	Contribution to achievement of objectives	20 out of 30 points
	Quality of implementation	15 out of 20 points
	Unintended results	15 out of 20 points
Overall score and rating		Score: **70 out of 100 points** Rating: Level 3: moderately successful

In the spirit of what the project sought to achieve, the project was successful. By offering equipment and spare parts and introducing regular maintenance, the project helped municipalities salvage part of their dilapidated fleet of waste collection trucks. By optimising the routes of these waste collection trucks, the project helped utilise the municipalities' full waste collection capacity. Together, this allowed the municipalities to continue to collect the increased amount of solid waste stemming from the influx of Syrian refugees. This is a real and tangible result.

The project also sought to enhance the municipalities' overall management of the municipal solid waste sector. It sought to achieve this by introducing new management tools and increasing municipal revenues, as well as by strengthening the monitoring and steering of the sector by the Ministry of Local Administration. The project made limited progress in these areas for two reasons. First, there was limited appetite and capacity within both the ministry and the municipalities to implement these measures. Second, travel and work restrictions imposed in response to the COVID-19 pandemic hindered close personal cooperation which could have generated buy-in and built capacity.

As the original intent of the project was to enable the supported municipalities to collect larger amounts of solid waste, the evaluation weighs the ability of the municipalities to continue to collect the increased amounts of solid waste more than their limited progress in enhancing management of the solid waste management sector.

In total, the effectiveness of the project is rated Level 3: moderately successful, with 70 out of 100 points.

Analysis and assessment of effectiveness

Effectiveness dimension 1: Achievement of the (intended) objectives

The OECD DAC defines effectiveness as 'the extent to which the development intervention's objectives were achieved or are expected to be achieved' (OECD/DAC, 2019). As Jordan is classified as having a fragile context, BMZ adds to this definition (or judgment criterion) of effectiveness the extent to which 'the project was able to strengthen deescalating factors/connectors' (see the GIZ project evaluation matrix, Annex 1).

The formal objective of ADHOC II was that 'the execution of municipal solid waste management tasks in the selected refugee-hosting municipalities is improved' (GIZ, 2017b). In practice, this meant that the project was to build on ADHOC I and enable the five supported refugee-hosting municipalities to continue to collect the increased amount of solid waste stemming from the influx of Syrian refugees. Most (if not all) key informants at the municipal level noted that the municipalities are able to collect the increased amount of waste (INT DTG 1,2,3,4,7,8; ITG 2,3,4,7,8,10; OS 2). As such, the objective was achieved. This is not to say that all waste is being collected and that the streets are free of waste. Backstreets and empty lots remain littered with waste, especially plastic waste (field observation; INT DTG 8; ITG 2,3,7,10). Instead, the type and percentage of waste that is currently collected is similar to that collected before the Syrian refugee crisis.

Both the Jordanian Government and the German Government recognised that any accumulation of solid waste in the streets of Jordanian cities – and the associated deterioration in public hygiene and citizen wellbeing – could spark conflict between residents and refugees, raising questions about the quality of life, security and access to economic opportunities and public resources. By contributing to municipalities' capacity to handle solid waste collection, the project sought to deescalate social tension (GIZ, 2017b). As observed in the previous paragraph, the five supported municipalities were able to collect the increased amount of waste. The project thus strengthened deescalating factors. Section 4.5 discusses the extent to which this contributed to social cohesion between residents and refugees.

Effectiveness can also be judged against the formal outcome-level results indicators in the project's results matrix. Table 12: Results achievement as per outcome indicators presents the results achievement on each indicator as reported in the project's completion report. Table 13: Reliability of outcome indicator data reflects on the reliability and use of the reported data. Table 12: Results achievement as per outcome indicators indicates that the project achieved two out of the three outcome indicators. Based on a cold-blooded assessment of the results matrix, the project objectives were 'partially achieved'. The following subsection elaborates on the reasons for the (non-)achievement of the objectives.

Table 12: Results achievement as per outcome indicators

Outcome indicator	Base value	Target value	Result
Cost coverage ratio improved by 10% in Irbid and Mafraq	30% Irbid 29% Mafraq	40% Irbid 39% Mafraq	42% Irbid* 40% Mafraq*
10 measures from the municipal waste management plans implemented in 4 out of 5 municipalities	0	10	12
Use of a digital SWM improvement process based on customer feedback used in 4 out of 5 municipalities	1	4	1

*See also Table 13: Reliability of outcome indicator data ; source: (GIZ, 2021f)

Table 13: Reliability of outcome indicator data

Outcome indicator	Reliability of monitoring data
Cost coverage ratio improved by 10% in Irbid and Mafraq	The evaluation team did not receive the calculations of the baseline- and end-values and can neither verify the source nor the reliability of the data. Municipalities do not maintain comprehensive accounts of specific costs and revenues relating to SWM (INT 2,4,6,8; GIZ 2,3). It is therefore unclear what the end-value figures are based on. The baseline-values were calculated by the GIZ review team (INT GIZ 3; OS 9). The sources of the baseline- and end-values are likely to be different and it is not clear that they are based on a similar calculation methodology. The evaluation judges the data as unreliable. As explained in the text below, the indicator offers a weak indication of the project's success. This evaluation therefore based its evaluative judgment in this section and chapter on the project's effectiveness on a wider and qualitative assessment of the project's results.
10 measures from the municipal waste management plans implemented in 4 out of 5 municipalities	The project team shared the list of 12 measures that have been implemented by the municipalities; 11 out of the 12 measures concerned project activities, i.e. they were included in the project scope and the municipal waste management plans. The implementation of the measures was verified by the municipalities (INT DTG 1,2,3,4,6,8,10). The base and target values are reliable. The implemented measures fed into the evaluation's assessment of the project's contribution to the observed results.

Use of a digital SWM improvement process based on customer feedback used in 4 out of 5 municipalities	As explained in the next subsection, the project was unable to help establish a digital customer feedback system in the municipalities. This was confirmed by the municipalities (INT DTG 1,4,6,8,12). The base- and end-values have been verified and are reliable.

Table 14: Assessed and adapted objective indicators for specific modules (outcome level) offers a critical assessment of the project's outcome indicators based on the SMART assessment criteria. The evaluation team concludes that the formal outcome indicators provide a weak indication of results achievement. The reasons are, in short, threefold. First, the project scope did not directly and only to limited degree indirectly target an improvement in the cost coverage ratio of municipal solid waste collection. In practice, the project did not contribute to improved revenue collection and only to a limited degree to lowering the costs (mainly due to fuel savings stemming from the optimised routing of the waste collector trucks (INT DTG 1,2,3)). Moreover, an improved 'execution of municipal solid waste management tasks' could lead to higher costs without a concomitant increase in revenues.

Second, the implementation of measures in the municipal SWM plans indicate action, but not that 'the execution of municipal solid waste management tasks in the selected refugee-hosting municipalities is improved' (emphasis added). Third, it is how a municipality responds to customer feedback (rather than merely using a customer feedback system) that says something about improved municipal waste management.

A better quantitative indicator for the project's success is the solid waste collection rate. This indicator was included in the original results framework. The indicator was replaced during the mid-term review of the project in 2019 with the '10 measures of the municipal waste management plans are implemented' indicator. The reason was that the municipalities do not monitor the solid waste collection rate and therefore do not measure and know their collection rate (INT OS 9; GIZ 3). This was confirmed by the municipalities during the inception mission.

As noted in section 1.1, the lack of quantitative data at the outcome level constituted a limitation to this evaluation. The evaluation reports on the achievement of the above outcome indicators as these have been agreed upon with BMZ. At the same time, the evaluation based its own evaluative judgment on a wider and more qualitative-oriented assessment (as evidenced by this and the next subsection).

Table 14: Assessed and adapted objective indicators for specific modules (outcome level)

Project's objective indicator according to the (last modification) offer	**Assessment according to SMART* criteria**	**Explanation of changes to the objective indicator** and/or s**pecified objective indicator**
Cost coverage ratio improved by 10% in Irbid and Mafraq Base value (2017): 30% in Irbid, 29% in Mafraq Target value (2021): 40% in Irbid, 29% in Mafraq Source: (GIZ, 2019a)	The indicator is: • specific (and commonly used for measuring improvements in public services/public utility operations). • measurable in principle, but less so in practice. The project team pointed out that the municipalities' accounting systems do not provide this ratio (do not account for the requisite cost and revenue items). The baseline was calculated using a dedicated accounting approach. (INT GIZ 2,3). • achievable. The target value represents a modest increase for a 4-year period, reflecting the nascent state of municipal SWM management in Jordan and the limited scope of the project. • relevant in principle, but less so in practice. Full-cost coverage is a sine qua non for sustainable SWM management; the project, however, did not directly target an improvement in	The outcome indicator has been agreed upon with BMZ and is measurable by the project team. The evaluation therefore reports on the achievement of results in Table 12: Results achievement as per outcome indicators and reflects on the reliability of the reported data in Table 13: Reliability of outcome indicator data . The evaluation based its own evaluative judgment on a wider qualitative assessment of the project as evidenced by the analysis in this chapter.

Project's objective indicator according to the (last modification) offer	Assessment according to SMART* criteria	Explanation of changes to the objective indicator and/or specified objective indicator
	cost coverage. In fact, the project did not contribute to an increase in revenue and contributed only indirectly to a reduction in costs (through fuel savings and efficiency gains from the optimised routing of waste collector trucks). It constitutes a poor indicator of project success. • time-bound with a clear date for achieving the target value.	
10 measures of the municipal waste management plans are implemented Base value (2017): 0 Target value (2021): 10 measures implemented Source: (GIZ, 2019a)	The indicator is: • specific (following an explanation from the project team, it was understood that this is a cumulative 10 measures across the 5 municipalities, i.e. not 10 measures per municipality (INT 2, 3 with GIZ)). • measurable, as the implementation of the measures can be ascertained. • achievable, as the municipal waste management plans have been developed by the project with the aim of implementing them. • not relevant, as it concerns an activity or output measure and does not indicate whether the 'execution of SWM tasks' as a whole has improved. It also constitutes a poor indicator for project success. • time-bound, as the measures need to have been implemented.	The outcome indicator has been agreed upon with BMZ and is measurable by the project team. The evaluation has not changed the indicator and reports on the results achievement in Table 12: Results achievement as per outcome indicators .
Use of a digital system for improving SWM on the basis of customer feedback Base value (2017): 1 Target value (2021): 4 Source: (GIZ, 2019a)	The indicator is: • not specific: the indicator is unclear as to whether the digital system refers to the customer feedback system or the municipal SWM improvement process (based on customer feedback); nor does the indicator reveal the expected quality of use (i.e. what do the municipalities truly do with the customer feedback – does it result in real and measurable improvements?). • measurable: the (qualitative) use of the digital system can be ascertained through interaction with the relevant municipal stakeholders. • achievable: the setting up of the system is part and parcel of the project activities. • partly relevant: (constructive) customer feedback enables the municipalities to identify bottlenecks and improve their execution of SWM tasks; it is only the volume and substance of the customer feedback that offers an indication as to whether the municipalities are successful in improving their execution of the SWM tasks. • time-bound: the use of the digital system is to be achieved before the project ends in 2021.	The outcome indicator has been agreed upon with BMZ and is measurable by the project team. The evaluation has not changed the indicator and reports on the results achievement in Table 12: Results achievement as per outcome indicators .

* SMART: specific, measurable, achievable, relevant and time-bound

There is a third and final way to judge the attainment of the objectives. This rests on a broader interpretation of the project's outcome statement that 'the execution of municipal solid waste management tasks in the selected refugee-hosting municipalities is improved' (GIZ, 2017b). This broader interpretation links the 'tasks' in the outcome statement to the three intervention areas of the project, namely:

- improved municipal management of the municipal solid waste sector,
- the effective and efficient use of the municipal solid waste management infrastructure (especially waste collector trucks),
- the enhanced capacity of the Ministry of Local Administration to monitor and steer the municipal solid waste management sector in Jordan.

How do the municipalities perform in terms of improved management of the municipal solid waste management sector and the more effective and efficient use of the municipal solid waste management infrastructure? It goes beyond the scope of this evaluation to offer a comprehensive assessment of the municipalities' solid waste 'management'. The evaluation did, however, review the achievement of the project's intended outputs. From this, the evaluation can glean the likelihood that municipalities have improved their overall management.

On the one hand, all municipalities adopted municipal SWM plans (INT DTG 4,6,8; GIZ 3; OS 7) and improved the maintenance and use of the waste collector trucks by refurbishing the existing fleet of waste collector trucks, installing a digital fleet management system and introducing regular maintenance (INT DTG 1,2,3,4,6,8,10). On the other hand, the municipal SWM plans did not appear to serve as a daily guidance tool for municipal SWM operations; instead, they capture the municipalities' investment needs (INT DTG 2,4,8; GIZ 3). The municipalities have not (yet) introduced higher commercial solid waste management fees or digital customer feedback systems (INT DTG 1,4,6,8,12; GIZ 3). Moreover, the envisaged intermunicipal benchmarking of municipal SWM performance by the Ministry of Local Administration is still in its design and testing phase and has not been rolled out yet (INT OTG 12; GIZ 3). This workstream cannot yet have had an impact on the actual municipal management of the solid waste sector.

Based on these observations, the evaluation concludes that the municipal workshops have improved the maintenance and use of the waste collector trucks, but that the municipal departments responsible for solid waste collection have not, more broadly, improved 'the execution of municipal solid waste management tasks' (emphasis added). The picture that emerges from this third assessment is also that the project objectives have been 'partially achieved'.

What conclusions can be drawn about the project's effectiveness? For all practical intents and purposes, the project sought to have municipalities continue to collect an increased amount of solid waste. This objective was achieved. The project also sought to improve municipal solid waste management more broadly. This objective was partially achieved. The original intent of the project was to help municipalities continue to collect increased amounts of waste. The evaluation therefore assigns more weight to the former (collection of waste) than to the latter (improved management). Based on these observations and considerations, the evaluation team assigns 20 out of 30 points to the project’s achievement of the intended objectives.

Effectiveness dimension 1 – Achievement of the (intended) objectives – scores **20 out of 30 points.**

Effectiveness dimension 2: Contribution to achievement of objectives

This section examines the extent to which the project contributed to the achievement of the objectives. To determine the project's contribution, the evaluation reconstructed – prior to the field work – the project's theory of change. This theory of change was expressed in three results hypotheses. Table 15: Selected results hypothesis for effectiveness: # R1 to Table 17: Selected results hypothesis for effectiveness: # R3 summarise these three results hypotheses. Section 2.2 spells out the hypotheses in more detail. Figure 1 on page 15 depicts the hypotheses graphically; they are marked R1 to R3.

This section evaluates to what extent these three results hypotheses held up in practice and the project likely contributed to the objectives. This evaluation is based on a contribution analysis (Mayne, 2008). The analysis is also used to identify the internal and external factors responsible for the (non-)achievement of the objectives.

Table 15: Selected results hypothesis for effectiveness: # R1

Hypothesis 1 (activity – output – outcome)	If the project provides advice and training to the municipalities, then this will improve the preconditions for municipal SWM service delivery (output) and lead to an improved execution of municipal SWM tasks by the supported municipalities (outcome).
Main assumptions	The municipalities in general and the municipal environment/fleet departments specifically have the interest, incentive, understanding, capacity and tenacity to adopt improved business practices and execute municipal SWM tasks more effectively.
Risks/unintended results	None identified.
Alternative explanation	Capacity development and financial support from other development organisations, most notably the EU, Global Affairs Canada, United Nations Development Programme (UNDP) or the World Bank.

Table 16: Selected results hypothesis for effectiveness: # R2

Hypothesis 2 (activity – output – outcome)	If the project provides advice to the municipalities on the introduction of digital fleet management systems and (digital) maintenance plans, and procures equipment and spare parts for municipal workshops, then municipalities will improve the maintenance of waste collector trucks (output) and improve the execution of municipal SWM tasks (outcome).
Main assumptions	The municipalities, the municipal environment/fleet departments and the municipal workshops have the interest, incentive, understanding, capacity and tenacity to use the digital fleet management systems, the (digital) maintenance plans, new equipment and spare parts.
Risks/unintended results	The project constructed new administrative buildings and working facilities for the municipal workshops in Irbid and Karak. The new working facilities helped, in part, to improve efficiency in maintaining the waste collector trucks. This contributed to the salvaging of the waste collector fleet (an intended result). The new administrative buildings and working facilities also improved the working conditions for the workshop staff (a positive unintended result). The municipal workshop in Irbid also introduced an ISO 9001 certified quality management system.
Alternative explanation	Capacity development and financial support from other development organisations, most notably the EU, Global Affairs Canada, UNDP or the World Bank.

Table 17: Selected results hypothesis for effectiveness: # R3

Hypothesis 3 (activity – output – outcome)	If the project provides advice to the Ministry of Local Administration, then the ministry will establish an SWM department, build its capacity and improve the preconditions in the ministry for monitoring and steering the municipal SWM sector (output) and help improve the execution of municipal SWM tasks (outcome).
Main assumptions	The Ministry of Local Administration has the interest, incentive, capacity, understanding and tenacity to benchmark municipal SWM services and steer the municipal SWM sector.
Risks/unintended results	None identified.
Alternative explanation	Political pressure to improve municipal solid waste management.

The previous subsection, on the achievement of the objectives, reported that the supported municipalities were able to continue to collect the increased amount of solid waste stemming from the influx of Syrian refugees. The evaluation found that this result is directly linked to the second results hypothesis.

Three of the four municipalities visited ascribe their ability to collect the increased amount of solid waste to having been able to salvage and optimise the use of their waste collector fleet (INT DTG 1,2,3,4,8; OS 2,7). They were able to do so because the project provided them with (INT DTG 1,2,3,4,8; OS 2,7):

- equipment and spare parts to repair and refurbish the dilapidated waste collector trucks in their fleet,
- technical assistance for the regular maintenance of the waste collector trucks and
- the IT equipment and know-how to optimise the routing of the waste collector trucks.

The municipalities also received support from the Ministry of Transportation (which provided the digital fleet tracking system hard- and software) and other development partners (new waste collector trucks) (INT DTG 1,2,3,4,6; OS 7,8,14). The pre-existing fleet of waste collector trucks was, however, larger than the number of new trucks received from other development partners; moreover, the new trucks also required maintenance and (soon after receipt) repair (INT DTG 1,2,3). The project's support to help salvage and optimise the use of the existing fleet was deemed critical by the municipalities for the continued operation of the fleet and the collection of an increased amount of solid waste (INT DTG 1,2,3,4,8). The fact that the municipal workshops used the equipment, spare parts and know-how to salvage the waste collector trucks and collect the increased amount of waste – without major changes in resources, authorities and incentives – evidences that the municipal workshops were intrinsically motivated (or at least see it as their task) to do everything possible to salvage the fleet and collect the solid waste in their municipalities (INT DTG 1,2,3,4,6,8,10). The collected evidence confirms the validity of the second results hypothesis (as long as the scope of the hypothesis is limited to the 'effective and efficient use' of the waste collector fleet and the 'collection of solid waste').

Russeifa municipality noted that they received limited support from the project, namely some IT equipment to optimise the use of the digital fleet tracking system, as well as some safety clothes and equipment (INT DTG 6,10; OS 7). They were able to collect the increased amount of waste by resorting to three shifts of waste collection and 24/7 operations, as well as by using whatever budget they had to purchase spare parts (mostly limited to new tyres) (INT DTG 6,10). On the one hand, this shows that municipalities can find alternative ways to deal with the need for increased waste collection. On the other hand, the evaluation team visited the municipal workshop and found both the workshop and the waste collection fleet to be in a highly dilapidated state (field observation). This municipality could undoubtedly have benefited from new equipment and spare parts, as well as technical advice on fleet maintenance. The project team noted, however, that this municipality showed little initiative and ownership and consequently received less support from the project (INT GIZ 2,3). Based on its two meetings in this municipality, the evaluation team can neither validate nor reject this experience of the project team.

The previous subsection, on the achievement of objectives, concluded that the supported municipalities were less successful in improving the municipal management of the solid waste management sector more broadly. This was the domain of the first results hypothesis. This hypothesis states that 'if the project provides advice and training to the municipalities, then this will improve the preconditions for municipal SWM service delivery (output) and lead to an improved execution of municipal SWM tasks by the supported municipalities (outcome)'. The project's 'advice and training' concerned mainly the preparation and adoption of municipal SWM plans, the introduction of new commercial solid waste management fee schedules and the introduction of digital customer feedback systems (GIZ, 2017b).

As noted, the municipal SWM plans have been prepared. For some municipalities, they offer a useful framework within which to organise their work and capture investment needs (INT DTG 6,8). However, these SWM plans do not function as a daily guidance tool for municipal SWM operations (INT DTG 2,4,8; GIZ 3). The municipalities have not (yet) adopted new commercial solid waste management fee schedules or digital customer feedback systems (INT DTG 1,4,6,8,12; GIZ 3). This results hypothesis therefore already breaks down on the project being unable to deliver on its intended activities and outputs. The reasons for this differ according to the intended output.

- On the municipal SWM plans: the project ascribes their 'non-use' to the fact that the municipal SWM plans were prepared by external consultants (rather than the municipalities themselves), according to a format that did not cater to the municipalities' needs and capacities (INT GIZ 2,3) (Irbid, 2020). The applied format was, however, a requirement from the EU which supported the Ministry of Local

Administration in the implementation of the National SWM Strategy. The preparation of municipal SWM plans according to the prescribed format was one condition for the release of the EU's budget support (INT GIZ 3; OS 4,7).

- On the setting and collection of commercial solid waste management fees: a well-established and functioning system already existed (INT GIZ 1,3; DTG 4,8,12; OS 3). Commercial entities are charged a solid waste collection fee based on the size of their company and the amount of waste that they produce. This fee is collected annually upon renewal of a company's business licence. The project helped Irbid municipality to review the underlying fee schedule. A proposal for updating the fee schedule (which would then apply countrywide) was under discussion between Irbid municipality and the Ministry of Local Administration at the time of the field mission (INT GIZ 3; DTG 4,12; OS 3). The project completion report states that the municipalities of Irbid, Mafraq and Ramtha and the Ministry of Local Administration have since accepted the proposal and will apply it in the three municipalities on a pilot basis (GIZ, 2021f). The project team was unable to substantiate this statement with documentation. Shared minutes only confirm that Irbid is working on an updated fee schedule and registry (GIZ, 2021c). Moreover, the evaluation has no evidence that, when applied, the new fee schedule will significantly increase the revenues from commercial solid waste collection fees, nor change the municipalities' management practices.
- On the digital customer feedback systems: the project was unable to put forward a proposal because of limited buy-in from the municipalities (who, presumably, did not deem their performance to be at a sufficient level to make a customer feedback system effective and of value), underperformance by the project team (taking too long to survey the market and decide on the specifications), internal GIZ discussions (on EU data protection compliance) and Covid-19 induced work restrictions (INT GIZ 3; OS 3).

The third (and final) results hypothesis was that 'if the project provides advice to the Ministry of Local Administration, then the ministry will establish an SWM department, build its capacity and improve the preconditions in the ministry for monitoring and steering the municipal SWM sector (output) and help improve the execution of municipal SWM tasks (outcome)'. The Ministry of Local Administration did establish a dedicated SWM department. The project sought to support this by supporting the preparation of an organisational plan, building staff capacity and introducing a system for the intermunicipal benchmarking of municipal SWM performance by the Ministry of Local Administration. Here again, progress on activities and outputs was limited and the results hypothesis did not hold. Again, the reasons differ according to activity or output.

- On the organisational plan and capacity development: these were scuppered because the ministry's SWM department neither enabled an integrated expert, nor embraced an external capacity development advisor. This was due to various reasons, including: ministry regulations; the department heading the project implementation unit and consequently being subsumed by the requirements of the EU's support to the implementation of the National SWM Strategy; the COVID-19 induced travel and work restrictions, and language barriers (as the recruited advisor did not speak Arabic). The latter two reasons did not allow the recruited advisor to onboard and establish himself in the department. Ultimately, the advisor took up another assignment (outside of Jordan) and, in the end, no capacity development support was provided to the ministry and no organisational plan was developed with the support of the project (INT GIZ 3, DTG 12).
- On the intermunicipal benchmarking: a humble beginning was made by way of a two-page questionnaire, inquiring after key data and practices on municipal SWM. This questionnaire (developed by the project team) was sent out to the five supported municipalities. At the time of the field mission, the Ministry of Local Administration was awaiting feedback from the municipalities. The ministry indicated that it lacked capacity, could not actively follow up with the municipalities and could not give this workstream priority (INT GIZ 2, 3, DTG 12). The project completion report states that the ministry has in the meantime (i) received and analysed the survey responses from the municipalities and adapted the questionnaire accordingly, and (ii) intends to use the questionnaire as a 'semi-annual monitoring system'

in the future (GIZ, 2021f). Here, the proof of the pudding will be in the eating. The interviews conducted by the evaluation team with the ministry and GIZ do not stem hopeful in this regard.

In summary, one results hypothesis held up in practice, whilst two results hypotheses did not. The project contributed significantly to the ability of the supported municipalities to continue to collect the increased amounts of solid waste. The project did not contribute meaningfully to an improvement in the overall management of the municipal solid waste management sector, nor in the monitoring and supervision of the municipal solid waste management sector by the Ministry of Local Administration. As in the previous subsection, the evaluation assigns more weight to the former (overall management of the sector) than the latter (monitoring and supervision of the sector), as it is linked to the original intent and purpose of the project, namely to allow the municipalities to collect the solid waste. The evaluation therefore assigns 20 out of 30 points for the contribution to the achievement of the objectives. The evaluation nonetheless revisits the project's inability to enhance the overall management of the municipal solid waste management sector in section 4.7, where the sustainability of the project's results is discussed (and the evaluation's verdict is harsher).

Effectiveness dimension 2 – Contribution to achievement of objectives – scores **20 out of 30 points.**

Effectiveness dimension 3: Quality of implementation

This section reflects on the quality of project implementation. This is assessed based on the project team's monitoring and steering of the project and its coordination of stakeholders. ADHOC II was a small, easily surveyable project. It was, in effect, implemented and steered by a two-person GIZ team (INT GIZ 2,3). The international team leader and Jordanian project coordinator maintained regular informal contact with the five supported municipalities and the SWM department in the Ministry of Local Administration (INT DTG 1,2,3,4,6,8,12; GIZ 2,3). This allowed it to keep close tabs on local developments and did not require separate external context analysis studies (INT GIZ 3).

The project team closely monitored progress on the project activities and outputs. It produced fortnightly narrative progress reports (INT GIZ 2,3). In addition, the GIZ SWM Cluster coordinator held fortnightly meetings with the SWM department in the Ministry of Local Administration (INT GIZ 3). The project team prepared a progress report, including an updated results matrix, each year (GIZ, 2021a; GIZ, 2021e; GIZ, 2021f). Finally, the procurement of equipment and spare parts, as well as the construction works, were delivered (field observation). Based on the above observations, the quality of implementation is considered solid by the evaluation team.

At the same time, the previous subsection showed that numerous activities turned out to be less relevant (e.g. the review of commercial solid waste collection fees), encountered limited buy-in (e.g. the capacity development of the SWM department in the Ministry of Local Administration or the intermunicipal benchmarking system), or experienced significant delays (e.g. the design of the digital customer feedback system). This raises the question of whether the project should have raised the alarm at some point and noted that the project objectives in two of the three intervention areas (output areas) were unlikely to be achieved.

With hindsight, the answer is yes. There are, however, three mitigating factors that explain why this was not done (or at least not formally done – the project remained confident of delivering on all outputs until at least the last annual progress report (GIZ, 2021a)). First, the project considered itself a technical assistance project and not in a position to engage in a policy dialogue with the municipalities or the Ministry of Local Administration on their (political) support for the municipal solid waste management sector (INT GIZ 3). Second, the travel and work restrictions imposed as a result of the COVID-19 pandemic hampered the capacity building of the municipalities and Ministry of Local Administration, as this required face-to-face interaction over extended

periods of time (INT GIZ 2,3; OS 3). Third, one person on the project team was on extended care and bereavement leave during the second half of the project (INT GIZ 2,3,4,8).

Based on the above strengths, weaknesses and mitigating factors, the evaluation assigns 15 out of 20 points for the quality of implementation.

Effectiveness dimension 3 – Quality of implementation – scores **15 out of 20 points.**

Effectiveness dimension 4: Unintended results

The OECD DAC evaluation standards (OECD, n.d.) and the GIZ project evaluation matrix (see Annex 1) require this evaluation to look out for unintended results, whether positive or negative. The evaluation inquired amongst the key informants for possible unintended results. No unintended results were identified during the interviews. The project helped to construct new administrative buildings and hangars for the Irbid and Karak municipal workshops. These investments led both to an efficiency improvement in the maintenance of the waste collector fleet (an intended result), but also to better working and safety conditions in these workshops (INT DTG 1,3, 4; GIZ 2,3,8; field observation). The latter can be qualified as an unintended result.

Moreover, the project supported the Irbid municipal workshop in introducing a quality management system and obtaining an ISO 9001 certificate. During the field mission, the certification process was still ongoing. The project completion report states that this certification has now been obtained (GIZ, 2021f). This certification must be periodically renewed, which requires the Irbid municipal workshop to maintain the requisite quality standards. In and by itself, this is positive. The evaluation team did not discuss the quality management system with the Irbid municipality and therefore cannot pass an evaluative judgment on the importance of this ISO 9001 quality management system for the management and operation of the municipal workshop.

The question is how to rate the improved working and safety conditions in the Irbid and Karak workshops and the introduction of the ISO 9001 quality management system in the Irbid municipal workshop. The evaluation assumes that if there had been no positive or negative unintended results, the project would have been assigned 10 points. The evaluation subsequently classifies the above-mentioned improvements as positive results. At the same time, the results were only achieved in two out of the five supported municipalities. The evaluation therefore assigns 15 out of 20 points for the unintended positive result.

Effectiveness dimension 4 – Unintended results – scores **15 out of 20 points.**

Photo 2: Clean streets and parks; plastic litter in backstreets and empty lots

Source: Geert Engelsman

The impact of the COVID-19 pandemic on the results achievement

The project was implemented during the COVID-19 pandemic for the last 21 months of the 53-month project. During this time, the project faced several full lockdowns, work and travel restrictions, as well as insecurity amongst staff and partners about their personal health and safety (field observation; (GIZ, 2021e)). On the one hand, these restrictions and uncertainty hampered the on-the-ground, personal collaboration between the project team, external experts, municipalities and the ministry. It also delayed the construction work on the municipal workshop in Irbid although this was still finished before the project came to an end.

On the other hand, the project was already operating for six years before the pandemic hit and had good working relations with all partners. Important work streams – such as the procurement of equipment and spare parts – were well under way before the pandemic hit. Moreover, as noted above, the COVID-19 pandemic was never cited as a main cause for the non-achievement of outputs. The project team was able to continue all project interventions except for providing direct support to and building capacity in the SWM department in the Ministry of Local Administration.

The pandemic will undoubtedly have affected the progress made by the project and the smoothness of its implementation. However, the evaluation found no evidence that the pandemic substantively affected the achievement of the project's results or that the results would have been substantively different without the pandemic. The evaluation team concludes that the COVID-19 pandemic was a nuisance and created personal insecurity, but that the project team mastered the situation well and the pandemic did not materially affect the project outcome.

Methodology for assessing effectiveness

Table 18: Methodology for assessing OECD DAC criterion: effectiveness

Effectiveness: assessment dimensions	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
Achievement of the (intended) objectives	Objective statement: 'the execution of municipal SWM tasks … is improved' in the 5 supported municipalities. Outcome indicators: Cost coverage ratio improved by 10% in Irbid and Mafraq. 10 measures in the municipal waste management plans implemented in 4 out of 5 municipalities. 4 out of 5 municipalities use a digital system to improve SWM on the basis of customer feedback.	**Evaluation design:** • Direct quantitative and qualitative inquiry **Empirical methods:** • Document analysis • Key informant interviews • Street interviews	Qualitative data are good due to the number and diversity of key informants. There are no meaningful quantitative data on municipal performance in SWM (cost coverage ratio, waste collection rate).
Contribution to achievement of objectives	Theory of change, including results hypotheses (see section 2.2).	**Evaluation design:** • Theory-based evaluation • Direct quantitative and qualitative inquiry • Contribution analysis **Empirical methods:** • Document analysis • Key informant interviews • Street interviews	Qualitative data are good due to the number and diversity of key informants.

Effectiveness: assessment dimensions	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
Quality of implementation	The extent to which the project team, Ministry of Local Administration and the supported municipalities actively and effectively steered the achievement of the project objectives, including (i) conducting regular context and results analyses; (ii) responding to project and context developments in a timely fashion; (iii) using the monitoring and evaluation system; (iv) involving all stakeholders.	**Evaluation design:** • Direct inquiry • Contribution analysis **Empirical methods:** • Document analysis • Key informant interviews	Qualitative data are good due to the number and diversity of key informants.
Unintended results	Open inquiry amongst stakeholders about the (unintended) outcomes and impacts of the project, the benefits and risks arising from them, and how the GIZ SWM Cluster responded to them.	**Evaluation design:** • Direct inquiry **Empirical methods:** • Document analysis • Key informant interviews • Street interviews	Qualitative data are good due to the number and diversity of key informants.

4.5 Impact

This section analyses and assesses the impact of the project. It is structured according to the assessment dimensions in the GIZ project evaluation matrix (see Annex 1).

Summarising assessment and rating of impact

Table 19: Rating of OECD DAC criterion: impact

Criterion	Assessment dimension	Score and rating
Impact	Higher-level (intended) development changes/results	30 out of 30 points
	Contribution to higher-level (intended) development results/changes	30 out of 40 points
	Contribution to higher-level (unintended) development results/changes	15 out of 30 points
Impact score and rating		Score: **75 out of 100 points** Rating: Level 3: moderately successful

The project sought to help the municipalities of Irbid, Karak, Mafraq, Ramtha and Russeifa deal with the increase in solid waste due to the influx of Syrian refugees. The aim (envisaged impact) was to prevent or reduce social conflict and environmental pollution stemming from the non-collection of solid waste. In this, the project was successful, not so much by 'reducing' social tension and environmental pollution, but by 'preventing' its occurrence. Thanks to the project, municipalities were able to continue to collect the increased amounts of solid waste and in this way contribute to better public hygiene, less soil and water pollution, and enhanced social cohesion.

In total, the impact of the project is rated Level 3: moderately successful, with 75 out of 100 points.

Analysis and assessment of impact

Impact dimension 1: Higher-level (intended) development changes/results

The OECD DAC defines impact as 'the extent to which the intervention has generated or is expected to generate significant positive or negative, intended or unintended, higher-level results' (OECD/DAC, 2019). As the unintended results are discussed further below, this subsection concentrates on the intended impact.

The ADHOC II project constituted an 'individual measure'; it was not part of a (bilateral) development programme. As such, it did not include a formal impact statement. The project's envisaged impact could nonetheless be inferred from the BMZ offer (GIZ, 2017b), the results model (GIZ, 2019b), and BMZ's country strategy for its bilateral cooperation with Jordan (BMZ, 2018). By supporting increased solid waste collection, the project sought to contribute to improved public hygiene, less groundwater and soil pollution and enhanced social cohesion between residents and refugees.

As mentioned in the previous section on effectiveness, most key informants at the municipal level noted that the municipalities were able to collect the increased amount of waste stemming from the influx of refugees (INT DTG 1,2,3,4,7,8; ITG 2,3,4,7,8,10; OS 2). Only one key informant (INT DTG 2) expressed – unprompted – concern about public hygiene or environmental pollution stemming from uncollected solid waste. When prodded on the issue, key informants did not consider either to be an issue, although they appreciated the cleaner streets (INT DTG 1,4,8; ITG 2). Some key informants observed that groundwater pollution is not really an issue in Jordan because the groundwater levels are so low and wells are very deep underground (OS 2,12; GIZ 15). In any case, with the increased amount of solid waste being collected, public hygiene and environmental protection will be better than it would be if this waste was not collected. Furthermore, in Irbid, the municipal workshop has established a system to prevent motor oil from spilling onto the ground when the oil in municipal vehicles is changed in the workshop (INT DTG 1; OS 3; GIZ 2,3).

The key informants at the municipal level were unanimous that residents and refugees live in harmony – at present, there are no (major) tensions between the two groups (INT DTG 1,2,4,7,8; ITG 2,7,8,9,10). Based on the interviews, it could be concluded that social cohesion between residents and refugees was never at risk. All the key informants in the municipalities reported that their humanity, common culture and language, and family ties ensured humanitarian aid, peaceful co-existence and assimilation from the start (INT DTG 2,7,8; ITG 2,7,8,9,10). However, previous research showed that tensions did emerge early on due to increases in rental prices stemming from the extra demand for rental apartments (INT DTG 4) (Idris, 2016), as most Syrian refugees moved into the Jordanian cities and rented their own apartments (Betts & Collier, 2017).

Based on the above observations, the envisaged higher-level impacts of the project (public hygiene, environmental protection and social cohesion) have been realised. Accordingly, the evaluation team assigns 30 out of 30 points for the achievement of the higher-level objectives.

Impact dimension 1 – Higher-level (intended) development changes/results – scores **30 out of 30 points.**

Impact dimension 2: Contribution to higher-level (intended) development results/changes

This subsection examines the extent to which the project contributed to public hygiene, reduced environmental pollution and enhanced social cohesion in the municipalities. To determine the project's contribution, the evaluation reconstructed – prior to the field work – the project's theory of change. This theory of change entailed two impact hypotheses. Table 20: Selected results hypotheses for impact 1 and Table 21: Selected results hypotheses for impact 2 capture these two impact hypotheses. Figure 1 on page 15 depicts the hypotheses graphically; they are marked I1 and I2. This section evaluates the extent to which these two impact hypotheses held up in practice and the extent to which the project contributed to the impacts. This evaluation is based on a contribution analysis (Mayne, 2008).

Table 20: Selected results hypotheses for impact 1

Impact hypothesis 1 (outcome – impact)	If the supported refugee-hosting municipalities are able to collect the increased amount of solid waste (stemming from the influx of refugees), then this will result in less soil and groundwater pollution and better public hygiene, because there is less solid and organic litter on the ground that could be a source of pollution and disease.
Main assumption	The collected waste is disposed of in the designated and formal landfills.
Risks	The designated landfills are not up to standard, and environmental pollution (soil and groundwater pollution) occurs on the landfill sites.
Alternative explanation	There is no obvious alternative explanation. Municipal solid waste is either collected or not by the municipality. There are no private waste collection initiatives. Uncollected waste would be burned and cause air pollution.
Confirmed/partly confirmed/not confirmed	Confirmed.

Table 21: Selected results hypotheses for impact 2

Impact hypothesis 2 (outcome – impact)	If municipal solid waste collection in the supported refugee-hosting municipalities improves, then this will lead to reduced tension and conflict between residents and refugees, because one source of potential tension – an unsatisfactory solid waste collection service that residents may associate with the influx of refugees – is taken away (is removed).
Main assumption	The influx of refugees is a source of tension for refugee-hosting communities.
Risks	None identified.
Alternative explanation	Other interventions mitigate any tension between residents and refugees and ensure social cohesion.
Confirmed/partly confirmed/not confirmed	Partly confirmed.

As already concluded in the previous section on effectiveness, the supported municipalities were able to continue to collect the increased amount of solid waste stemming from the influx of Syrian refugees and the project contributed to the municipalities' ability to collect this increased amount of waste. The first part of both impact hypotheses thus holds: the municipalities do collect the increased amount of solid waste.

The second part of each impact hypothesis subsequently holds automatically: with waste collected, one source of disease, pollution and social conflict is removed. A logical (causal) relation exists between the waste collection and better public hygiene, reduced environmental pollution and social cohesion. Of course, public hygiene, environmental pollution and social cohesion are influenced by a myriad of other factors as well. But a reduction in litter (arising from uncollected waste) automatically removes one source of pollution/tension.

The question is how much of a contribution solid waste collection makes to public hygiene, soil and water protection and social cohesion. Here, the picture becomes murkier. Whilst most solid waste is collected, as noted previously, the backstreets and vacant land in the supported municipalities remain littered with (plastic) waste (field observation; INT DTG 8; ITG 2,3,7,10). For some, this presents an aesthetic problem rather than an environmental problem (INT GIZ 3), especially because groundwater levels are generally low in Jordan (INT GIZ 3,15; OS 2,12). On the other hand, plastic litter is dangerous for birds, rodents and insects, which tend to eat it. With regard to social cohesion, as also noted above, the common culture and language and family ties between residents and refugees support a peaceful co-existence and assimilation (INT DTG 2,7,8; ITG 2,7,8,9,10).

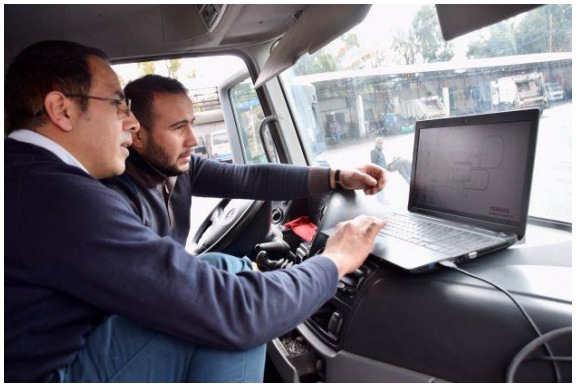
Finally, two questions remain. First, has the environmental footprint of the solid waste not merely been moved to outside the municipal borders? Second, are there other interventions (whether grassroots, governmental or

originating from other development organisations) that have significantly contributed to social cohesion between residents and refugees? The answer to the first question is 'no'. The municipal solid waste is disposed of in official, government-run landfills that fulfil international standards. The evaluation team visited the Al-Ekaider landfill. Two new landfill cells have been constructed with funding from the EU and BMZ, respectively (INT OS 2,4; field observation). The evaluation did not inquire into the interventions taken to promote social cohesion. The evaluation can therefore not truly answer this question. Having said that, and as noted above, social cohesion did not appear to be a major concern for the local populations. The BMZ-funded Waste to Positive Energy project has organised municipal-level dialogues between (so far around 500) residents and refugees. The dialogue participants reported a reduction in social tension due to these dialogues (INT GIZ 1; ITG 9).

The contribution of solid waste collection to environmental protection and social cohesion should not be exaggerated. The contribution is nonetheless plausible and aimed for by the project. The evaluation therefore assigns 30 out of 40 points for the project's contribution to the higher-level intended results.

Impact dimension 2 – Contribution to higher-level (intended) development results/changes – scores **30 out of 40 points**.

Photo 3: Showing the route to the landfill



Source: GIZ/Regina Tauschek

Source: Geert Engelsman

Impact dimension 3: Contribution to higher-level (unintended) development results/changes

The OECD DAC evaluation standards (OECD, n.d.) and the GIZ project evaluation matrix (see Annex 1) require evaluations to look out for unintended results, whether positive or negative. The evaluation inquired amongst the key informants for possible unintended impacts. The key informants to this evaluation identified 'no unintended impacts', whether positive or negative. The subsequent question is how to rate the non-occurrence of unintended impacts. The evaluation team presumed that the occurrence of negative impacts would result in 0 points and positive impacts could (in an ideal case) result in the allocation of 30 points. Based on this logic, the evaluation assigned 15 out of 30 points for the non-occurrence of unintended impacts.

Impact dimension 3 – Contribution to higher-level (unintended) development results/changes – scores **15 out of 30 points**.

Methodology for assessing impact

Table 22: Methodology for assessing OECD DAC criterion: impact

Impact: assessment dimensions	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
Higher-level (intended) development changes/results	The project's intended impacts are improved public hygiene, groundwater and soil protection, and social cohesion between residents and refugees.	**Evaluation design:** • Direct quantitative and qualitative inquiry **Empirical methods:** • Document analysis • Key informant interviews • Street interviews	Qualitative data are good due to the number and diversity of key informants. There are no meaningful quantitative data on municipal performance in SWM (waste collection rate) or on the environmental footprint of the non-collection of waste.
Contribution to higher-level (intended) development results/changes	The project's theory of change (see section 2.2), including the impact hypotheses.	**Evaluation design:** • Theory-based evaluation • Direct quantitative and qualitative inquiry • Contribution analysis **Empirical methods:** • Document analysis • Key informant interviews • Street interviews	Qualitative data are good due to the number and diversity of key informants.
Contribution to higher-level (unintended) development results/changes	Open inquiry amongst stakeholders about the (unintended) outcomes and impacts of the project, the benefits and risks arising from them, and the extent to which the project contributed to these unintended results.	**Evaluation design:** • Direct quantitative and qualitative inquiry • Contribution analysis **Empirical methods:** • Document analysis • Key informant interviews • Street interviews	Qualitative data are good due to the number and diversity of key informants.

4.6 Efficiency

This section analyses and assesses the efficiency of the project. It is structured according to the assessment dimensions in the GIZ project evaluation matrix (see Annex 1).

Summary assessment and rating of efficiency

Table 23: Rating of OECD DAC criterion: efficiency

Criterion	Assessment dimension	Score and rating
Efficiency	Production efficiency (Resources/Outputs)	30 out of 70 points
	Allocation efficiency (Resources/Outcome)	20 out of 30 points
Efficiency score and rating		Score: **50 out of 100 points** Rating: Level 4: moderately unsuccessful

More than half (56%) of the project budget was spent on the procurement of equipment and spare parts, the partial rehabilitation of the municipal workshops in Irbid and Karak, the introduction of regular maintenance of the municipal solid waste management fleet and a digital tracking system for the fleet. On the one hand, these expenditures enabled the municipalities to salvage and optimise the use of their waste collection fleet and collect the increased amounts of municipal solid waste. In terms of effectiveness, the budget was spent efficiently.

On the other hand, as will be elaborated in section 4.7, the municipalities do not organise solid waste collection efficiently; nor do they invest in the solid waste infrastructure. From a sustainability perspective, more resources should have been spent on working with the Ministry of Local Administration and the political leadership of the municipalities to alter their perspective on the value and organisation of solid waste collection and on the municipal autonomy and resources needed to manage solid waste collection effectively and efficiently. In terms of sustainability, the budget was not spent efficiently.

In total, the efficiency of the project is rated Level 4: moderately unsuccessful, with 50 out of 100 points.

Analysis and assessment of efficiency

Efficiency dimension 1: Production efficiency

The OECD DAC defines efficiency as 'the extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way' (OECD/DAC, 2019). 'Economic' means that inputs are converted into results without waste, i.e. results are produced in a cost-effective way. 'Timely' means that the results are delivered within the intended time frame, or a time frame reasonably adjusted to the evolving context.

GIZ's Corporate Unit Evaluation distinguishes between production and allocation efficiency. Production efficiency refers to the relationship between inputs and outputs. Allocation efficiency concerns the conversion of inputs into outcomes. The project's production efficiency is the topic of this subsection; the project's allocation efficiency is considered in the next subsection.

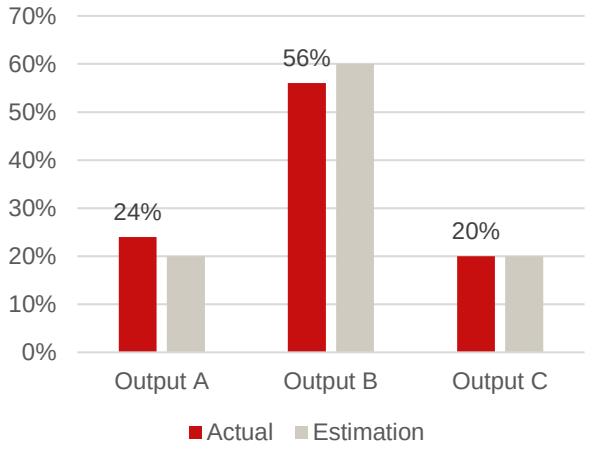
The starting point for assessing the project's efficiency is knowing how the project's resources have been spent. The efficiency tool provided by GIZ's Corporate Unit Evaluation allowed the evaluation and project teams to allocate all expenditures and costs to the corresponding outputs and outcomes. Table 24: Recapturing the project's main workstreams recalls the project's three main workstreams (output areas). Figure 3 shows how the project spend its inputs across these three main workstreams.

Table 24: Recapturing the project's main workstreams

Workstream (output)	Summary description
A	Improve municipal management of the municipal solid waste sector
B	Increase the municipal workshop capacity to maintain and use the waste collector fleet
C	Strengthen the capacity of the Ministry of Local Administration to monitor and steer the municipal solid waste management sector in Jordan

Source: (GIZ, 2017b)

Figure 3: Project costs and expenditures per output



Source: Efficiency tool

Figure 3 shows that the bulk of the resources (56%) were spent on output B: procuring equipment and spare parts, partially rehabilitating the Irbid and Karak workshops, introducing regular maintenance in the supported municipal workshops and supporting IT infrastructure for the optimal use of the digital fleet management tracking system. This is no surprise, given that the procurement of equipment and spare parts, as well as the rehabilitation of the Irbid and Karak workshops, required significant monetary outlays. In fact, if all the procurement and construction costs are assigned to output B and all other resources (mostly staff costs and technical assistance) are distributed equally across the three outputs, then this gives a similar distribution of funds. This alternative distribution is shown in Figure 3 in the grey columns.

The first question to be answered here is 'to what extent have the intervention's inputs … been used economically in relation to the outputs delivered' (evaluation matrix, see Annex 1). The sine qua non for a cost-effective use of inputs is that the outputs are delivered. The effectiveness analysis (see section 4.4) showed that this was not uniformly the case. Table 25: Extent to which outputs were achieved recaps the output achievements. It shows that the inputs into output B were used cost effectively, but the inputs into outputs A and C were used much less cost effectively.

Table 25: Extent to which outputs were achieved

	Outputs	Achieved?	On time?
A	4 out of 5 municipalities adopted municipal SWM plans (developed in a participatory manner).	Yes	Yes
	In 3 out of the 5 target municipalities, commercial waste fees are levied based on a new current registry of commercial waste.*	No	No
	In 4 out of the 5 target municipalities, a digital customer feedback system is established.	No	No
B	In 4 out of the 5 target municipalities, the municipal workshops use (digitised) maintenance plans for the waste collection vehicles.	Yes	Yes
	In 4 out of the 5 target municipalities, the municipal workshops use a digital fleet management system.	Yes	Yes
C	The organisational plan introduced in the Ministry of Municipal Affairs is rated by 85% of the approximately 20 staff members interviewed as helpful and useful for the performance of the department's tasks.**	No	No
	The Ministry of Municipal Affairs has introduced an intermunicipal benchmarking system on a pilot basis in the 5 target municipalities.***	No	No

Source: (GIZ, 2021f), authors

* Even before the project started, Jordan already had a functioning system for the determination of commercial solid waste collection fees. A new registry proved superfluous (INT GIZ 2,3; OS 3). The project did help Irbid municipality to update and refine the commercial waste collection fee schedule, including making the fees more dependent on the actual waste generated (INT GIZ 2,3; OS 3). At the time of the field mission, the Ministry of Local Administration disagreed with the proposed schedule and the process followed (INT DTG 12). The project completion report states that agreement has since been reached between the ministry and Irbid municipality and that a new fee schedule will be piloted in Irbid, Ramtha and Mafraq (GIZ, 2021f). The project team was unable to substantiate this statement with documentation. Shared minutes only confirm that Irbid is working on an updated fee schedule and registry (GIZ, 2021h). As of the end of the project, commercial waste fees had not (yet) been substantially and structurally raised; fees were not being levied using a different system; and revenues in at least three of the five municipalities had not increased. The evaluation team therefore considers that this output has not been achieved. See also section 4.4.
** The project completion report states that a survey amongst the nine staff in the SWM department indicates that eight of them consider the operational plan to be helpful and useful (GIZ, 2021f). Section 4.4 explained that the project did not help the SWM department to develop an organisational plan. It is unclear to the evaluation team what operational plan is referred to and what the contribution of the project was. Moreover, the survey was conducted by telephone. There is no written documentation of the survey questions, results and process (Suleiman, 2022). The evaluation therefore uses its own assessment from the field mission and judges that this output has not been achieved.
*** The project completion report considers the intermunicipal benchmarking system to be delivered (GIZ, 2021f). The evaluation team disagrees because the 'system' consists only of a two-page questionnaire, which has been sent once to the five supported municipalities. Moreover, the Ministry of Local Administration has not yet used the questionnaire to reflect on and steer the municipal solid waste sector. See also section 4.4.

The next question to be answered in this section is 'to what extent could the intervention's outputs … have been increased through the alternative use of inputs' (evaluation matrix, see Annex 1). This question is less straightforward to answer. More money and time spent on the procurement of equipment and spare parts or the rehabilitation of workshops would likely have resulted in a concomitant increase in outputs (more equipment and spare parts, better workshop facilities). More money and time spent on (i) the commercial waste collection fee system, (ii) the digital customer feedback system, (iii) capacity development of the SWM department in the Ministry of Local Administration, or (iv) the intermunicipal benchmarking system would probably not have altered the results (as the buy-in from the municipalities and the ministry into these outputs was limited – see also section 4.4).

The money could nonetheless have been used differently within these two workstreams. For example, a more intense policy dialogue with the municipalities and the ministry could have revealed both their needs and constraints. It could also have identified the reform space to put municipal solid waste management on a more sustainable footing (see also sections 4.2 and 4.7). The evaluation team does not claim that this would have been an easy and straightforward path. However, the fact of the matter is that, at present, several outputs have not been achieved. The evaluation team therefore concludes that an alternative use of inputs would have made sense and should have been decided upon as soon as it became clear that the originally envisaged outputs were not supported by the municipalities and the SWM department in the Ministry of Local Administration.

Finally, this section examines whether the outputs were 'produced on time and within the planned time frame' (evaluation matrix, see Annex 1). The answer to this question can also be deduced from Table 25: Extent to which outputs were achieved and (again) the answer is 'in part'. Important outputs (such as the procurement of equipment and spare parts and the partial rehabilitation of the workshops in Irbid and Karak) were delivered on time. Other outputs, such as the digital customer feedback system, the organisational plan for the SWM department in the Ministry of Local Administration and the intermunicipal benchmarking system, were not delivered on time.

In summary, some outputs were delivered and delivered on time, whilst others were either not delivered or not delivered on time. A different use of inputs, especially in relation to supporting improved municipal management of the solid waste sector – support that would have aligned better with the interest, needs, incentives and capacity of the supported municipalities and the Ministry of Local Administration – would either have achieved better results or provided the insight that the money should not have been spent at all as there

was a lack of local ownership of the envisaged activities and goals. Based on this assessment, the evaluation team assigns 30 out of 70 points for the production efficiency of the project.

Efficiency dimension 1 – Production efficiency – scores **30 out of 70 points**.

Efficiency dimension 2: Allocation efficiency

As noted above, allocation efficiency concerns the conversion of inputs into outcomes. The key question to be answered in this section is whether the same results could have been achieved with fewer resources ('cost minimisation') or whether better results could have been achieved with the same amount of resources, for example, by distributing funds differently across the various outputs ('yield maximisation').

To answer this question, we need to go back (again) to the effectiveness and contribution analysis and pre-empt the sustainability analysis (see section 4.7). The effectiveness and contribution analysis showed that the project's main results were achieved through output B. The procurement of equipment and spare parts allowed the workshops to salvage waste collector trucks. The support for an optimal routing of the waste collector trucks allowed the workshops to optimise the use of the existing fleet of waste collector trucks. The partial rehabilitation of the workshops in Irbid and Karak increased the efficiency of maintenance work and improved working conditions for staff. From this perspective, it made sense to spend most funds on output B.

With this knowledge in mind, could even better results have been achieved if the project had spent even more on the procurement of equipment and spare parts or further rehabilitated the workshops? This question is difficult to answer. The evaluation's tentative answer, however, is 'no'. The reason is that the current expenditures already allowed the existing fleet to be used to the maximum degree. More equipment and spare parts would not have altered this picture. It would not have resulted in more waste collection.

The more interesting follow-up question is whether the project could have achieved better results if it had spent more time and resources on outputs A and C, i.e. on improving the municipal management of the municipal solid waste management sector and helping the Ministry of Local Administration with its monitoring and steering of the municipal solid waste management sector. As is explained in the next section (on sustainability), the answer to this question is probably yes, not by pursuing the envisaged outputs (for which there was limited ownership amongst the municipalities and the Ministry of Local Administration), but by helping to put the municipal solid waste management sector on a more sustainable footing. If municipalities were given more autonomy, responsibility and resources to manage the municipal solid waste management sector, then they would have an incentive to organise the sector more efficiently and deliver better quality services. In other words, from a sustainability perspective, much more attention ought to have been spent on improving the management of the municipal solid waste management sector. This was the domain of outputs A and C.

From an effectiveness point of view, the project could have received 30 points. From a sustainability point of view, 0 points would be more accurate. As with the analysis of the project's effectiveness, the evaluation assigns relatively more weight to the fact that the project did achieve its original intent, namely, to allow the municipalities to continue to collect the increased amounts of solid waste. The evaluation team therefore assigns the project 20 out of 30 points for its allocation efficiency.

Efficiency dimension 2 – Allocation efficiency – scores **20 out of 30 points**.

Methodology for assessing efficiency

Table 26: Methodology for assessing OECD DAC criterion: efficiency

Efficiency: assessment dimensions	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
Production efficiency (Resources/Outputs)	• How are the inputs distributed? • To what extent have the inputs been used economically in relation to the outputs delivered? • To what extent could the outputs have been increased through an alternative use of inputs? • Were the outputs produced on time and within the planned time frame?	**Evaluation design:** • Follow-the-money approach • Contribution analysis • Yield maximisation and cost minimisation analysis **Empirical methods:** • Efficiency tool • Key informant interviews	Project outputs (including time of delivery) and financial data are reported according to GIZ standards. Cost categories were allocated across outputs based on the expert opinion of the project team (in consultation with the evaluation team).
Allocation efficiency (Resources/Outcome)	• Could the same results have been achieved with fewer resources (cost minimisation)? • Could better results have been achieved with the same amount of resources, for example, by distributing funds differently across the various outputs (yield maximisation)?	**Evaluation design:** • Follow-the-money approach • Contribution analysis • Yield maximisation and cost minimisation analysis **Empirical methods:** • Efficiency tool • Key informant interviews	This section is based on the analysis in the effectiveness and sustainability sections.

4.7 Sustainability

This section analyses and assesses the sustainability of the project. It is structured according to the assessment dimensions in the GIZ project evaluation matrix (see Annex 1).

Summary assessment and rating of sustainability

Table 27: Rating of OECD DAC criterion: sustainability

Criterion	Assessment dimension	Score and rating
Sustainability	Capacities of the beneficiaries and stakeholders	5 out of 20 points
	Contribution to supporting sustainable capacities	10 out of 30 points
	Durability of results over time	15 out of 50 points
Sustainability score and rating		Score: **30 out of 100 points** Rating: Level 5: unsuccessful

The real challenge for the supported municipalities lies in sustaining the project's results. The project procured good quality equipment and original spare parts which can be expected to have long technical lifetimes. Municipal workshop staff will do their utmost to salvage the fleet up to the point – or even beyond – where it is technically feasible. But goodwill, technical competency and spare parts can only go so far. Ultimately, the sustainability of the project's results depends on the municipalities' ability to take over: to organise solid waste collection efficiently and invest in the solid waste collection fleet and infrastructure.

The challenges faced by the municipalities in organising solid waste collection efficiently and sustainably are fourfold: (i) they do not collect sufficient fees to cover the costs of solid waste collection; (ii) the collected fees

are not ring-fenced for operating, maintaining and investing in municipal solid waste collection (but are transferred into the general budget); (iii) the municipalities make insufficient funds available (from the general budget) to maintain and invest in municipal solid waste collection; and (iv) the municipalities lack the authority to raise extra taxes, recruit waste management specialists and organise their solid waste collection through a special purpose vehicle like a public utility. Instead, the proverbial cow is being milked to the last drop by the municipalities without securing the continuation of the herd.

In total, the sustainability of the project is rated Level 5: unsuccessful, with 25 out of 100 points.

Analysis and assessment of sustainability

Sustainability dimension 1: Capacities of the beneficiaries and stakeholders

The OECD DAC defines sustainability as 'the extent to which the net benefits of the intervention continue or are likely to continue' after the project support ceases (OECD/DAC, 2019). The net benefits of ADHOC II are that it allowed the supported municipalities to salvage and optimise the use of their existing waste collector fleet and thereby continue to collect the increased amounts of solid waste in their municipalities (see section 4.4). The ability of the municipalities to continue collecting the (increased amounts of) solid waste naturally depends on their capacity to keep the waste collector trucks operational and make use of the digital fleet management tracking system.

The use of the digital fleet management system is well established (INT DTG 1,2,3). Without major changes in staffing, the workshops should have little trouble in continuing to use it. The project purchased original spare parts which can be expected to have a long technical lifetime (INT DTG 1,2,3; GIZ 2,3). Moreover, the project showed that if the municipal workshops are provided with equipment and spare parts, then they will use this equipment and spare parts (and have the necessary expertise) to salvage the waste collector trucks and collect the increased amount of waste. In other words, they have an intrinsic motivation and capacity to keep the waste collection fleet afloat (INT DTG 1,2,3,4,6,8,10). These factors guarantee some sustainability of the net benefits.

However, the waste collector trucks do require regular maintenance. At times, this entails the replacement of parts, and over time the replacement of (old) trucks that stop functioning. Population growth and concomitant increases in solid waste production will require the municipalities to expand the waste collector fleet. Maintenance, replacement of parts/trucks and investment in new trucks require municipalities to reserve budget for these purposes. All the key informants in the supported municipalities noted that the municipalities did not have sufficient budget to take over these tasks (INT DTG 1,2,3,4,5,6,8).

The challenge for municipalities is fourfold. First, the current residential and commercial solid waste collection fees – collected by the regional electricity distribution companies on behalf of the municipalities – are not sufficient to cover the costs of solid waste collection (INT 4,7,8; GIZ 1,2,3). Second, the revenues from the residential and commercial solid waste collection fees are transferred into the general budget of the municipalities and are not earmarked for solid waste collection (INT DTG 4,8). Third, the municipalities make insufficient funds available (from the general budget) to maintain and invest in municipal solid waste collection (INT DTG 1,3,4,5,6,8). Fourth, the municipalities do not have the authority to raise extra taxes, recruit extra staff (for example, solid waste collection and management experts) or organise their solid waste collection differently (for example, through a special purpose vehicle like a public utility, e.g. a water supply utility or an electricity distribution company) (INT DTG 4,6,8; GIZ 1,2,3; DTG 3,4,7).

As a result, the municipalities lack the management expertise, financial resources, authority and incentives to organise their solid waste management sustainably. The municipalities lack the capacity (human, institutional and financial) to put the organisation of solid waste management on a secure footing. From a sustainability point of view, these challenges outweigh the intrinsic motivation and capacities of the municipal workshops to

keep the waste collector fleet afloat. The evaluation team therefore assigns 5 out of 20 points for the capacities of the beneficiaries and stakeholders to secure sustainable operations and benefits.

Sustainability dimension 1 – Capacities of the beneficiaries and stakeholders – scores **5 out of 20 points.**

Sustainability dimension 2: Contribution to supporting sustainable capacities

This subsection examines the extent to which the project sought to enhance the municipalities' capacities to sustain the project's results. On the one hand, the project recognised the need to invest in the management of the municipal solid waste management sector and the steering of the sector by the Ministry of Local Administration. This is evidenced by the project activities and envisaged outputs (for a quick overview, see Table 24: Recapturing the project's main workstreams and Table 25: Extent to which outputs were achieved in section 4.6).

On the other hand, these activities and envisaged outputs did not address the core challenges faced by the sector. As highlighted in the previous subsection on the capacities of stakeholders, these challenges stem from a lack of funds, an inadequately organised sector and municipalities' lack of authority to do something about these issues. The formulation of municipal SWM plans, the review of the commercial solid waste collection schedules, the introduction of digital customer feedback systems or the introduction of intermunicipal benchmarking did not address the root causes of the problem; these activities did not alter the authority and resources of the municipalities and their incentive to organise municipal solid waste collection effectively, efficiently and sustainably.

The project's contribution to supporting the sustainable capacities of the municipalities is therefore limited to the introduction of regular maintenance, the optimisation of waste collection routes and the provision of high-quality spare parts for the waste collection trucks. Based on this analysis, the evaluation team assigns 10 out of 30 points for the project's contribution to supporting sustainable capacities.

Sustainability dimension 2 – Contribution to supporting sustainable capacities – scores **10 out of 30 points**.

Sustainability dimension 3: Durability of results over time

This subsection examines the estimated durability of the results. The above analysis suggests that the ability of the municipalities to continue the collection of (increased amounts of) solid waste will depend on the current waste collector fleet remaining operational and capable of collecting the increased amounts of waste from an expanding population. The nature of the evaluation (a qualitative inquiry) does not allow an exact prediction. It appears fair to presume, however, that the results can be maintained for a number of years (for example, between two and four years). After that, the municipalities will need to inject new funds to maintain, and where necessary replace, waste collector trucks. Based on this estimation, the evaluation team assigns 15 out of 50 points for the durability of the results.

Sustainability dimension 3 – Durability of results over time – scores **15 out of 50 points**.

Photo 4: Some connections survive longer than others – the Temple of Hercules, Amman, Jordan

Source: Geert Engelsman

Methodology for assessing sustainability

Table 28:Methodology for assessing OECD DAC criterion: sustainability

Sustainability: assessment dimensions	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
Capacities of the beneficiaries and stakeholders	The extent to which the project's beneficiaries and relevant stakeholders/reform actors have the perspective, interest, incentive, influence, capacity, resources, tenacity and resilience to continue the work after GIZ's support ceases.	**Evaluation design:** • Direct inquiry **Empirical methods:** • Key informant interviews	Qualitative data are good due to the number and diversity of key informants.
Contribution to supporting sustainable capacities	The extent to which the project contributed to the municipalities having the institutional, human and financial resources as well as the willingness (ownership) required to sustain the project's positive results over time.	**Evaluation design:** • Theory-based evaluation • Direct inquiry • Contribution analysis **Empirical methods:** • Key informant interviews	Qualitative data are good due to the number and diversity of key informants.
Durability of results over time	This question seeks to draw a conclusion from the analysis of the first 2 dimensions covered by this evaluation criterion and make a prediction as to the likelihood that the key stakeholders will continue (to improve) solid waste collection and contribute to (enhanced) public hygiene, environmental protection and social cohesion.	**Evaluation design:** • Direct inquiry **Empirical methods:** • Key informant interviews	Qualitative data are good due to the number and diversity of key informants.

4.8 Follow-on project and mainstreaming of municipal SWM

This final section draws lessons from ADHOC II and makes recommendations for the 'informal' follow-on project. It also addresses the evaluation question posed by the GIZ country director in Jordan: 'To what extent can solid waste management be mainstreamed across GIZ's water, environment, employment or finance clusters?'′

Follow-on project: Solid Waste Management, Jordan (PN 2020.2028.7)

If there is a follow-on project, the central project evaluations need to draw lessons from the ADHOC II project and formulate recommendations for the design and implementation of the subsequent intervention. There is no 'formal' follow-on project to ADHOC II. Moreover, BMZ has decided to phase out its involvement in the solid waste management sector in Jordan over the next four years. In principle, therefore, this final section is not needed. However, BMZ has decided to make a 'controlled exit' out of the municipal SWM sector in Jordan. This is because a new project – Solid Waste Management, Jordan (PN 2020.2028.7) – has been launched (GIZ, 2021b; 2021c). The project is to 'link up with structures already established ... [further] strengthening the management capacity of partner organisations ... to secure and consolidate the already created impacts' (GIZ, 2021b). In other words, a new intervention is to help secure the sustainability of Germany's past investments in the municipal SWM sector.

This is relevant. Section 4.7 showed that neither the outcomes nor the impacts of ADHOC II are sustainable. The supported municipalities lack the authority, resources and accountability to organise their municipal solid waste management in a sustainable manner. Section 4.2 already observed a design failure in that regard: the ADHOC projects addressed the symptoms (lack of equipment, practices and capacity) rather than the root causes of underperformance (lack of authority, resources and accountability on the part of municipalities). The actual level of municipal authority and resources, and the concomitant accountability and incentives, are the product of past political decisions and the prevailing power relations between the main actors, most notably the municipal governments, the Ministry of Local Administration, the Ministry of Environment and the Ministry of Finance. The key to sustainability lies equally in renewed political decisions on the allocation of power, resources and accountability to municipal governments.

The new project – Solid Waste Management, Jordan (PN 2020.2028.7) – recognises this. Box 1 states the objective and outlines the three main components of the new project. Its essence lies however somewhere else, namely in the project's approach (INT GIZ 4). Together with the University of Darmstadt, the project will pilot test a new (for GIZ) approach: the 'problem-driven iterative approach' (GIZ, 2021c).

Box 1: Solid Waste Management, Jordan (PN 2020.2028.7)

Objective: The institutional and technical preconditions for the development of a sustainable circular economy in Jordan are improved.

Outputs:
- Enhance the ability of public and private actors to cooperate in promoting a circular economy in Jordan
- Improve the technical and institutional capacity of municipalities in municipal SWM
- Introduce the separate collection of valuable solid waste streams

Budget:
- Up to €10 million

Duration:
- December 2021 to November 2025 (4 years)

Source: (GIZ, 2021c)

This approach was developed by Matt Andrews, a senior lecturer at Harvard University (Andrews, 2013). The approach's premise is that institutional reform often fails because it does not take into consideration the underlying (formal and informal) political and cultural context. These 'contextual factors are seldom detailed, defined, or deciphered ... because of an inability to see and map context' (Andrews, 2013). Accordingly, development projects all too often focus on (technical) solutions rather than the underlying (societal) challenges. To overcome this development myopia, Andrews proposes viewing development as an endogenous process with local actors in the driving seat, allowing these actors to identify the root causes of development challenges and offer contextually sensitive and appropriate solutions for such challenges.

The new project creates room for this approach by introducing 'dialogues' between public and private actors in municipal SWM, as well as between public actors themselves (municipalities, the Ministry of Local Administration and the Ministry of Environment, for example). The impact hypothesis is that such dialogues 'between public actors and between the public and private sector will lead to a better understanding of the roles and competencies of the different actors'. This, in turn, should 'improve the communication and coordination between public and private actors. Key strategic challenges in the sector can so be discussed constructively and the beginnings of solutions can be developed. This will happen under the assumption that [national] decision-makers will actively participate in finding a solution for the sustainable financing of the sector' (GIZ, 2021c).

The last assumption is critical and links back to an observation made in section 4.2: it is critical that the key local actors – municipal governments and the Ministry of Local Administration – recognise that there is a development challenge, analyse its root causes, formulate a reform agenda to overcome these root causes and, if necessary, identify room for external support. Or in the words of Andrews: 'institutional reform is warranted only when insiders agree that problems exist because of weaknesses in incumbent mechanisms' (Andrews, 2013). From the perspective of this evaluation (and the sustainability of the municipal SWM sector), it is equally important that this 'recognition' is not limited to the 'sustainable financing of the sector' (GIZ, 2021c), but also addresses the authority, autonomy and accountability of the municipal governments and the Ministry of Local Administration.

Neither the BMZ offer for the new project nor this evaluation show the presence of such willingness and ownership on the part of local stakeholders to address – using a problem-driven iterative approach – the authority, autonomy and accountability of the municipal governments in SWM. The first challenge for GIZ will therefore probably be to get the buy-in of the ministry and the municipalities for this new approach and process. The second challenge will be to (gently) steer the dialogue towards the root causes of the problem and an examination of the underlying political and cultural influencing factors (including power relations) that limit the authority, autonomy and accountability of the municipal governments. The third challenge will be to be patient, allow these dialogues to unfold and take their course, and – if necessary – suspend envisaged output delivery (such as a document on sustainable sector financing). The evaluation's recommendations build on these insights (see section 5.2).

Mainstreaming municipal SWM in GIZ's project portfolio

The country director observed that the five municipalities supported under ADHOC II have limited institutional capacity and she expressed concern about the sustainability of the project's results. (This evaluation warrants this concern – see section 4.7.) She also noted, however, that waste collection is critical, and non-collection affects climate change and produces environmental pollution. The country director wondered therefore whether solid waste management could be mainstreamed across GIZ's country portfolio and whether it could be approached as a cross-cutting theme rather than a sector intervention. To investigate this, the evaluation team engaged with the heads of the environment, water and employment clusters in GIZ's Amman office (INT GIZ 5,12,15).

The discussions offered some clues. The environment, employment and SWM clusters all envisage enhanced private sector involvement (INT GIZ 4,5,12) (GIZ, 2021c). This covers businesses taking responsibility for their own waste streams, exploiting recycling opportunities for valuable waste streams (e.g. plastic), and executing solid waste collection, sorting, recycling and disposal tasks for local governments. Based on past professional experience, the evaluators know that the private sector can play a valuable role in solid waste management.

On its own initiative, the private sector will (logically) only invest in profitable business opportunities (for example, the recycling of valuable materials such as plastic and glass). Broader engagements (for example, in general solid waste collection) require public-private partnerships in which local governments service part of the bill. Based again on the evaluators' past professional experience, such public-private partnerships require strong and capable local governments to ensure that both a comprehensive and socially fair deal is struck and that residents, the local government and the private partner benefit in equal measure. Developing and implementing such public-private partnerships require specialised expertise and dedicated efforts. They are therefore not something that can be (easily) mainstreamed across interventions and sectors. They can be developed in one sector and, based on local success stories, replicated in other sectors.

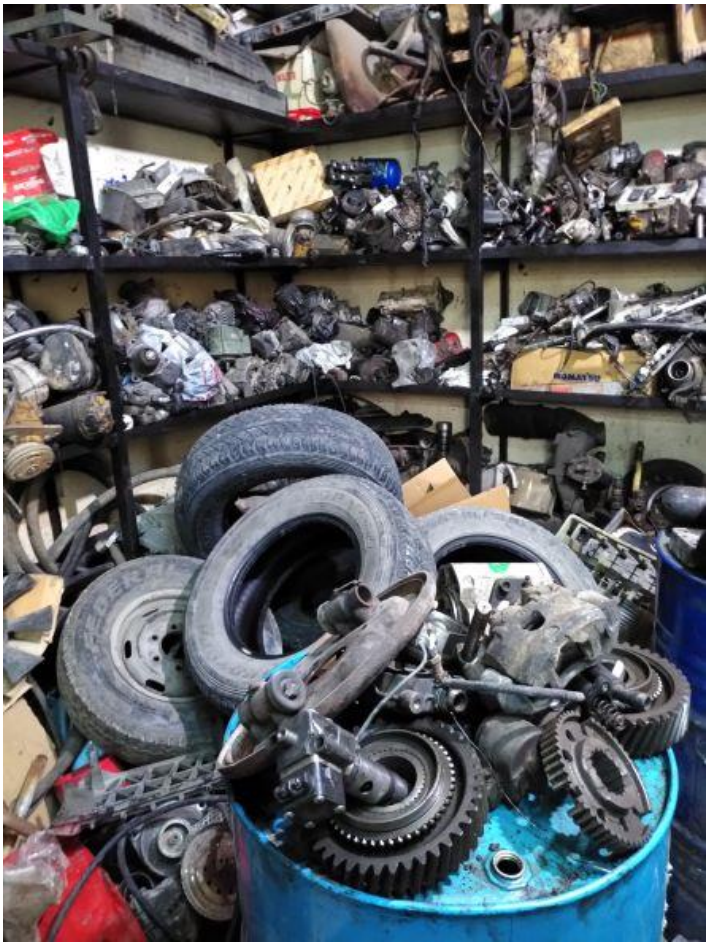
The environment, employment and SWM clusters are also engaged to varying degrees in municipal finance, digitalisation and (international) twinning activities (INT GIZ 3,4,5,15). Each has a role to play in transforming the municipal SWM sector. None of these services in and by themselves address the core challenges facing the municipal SWM sector, namely the limited authority, autonomy, resources and accountability of municipalities in organising the SWM sector. Instead, they can only come into play effectively once these root causes of municipal underperformance in SWM have been resolved (and municipalities are enabled and incentivised to organise the municipal SWM sector effectively, efficiently and sustainably).

The smallest overlap exists between the water and SWM clusters (INT GIZ 15). As the two sectors are organised differently, the two clusters have different political and implementing partners and direct target groups. The local evaluator observed, however, that Jordan possesses relatively efficient and effective regional water utilities. Both evaluators noted, again based on their professional experience, that the collection, recycling and disposal of solid waste (as a semi-public good, just like drinking water) can be organised by means of public utilities. In other words, the water sector may have valuable lessons to teach when it comes to the organisation of the municipal SWM sector in Jordan.

The above deliberations show the potential for complementary action and mutual learning regarding SWM between the different GIZ clusters. However, these actions can only be effective once the municipal SWM sector is better organised. This requires municipal governments to get the requisite authority, autonomy, resources and accountability. As noted in section 4.7 and the previous subsection, this requires dedicated political action and is not something that can be addressed through the mainstreaming of SWM across GIZ's intervention areas. Consequently, this evaluation sees little value to be added by mainstreaming SWM across GIZ's clusters.

4.9 Key results and overall rating

Photo 5: Putting some order to chaos – storage rooms I



Source: Geert Engelsman

Photo 6: Putting some order to chaos – storage rooms II

Source: GIZ/Fabian Brandt

Table 29: Overall rating of OECD DAC criteria and assessment dimensions

Evaluation criteria	Dimension	Max	Score	Total (max.100)	Rating
Relevance	Alignment with policies and priorities	30	30	**75**	Level 3: moderately successful
	Alignment with the needs and capacities of the beneficiaries and stakeholders	30	20		
	Appropriateness of the design*	20	5		
	Adaptability – response to change	20	20		
Coherence	Internal Coherence	50	35	**70**	Level 3: moderately successful
	External Coherence	50	35		
Effectiveness	Achievement of the (intended) objectives	30	20	**70**	Level 3: moderately successful
	Contribution to achievement of objectives	30	20		
	Quality of implementation	20	15		
	Unintended results	20	15		
Impact	Higher-level (intended) development changes/results	30	30	**75**	Level 3: moderately successful
	Contribution to higher-level (intended) development results/changes	40	30		
	Contribution to higher-level (unintended) development results/changes	30	15		
Efficiency	Production efficiency	70	30	**50**	Level 4: moderately unsuccessful
	Allocation efficiency	30	20		
Sustainability	Capacities of the beneficiaries and stakeholders	20	5	**30**	Level 5: unsuccessful
	Contribution to supporting sustainable capacities	30	10		
	Durability of results over time	50	15		
Mean score and overall rating		100	**62**		**Level 4: moderately unsuccessful ***

* The criteria of effectiveness, impact and sustainability are knock-out criteria: if one of the criteria is rated at level 4 or lower, therefore, the overall rating cannot go beyond level 4 although the mean score may be higher.

Table 30: Rating and score scales

100-point scale (score)	6-level scale (rating)
92–100	Level 1: highly successful
81–91	Level 2: successful
67–80	Level 3: moderately successful
50–66	Level 4: moderately unsuccessful
30–49	Level 5: unsuccessful
0–29	Level 6: highly unsuccessful
Overall rating: The criteria of effectiveness, impact and sustainability are knock-out criteria: If one of the criteria is rated at level 4 or lower, the overall rating cannot go beyond level 4 although the mean score may be higher.	

5 Conclusions and recommendations

5.1 Key findings and factors of success/failure

Although the project objective is cast in rather broad terms (the execution of municipal SWM tasks is improved), in practice the project helped five municipalities to collect their residential and commercial waste. In this, the project was successful. By offering equipment and spare parts, and introducing regular maintenance, the project helped salvage at least some of the dilapidated waste collection trucks. By optimising the routes of these waste collection trucks, the project helped utilise the available capacity of waste collection. Together, this allowed the municipalities to maintain their waste collection service and absorb the increase in solid waste stemming from the influx of Syrian refugees.

Although the Ministry of Transportation provided the (GPS-based) fleet tracking system and several development organisations provided waste compactors to the municipalities, it was the project's support which helped salvage and optimise the use of the existing fleet of waste collection trucks. As the existing fleet of trucks was significantly larger than the number of newly procured trucks, the project contributed significantly to the municipalities' ability to collect most if not all waste. The biggest visible gain was made during ADHOC I; ADHOC II helped consolidate and maintain the municipalities' waste collection service. As such, the project helped maintain public hygiene and prevent social conflict between residents and refugees that could arise from the non-collection of solid waste. The project also contributed to environmental protection in general (through the collection of waste) and specifically in Irbid (by preventing motor oil from spilling into the ground when the oil in municipal vehicles is changed in the municipal workshops).

The main challenge faced by the project was to have municipalities build on the project's achievements and to organise municipal solid waste management more effectively. The municipalities lack the perspective, autonomy, authority, resources and political will to professionally organise solid waste management and, for

example, to treat it like other public utilities, such as water and electricity, which are semi-public goods that can be priced and organised as a public business.

This challenge is one for the Jordanian municipalities to acknowledge and address. Nevertheless, at least from the second phase onwards, after initial 'relief' had been provided for waste collection during the first phase, the project could and should have recognised that the problem of ownership and sustainability was political, not technical, that political problems cannot be resolved through technical solutions alone, and that the technical assistance therefore ought to have been accompanied by a political dialogue. At the end of the day, the project helped overcome a challenging situation (presented by the increase in solid waste) and made a potentially unbearable situation bearable. However, the project worked 'within the existing system' of solid waste management and did not help to 'change the system' and put municipal solid waste management on a more secure and solid footing.

Findings regarding 2030 Agenda

This subsection links the evaluation's findings and conclusions to the 2030 Agenda for Sustainable Development: the international communities' lodestar for development and development cooperation. At the request of the GIZ Corporate Unit Evaluation, this subsection focuses on:

- the project's contribution to the Sustainable Development Goals (SDGs),
- the use of existing and shared systems for implementation, monitoring and learning,
- the coordination and complementarity of actions between development partners,
- the interplay between and contribution to the three dimensions of sustainable development: social, economic and environmental and
- the promotion of inclusiveness both in terms of reaching vulnerable groups and leaving no one behind.

Universality, shared responsibility and accountability

The project helped five refugee-hosting communities to maintain waste collection despite increasing volumes of solid waste. This helped prevent environmental pollution and social conflict that could arise as a result of the non-collection of solid waste. In its own small way, the project thereby contributed to the following four SDG indicators (none of which are mentioned in the project documentation).

- 11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities
- 16.1.2 Conflict-related deaths per 100,000 population, by sex, age and cause
- 16.1.3 Proportion of population subjected to physical, psychological, or sexual violence in the previous 12 months
- 16.1.4 Proportion of population that feel safe walking alone around the area they live

As the project supports five mid-sized municipalities (only), the project's impact cannot be expected to lead to a visible improvement in these 'national-level' indicators (for which, in any case, no national data are available). Nevertheless, it is fair to conclude that the project helped to keep these aspects stable or contributed to their improvement.

ADHOC II used very few existing or shared systems for implementation, monitoring and learning. Project implementation was carried out by the GIZ project team (e.g. the procurement of equipment and spare parts or the development of an intermunicipal benchmarking system) or by consultants (e.g. preparing the municipal SWM plans or revising the commercial waste collection fee schedule). These activities were undertaken in close collaboration and consultation with the municipal fleet and environmental departments as well as municipal workshops. Moreover, the supplied equipment and spare parts allowed the municipal workshops to function and maintain the waste collector fleet. Project monitoring was again carried out by the project team. The intermunicipal benchmarking system had the potential to serve as a joint or even government-owned

monitoring and learning tool. However, the envisaged system has been GIZ-led and currently remains just a promising tool.

The coordination between development partners in the SWM sector has, for the most part, been informal but effective. Each development project and partner contributes to a different part of the SWM system (e.g. collection (BMZ), recycling (BMZ and EU), disposal (EU)), or, if targeting the same part of the system, concentrate on different locations or municipalities (e.g. BMZ, EU and Global Affairs Canada) or provide complementary measures (e.g. BMZ and USAID). There is ostensibly no active International Donor Group Meeting on SWM.

Interplay of economic, environmental and social development

In terms of the three dimensions of sustainable development, the project contributed to two dimensions, namely social and environmental. As intended, the project helped prevent social conflict and environmental pollution that could have occurred as a result of uncollected solid waste. As noted above, the project also allowed for better practices to be introduced when changing motor oil in waste collector trucks in Irbid, preventing the soil pollution that had occurred in the past.

Inclusiveness/leave no one behind

The project did no social targeting. Its outcome (collection of most waste) and impact (social cohesion and environmental protection) were realised, indiscriminately, across the geographic territory of the supported municipalities. The municipalities' waste collector trucks – which were maintained with the help of ADHOC II – collected most (if not all) waste in all parts of the municipalities. The support thus benefited all citizens, residents and refugees alike.

Findings regarding follow-on project

The Solid Waste Management, Jordan project (PN 2020.2028.7), which effectively constitutes the follow-up project to ADHOC II, recognises the need for improved communication and coordination between the municipal governments and the Ministry of Local Administration (amongst others). This enhanced communication and coordination should allow these actors to constructively address key strategic challenges. On the one hand, this evaluation underscores this need and underwrites this approach, as the root causes of municipal SWM underperformance lie in the municipal governments' lack of authority, autonomy, resources and accountability. This prevents them from organising the SWM sector effectively, efficiently and sustainably. On the other hand, the evaluation found little evidence that signalled an understanding of the problem and a willingness to address the root challenges facing the SWM sector. The envisaged problem-driven iterative approach adopted by the Solid Waste Management, Jordan project is the right one. A significant level of intervention will be required to bring the municipal governments and the Ministry of Local Administration to the table and into a constructive dialogue, and patience will be needed for the results of such dialogue to materialise.

5.2 Recommendations

The challenge for municipal solid waste management in Jordan is to put it on a sustainable footing. The sine qua non for sustainability is that Jordan organises, and generates the resources to pay for, the management of solid waste (operations and investments). Municipal solid waste management is a devolved responsibility in Jordan. However, municipal governments (outside of the Greater Amman Municipality) lack the full authority, autonomy, incentives, resources and accountability to take charge of and take responsibility for municipal solid waste management. The root causes of these 'system deficiencies' or 'missing links' lie in past political decisions and the concomitant power relations between the main actors, most notably the municipal governments, the Ministry of Local Administration, the Ministry of Environment and the Ministry of Finance.

The key to sustainability lies in new political decisions on the allocation of power, resources and accountability to municipal governments. Moving forward, the key challenge in municipal solid waste management is political rather than technical. Jordan needs to formulate political answers to Jordan's sustainability questions before technical solutions are laid out. These political answers and subsequent decisions can only be formulated, taken and implemented by the municipal governments, the Ministry of Local Administration and, ultimately, the Jordanian Government. GIZ can at best facilitate this process.

This evaluation recommends that the GIZ SWM Cluster in Jordan (target audience) gear its support under the new Solid Waste Management, Jordan project towards:

- facilitating a political dialogue between all key stakeholders on the future organisation of municipal solid waste management in Jordan. This dialogue should include topics such as the:
    - political economy of municipal solid waste management,
    - general resource constraint in the Jordanian public sector,
    - devolution of authority and responsibility for municipal solid waste management,
    - fiscal decentralisation,
    - public financial management and
    - (democratic) accountability of municipal governments.
- supporting the locally driven formulation and implementation of a political reform agenda by making 'international peers' available to the municipal governments and Ministry of Local Administration. Such peers (who may come from successfully run municipalities in Jordan, neighbouring countries or Germany) can inspire and coach local reform actors in the formulation and implementation of a political reform agenda. (The emphasis is hereby put on 'peers' rather than 'consultants' to ensure that the local actors lead and take charge of their own reform process.)

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Annex: GIZ project evaluation matrix

DAC Criterion Relevance - Is the intervention doing the right things? (max. 100 points)
The 'relevance' criterion focuses on the intervention's design. It refers to the extent to which the objectives and design of a development intervention are consistent with the (global, country and institution-specific) requirements, needs, priorities and policies of beneficiaries and stakeholders (individuals, groups, organisations and development partners). It also identifies the ability of the intervention's design to adapt to a change in circumstances. "Relevance" is assessed in relation to 1) the **time of the intervention design**[1] and 2) from **today's perspective**[2].

Assessment dimensions	**Filter - Project Type**	**Evaluation questions**	**Clarifications**	**Basis for Assessment / Evaluation indicators** *(e.g. module objective/programme indicators, selected hypotheses, or more generally a definition of the aspects to be used for evaluation)*	**Evaluation Design and empirical methods** *(Design: e.g. Contribution analysis, Follow-the-Money Approach) (Methods: e.g. interviews, focus group discussions, document analysis, project/partner monitoring system, workshop, online survey, etc.)*	**Data sources** *(e.g. list of relevant documents, interviews with stakeholder category XY, specific data, specific monitoring data, specific workshop(s), etc.)*	**Data Quality and limitations** *(Description of limitations, assessment of data quality: poor, moderate, good, strong)*	**Data Quality Assessment** (weak, moderate, good, strong)
Alignment with policies and priorities	Standard	To what extent are the intervention's objectives aligned with the (global, regional and country specific) policies and priorities of the BMZ and of the beneficiaries and stakeholders and other (development) partners? To what extent do they take account of the relevant political and institutional environment?	• Orientation at BMZ country strategies and BMZ sector concepts • Strategic reference framework for the project (e.g. national strategies including the national implementation strategy for Agenda 2030, regional and international strategies, sectoral and cross-sectoral change strategies, in bilateral projects especially partner strategies, internal analytical framework e.g. safeguards and gender[4] • Orientation of the project design at the (national) objectives of Agenda 2030 • Project contribution to certain Sustainable Development Goals (SDGs) • Explanation of a hierarchy of the different policies, priorities (especially in case of contradictions)	The BMZ Country Strategy seeks *to 'improve living conditions ...[and promote] stability of Jordan through [amongst others] improved access to water, waste water and solid waste ... [including through] short term interventions to improve the situation of refugees and hosting communities'.* The Jordan government defined its needs, strategy and legal framework for the solid waste management sector in the Jordan Response Plan (to the Syrian refugee crisis), the national SWM strategy, and the national SWM law. These policy documents strive to address, first and foremost, the short-term challenges of dealing with the increase in solid waste due to the influx of refugees, by expanding the physical,	Evaluation design: - Direct inquiry Empirical methods: - Document analysis - Key informant interviews	BMZ Country Strategy Jordan Jordan Response Plan 2016-2018 & 2021-2023 National SWM Strategy 2015 National SWM Law 2020 National Determined Contributions (Roadmap) Jordan Annual Report on NDCs Municipal SWM plans MoLA Mayor office Municipal council members Municipal Environmental and Fleet Management Departments Municipal workshops Joint Service Councils	The objectives and priorities of BMZ, the Jordan Government and the municipalities are well-defined and documented. The evaluation will assess to what extent stated objectives are undergirded by resources and actions.	strong

				organizational and human capacity of the municipalities and the Joint Service Councils. The development priorities and policies of the direct target beneficiaries - the 5 supported municipalities - will be identified and elaborated during the evaluation mission. The institutional framework is that municipalities are responsible for solid waste management collection, Joint Service Councils manage the landfills, and the Ministry of Local Administration Jordan supervises and approves the resources of the municipal governments. The project contributes to the following relevant SDGs. 11.6.1 (solid waste collection) 16.1.2-4 (urban security and safety)				
	and Fragility	To what extent was the (conflict) context of the project adequately analysed and considered for the project concept?	• Key documents: (Integrated) Peace and Conflict Assessment (I)PCA, Safeguard Conflict and Context Sensitivity documents	Compliance with (Integrated) Peace and Conflict Assessment (I)PCA, Safeguard Conflict and Context Sensitivity documents	Evaluation design: - Direct inquiry Empirical methods: - Document analysis - Key informant interviews - Focus group discussions	BMZ Offer (2017) Conflict Sensitive Actor Analysis (2017) Project team GIZ SWM Cluster MoLA Mayor's office Municipal Environmental and Fleet Departments Municipal workshops Joint Service Council (Landfill management) Municipal council members Civil society organizations Women organizations Refugee representatives /	The BMZ Offer provides a solid background and context description of the project (including how the project was designed to deescalate potential conflict between residents and refugees. There is only a Basic Peace and Conflict Assessment at the portfolio level, which offers limited information on the conflict potential at the municipal level vis-a-vis the main direct and indirect target groups, including MoLA, the municipal	good

						organization Residents and refugees	administrations, the municipal workshops and the residents and refugees. The evaluation will investigate to what extent this is amiss (or not relevant within the project context).	
Alignment with the needs and capacities of the beneficiaries and stakeholders	Standard	To what extent are the intervention's objectives aligned with the development needs and capacities of the beneficiaries and stakeholders involved (individuals, groups and organisations)?	• Also: consideration of stakeholders such as civil society and private sector in the design of the measure	The direct target groups' needs and capacities - MoLA - Municipal Environmental and Fleet Management Departments - Municipal workshops The indirect target groups' needs and capacities - Residents - Refugees	Evaluation design: - Direct inquiry Empirical methods: - Key informant interviews - Focus group discussions	MoLA Mayor's office Municipal Environmental and Fleet Departments Municipal workshops Joint Service Council (Landfill management) Municipal council members Civil society organizations Women organizations Refugee representatives / organization Residents and refugees	This data needs to be collected during the field mission. The evaluation expects that most stakeholders are able to articulate their needs and capacities (to respond to the project support).	good
	and Fragility	How were deescalating factors/ connectors[5] as well as escalating factors/ dividers[6] in the project context identified and considered for the project concept (please list the factors)?[7]	• e.g. see column I and II of the (Integrated) Peace and Conflict Assessment	The extent to which escalating factors / dividers and deescalating factors / connectors have been identified and weakened / strengthened	Evaluation design: - Direct inquiry Empirical methods: - Document analysis - Key informant interviews - Focus group discussions	Integrated Peace and Conflict Assessment Project team GIZ SWM cluster Mayor's office Municipal Environmental and Fleet Management Departments Municipal Council Members Civil Society Organizations Women Organizations Refugee representatives (Independent) Jordan and/or SWM sector experts	The project's objective *'to improve the execution of SWM tasks'* in the supported municipalities is to enhance solid waste collection and thereby 'deescalate' tension between residents and refugees stemming from street litter. The project thus seeks to contribute directly to deescalating conflict. In its implementation, the project is focussed on the technicalities of SWM and thus not directly mediate conflict. There is only a Basic Peace and Conflict Assessment at the portfolio level, which offers limited information on the conflict potential at the municipal level vis-a-	moderate

							vis the main direct and indirect target groups, including MoLA, the municipal administrations, the municipal workshops and the residents and refugees (and how the project deals with this).	
	and Fragility	To what extent were potential (security) risks for (GIZ) staff, partners, target groups/final beneficiaries identified and considered?		The extent to which a security risks analysis has been undertaken, documented and followed-up upon.	Evaluation design: - Direct inquiry Empirical methods: - Document analysis - Key informant interviews - Focus group discussions	Security risks analysis Project team GIZ SWM cluster	The project team collaborates closely with the GIZ Security and Risk Management Advisor, who briefs the project on the security risks. There has been no dedicated security risk analysis at the project level.	moderate
	Standard	To what extent are the intervention's objectives geared to the needs and capacities of particularly disadvantaged and vulnerable beneficiaries and stakeholders (individuals, groups and organisations)? With respect to groups, a differentiation can be made by age, income, gender, ethnicity, etc.?	• Reaching particularly disadvantaged groups (in terms of Leave No One Behind, LNOB) • Consideration of potential for human rights and gender aspects • Consideration of identified risks	Geographic and target group focus of the project	Evaluation design: - Direct inquiry Empirical methods: - Document analysis - Key informant interviews - Focus group discussions	BMZ Offer (2017) Portfolio-level gender analysis (2019) Project team MoLA Mayors Municipal Environmental and Fleet Management Departments Municipal Workshops Women organizations Refugee organizations	The project impacts were to be felt by residents and refugees (women and men) alike. There was little explicit 'targeting' in the project design. The project data thus offers little specific data on targeting activities and results. The evaluation will review the appropriateness of this.	good
Appropriateness of the design[3]	Standard	To what extent is the intervention's design appropriate and realistic (in terms of technical, organisational, and financial aspects)?	• Realistic project goal from today's perspective and in view of the available resources (time, finances, partner capacities) • Consideration of potential changes in the framework conditions • Dealing with the complexity of framework conditions and strategic reference frameworks and with possible overloading • Strategic focusing	Has a detailed Theory of Change been developed? Does the Theory of Change detail how GIZ' support is expected to result in the envisaged outcomes and impacts? Who are GIZ' boundary partners and how are they likely to respond to GIZ' support? How did GIZ' boundary partners influence other stakeholders - what was the envisaged ripple effect? Have potential internal / external influences / risks been factored in? Was the Theory of	Evaluation design: - Theory of Change Empirical methods: - Document analysis - Key informant interviews	Project document Results Matrix Project team GIZ SWM cluster MoLA Mayor office Municipal council members Municipal Environmental and Fleet Management Departments Municipal Workshops Joint Service Councils International development partners (EU, UNDP, WB and USAID) (Independent) Jordan	see Chapter 2.2 Inception Report. BMZ offer, the Results Matrix and the project team offered detailed information on the project's Theory of Change.	good

				Change plausible (realistic), verifiable and uncontested?		and/or SWM sector experts		
	Standard	To what extent is the intervention's design sufficiently precise and plausible (in terms of the verifiability und traceability of the system of objectives and the underlying assumptions)?	Assessment of the (current) results model and results hypotheses (Theory of Change, ToC) of the actual project logic: • Adequacy of activities, instruments and outputs in relation to the project objective to be achieved • Plausibility of the underlying results hypotheses • Clear definition and plausibility of the selected system boundary (sphere of responsibility) • Appropriate consideration of potential influences of other donors/ organisations outside the project's sphere of responsibility • completeness and plausibility of assumptions and risks for the project results • How well is co-financing (if any) integrated into the overall concept of the project and what added value could be generated for the ToC/project design?	same as above	same as above	same as above	same and above	good
	Standard	To what extent is the intervention's design based on a holistic approach to sustainable development (interaction of the social, environmental and economic dimensions of sustainability)?	• Presentation of the interactions (synergies/trade-offs) of the intervention with other sectors in the project design - also with regard to the sustainability dimensions in terms of Agenda 2030 (economic, ecological and social development)	The extent to which the project addresses the social, ecological and economic dimensions of sustainable development	same as above	same as above	same as above	good

Adaptability – response to change	Standard	To what extent has the intervention responded to changes in the environment over time (risks and potentials)?	• Reaction to changes during project including change offers (e.g. local, national, international, sectoral changes, including state-of-the-art sectoral know-how)	Identification of main changes in the context and the extent to which the project responded to these changes.	Evaluation design: - Context and project mapping Empirical methods: - Document analysis - Key informant interviews	BMZ Offer Amendments to BMZ Offer Project team GIZ SWM Cluster MoLA Mayor's office Municipal Environmental and Fleet Departments Municipal workshops Joint Service Council (Landfill management) Municipal council members	The main changes in the project design have been clearly described in the project amendments. The evaluation expects to collect solid information on the background and context of these changes during the field mission interviews and focus group discussions.	good

(1) The 'time of the intervention design' is the point in time when the offer/most recent modification offer was approved.

(2) In relation to the current standards, knowledge and framework conditions.

(3) The design of an intervention is usually assessed by evaluating its intervention logic. The intervention logic depicts the system of objectives used by an intervention. It maps out the systematic relationships between the individual results levels. At the time an intervention is designed, the intervention logic, in the form of a logical model, is described in the offer for the intervention both as a narrative and generally also on the basis of a results framework. The model is reviewed at the start of an evaluation and adjusted to reflect current knowledge. Comprehensive (re)constructed intervention logics are also known as "theories of change". In GIZ the 'project design' encompasses project objective (outcome) and the respective theory of change (ToC) with outputs, activities, TC-instruments and especially the results hypotheses as well as the implementation strategy (e.g. methodological approach, Capacity Development (CD) strategy). In GIZ the Theory of Change is described by the GIZ results model as graphic illustration and the narrative results hypotheses.

(4) In the GIZ Safeguards and Gender system risks are assessed before project start regarding following aspects: gender, conflict, human rights, environment and climate. For the topics gender and human rights not only risks but also potentials are assessed. Before introducing the new safeguard system in 2016 GIZ used to examine these aspects in separate checks.

(5) Deescalating factors/ connectors: e.g. peace-promoting actors and institutions, structural changes, peace-promoting norms and behaviour. For more details on ‘connectors’ see: GIZ (2007): ‘Peace and Conflict Assessment (PCA). Ein methodischer Rahmen zur konflikt- und friedensbezogenen Ausrichtung von EZ-Maßnahmen‘, p. 55/135.

(6) Escalating factors/ dividers: e.g. destructive institutions, structures, norms and behavior. For more details on ‘dividers’ see: GIZ (2007): ‘Peace and Conflict Assessment (PCA). Ein methodischer Rahmen zur konflikt- und friedensbezogenen Ausrichtung von EZ-Maßnahmen‘, p. 135.

(7) All projects in fragile contexts, projects with FS1 or FS2 markers and all transitional aid projects have to weaken escalating factors/dividers and have to mitigate risks in the context of conflict, fragility and violence. Projects with FS1 or FS2 markers should also consider how to strengthen deescalating factors/ connectors and how to address peace needs in its project objective/sub-objective.

OECD-DAC Criterion Coherence - How well does the intervention fit? (max. 100 points)
This criterion refers to the intervention's compatibility with other interventions in a country, sector or institution as well as with international norms and standards. **Internal coherence** addresses the synergies and division of tasks between the intervention and other interventions of German development cooperation and also the intervention's consistency with the relevant international norms and standards to which German development cooperation adheres. **External coherence** considers the intervention's complementarity, harmonisation and coordination with the interventions of other partners, donors and international organisations. The "coherence" criterion relates both to the intervention's design as well as to the results it achieves.

Assessment dimensions	**Filter - Project Type**	**Evaluation questions**	**Clarifications**	**Basis for Assessment / Evaluation indicators** *(e.g. module objective/programme indicators, selected hypotheses, or more generally a definition of the aspects to be used for evaluation)*	**Evaluation Design and empirical methods** (Design: e.g. Contribution analysis, Follow-the-Money Approach) (Methods: e.g. interviews, focus group discussions, document analysis, project/partner monitoring system, workshop, online survey, etc.)	**Data sources** (e.g. list of relevant documents, interviews with stakeholder category XY, specific data, specific monitoring data, specific workshop(s), etc.)	**Data Quality and limitations** (Description of limitations, assessment of data quality: poor, moderate, good, strong)	**Data Quality Assessment** (weak, moderate, good, strong)
Internal coherence	Standard	Within German development cooperation, to what extent is the intervention designed and implemented (in a sector, country, region or globally) in a complementary manner, based on the division of tasks?	• Also analysis of whether the project takes the necessary steps to fully realize synergies within German development cooperation	The extent to which ADHOC II *deliberately complements* other German development cooperation interventions and thereby (i) *achieves greater development outcomes* and impacts than these interventions could achieve on their own; and / or (ii) *realizes efficiency gains*, i.e., the development results are achieved with less resources than would otherwise be needed.	Evaluation Design: - Direct inquiry Empirical methods: - Document review - Key informant interviews	Project Annual report GIZ SWM cluster annual report Project team GIZ SWM Cluster MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal council members International development partners (at the national and local level) including EU, UNDP, World Bank, USAID.	Data is expected to be good due to the number and diversity of key informants.	good

	Standard	To what extent are the instruments of German development cooperation (Technical and Financial Cooperation) meaningfully interlinked within the intervention (in terms of both design and implementation)? Are synergies leveraged?	• if applicable, also take into account projects of different German resorts/ministries	The extent to which the technical cooperation of ADHOC II *deliberately complements* German financial cooperation interventions and thereby (i) *achieves greater development outcomes* and impacts than these interventions could achieve on their own; and / or (ii) *realizes efficiency gains*, i.e., the development results are achieved with less resources than would otherwise be needed.	Same as above	Same as above	Same as above	good
	Standard	To what extent is the intervention consistent with international and national norms and standards to which German development cooperation is committed (e.g. human rights)?		The extent to which ADHOC II complies with: LNOB, human rights, gender equity and conflict sensitive program management	Evaluation Design: - Direct inquiry Empirical methods: - Document review - Key informant interviews - Focus group discussions - Street interviews	GIZ Safeguard documents Project annual reports Project team MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal council members Joint Service Councils Civil society organizations Women organizations Refugee representatives / organization Residents / refugees	The project is focussed on improving technical capacities and processes and the across-the-broad improvement of SWM and societal stability in the municipalities. The project did little to socially target its assistance. The resultant project data base is limited. The project's boundary partners may have difficulty in articulating a view on the project's compliance with these standards.	moderate
External coherence	Standard	To what extent does the intervention complement and support the partner's own efforts (principle of subsidiarity)?		The extent to which ADHOC II places itself at the service of the local reform efforts by, and deliberately complements the efforts and capacities of, the national and/or local government.	Evaluation Design: - Direct inquiry Empirical methods: - Document review - Key informant interviews	Jordan Response Plan 2016-2018 & 2021-2023 National SWM Strategy 2015 municipal SWM Plans Project team MoLA Mayor's office Municipal council members Municipal Environmental Department	The data is expected to be good due to the combination of document review and relevant key informant interviews	good

	Standard	To what extent has the intervention's design and implementation been coordinated with other donors' activities?	• Also: To what extent could synergies be achieved through co-financing (where available) with other bilateral and multilateral donors and organizations and how did co-financing contribute to improved donor coordination?	The extent to which ADHOC II deliberately complements international development partner interventions and thereby (i) achieves greater development outcomes and impacts than these interventions could achieve on their own; and / or (ii) realizes efficiency gains, i.e., the development results are achieved with less resources than would otherwise be needed.	Evaluation Design: - Direct inquiry Empirical methods: - Key informant interviews	Project team GIZ SWM Cluster MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal council members International development partners (at the national and local level) including EU, UNDP, World Bank, USAID.	Data is expected to be strong due to the number and diversity of key informants.	good
	Standard	To what extent has the intervention's design been designed to use existing systems and structures (of partners/other donors/international organisations) for implementing its activities? To what extent are these systems and structures used?	• Also analysis of whether the project is taking the necessary steps to fully realize synergies with interventions of other donors at the impact level	The extent to which ADHOC II uses existing Jordanian or development partner systems and structures in project implementation	Evaluation Design: - Direct inquiry Empirical methods: - Document review - Key informant interviews	BMZ Offer Annual reports Project team GIZ SWM Cluster MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal council members International development partners (at the national and local level) including EU, UNDP, World Bank, USAID.	Data is expected to be good due to the number and diversity of key informants.	good
	Standard	To what extent are common systems (together with partners/other donors/international organisations) used for M&E, learning and accountability?		The extent to which ADHOC II uses existing Jordanian or development partner systems and structures in M&E, learning and accountability	Evaluation Design: - Direct inquiry Empirical methods: - Document review - Key informant interviews	Same as above	Same as above	good

OECD-DAC Criterion Effectiveness - Is the intervention achieving its objectives? (max. 100 points) 'Effectiveness' refers to the extent to which the intervention has achieved, or is expected to achieve, its objectives (at outcome level), including any differential results across beneficiary and stakeholder groups. It examines the achievement of objectives in terms of the direct, short-term and medium-term results.								
Assessment dimensions	**Filter - Project Type**	**Evaluation questions**	**Clarifications**	**Basis for Assessment / Evaluation indicators** *(e.g. module objective/programme indicators, selected hypotheses, or more generally a definition of the aspects to be used for evaluation)*	**Evaluation Design and empirical methods** (Design: e.g. Contribution analysis, Follow-the-Money Approach) (Methods: e.g. interviews, focus group discussions, document analysis, project/partner monitoring system, workshop, online survey, etc.)	**Data sources** (e.g. list of relevant documents, interviews with stakeholder category XY, specific data, specific monitoring data, specific workshop(s), etc.)	**Data Quality and limitations** (Description of limitations, assessment of data quality: poor, moderate, good, strong)	**Data Quality Assessment** (weak, moderate, good, strong)
Achievement of the (intended) objectives[1]	Standard	To what extent has the intervention achieved, or is the intervention expected to achieve, the (intended) objectives as originally planned (or as modified to cater for changes in the environment)?	• Assessment based on the project objective indicators (agreed with BMZ) • Check whether more specific or additional indicators are needed to adequately reflect the project objective	Objective statement: *'the execution of SWM task is improved in the five supported municipalities'.* Outcome indicators: Cost coverage ratio improved by 10% in Irbid and Mafraq 10 measures of the municipal waste management plans implemented in 4 of 5 municipalities 4 of 5 municipalities use of a digital system for improving SWM on the basis of customer feedback	Evaluation design: - Direct quantitative and qualitative inquiry Empirical methods: - Document analysis - Key informant interviews - Focus group discussions - Street interviews	Latest Results Matrix Municipal data Project team MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal council members Joint Service Councils Civil society organizations Women organizations Refugee representatives / organization Residents / refugees	Qualitative data is expected to be good: the number and diversity of key informants will offer a fair impression on the quality of municipal SWM. Meaningful quantitative data on the municipal performance in SWM (cost coverage ratio, waste collection rate) will be sparse and estimates only. See discussion in Inception Report.	moderate
	and Fragility	For projects with FS1 or FS2 markers: To what extent was the project able to strengthen deescalating factors/ connectors?[2, 4]		The extent to which solid waste collection and disposal has visibly improved in the five supported municipalities.	Same as above	Same as above	Same as above	moderate

	Contribution to achievement of objectives	Standard	*To what extent have the intervention's outputs been delivered as originally planned (or as modified to cater for changes in the environment)?*		4 of 5 municipalities approved (participatory-developed) municipal SWM plans 3 of 5 municipalities collect commercial waste tariffs based on a new commercial waste registry, 4 of 5 municipalities implemented a digital customer feedback system (including response processes), 4 of 5 municipalities use digital fleet maintenance plans and digital fleet management plans 85% of ca. 20 surveyed management and staff of the Ministry of Local Administration consider the new operations plan useful, the Ministry of Local Administration introduced an intercommunal benchmarking system.	Evaluation design: - Direct quantitative and qualitative inquiry Empirical methods: - Document analysis - Key informant interviews - Focus group discussions	Latest results matrix Municipal data Project team MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal council members Joint Service Councils Civil society organizations Women organizations Refugee representatives / organization	The data quality of both quantitative and qualitative data (at output level) is expected to be good.	good
		Standard	To what extent have the delivered outputs and increased capacities been used and equal access (e.g. in terms of physical, non-discriminatory and affordable access) guaranteed?		How have the project's boundary partners responded to GIZ' support? How has GIZ' support changed their perspective, rationale and behaviour? What is the result of this change in behaviour - what changes has this brought about? Has access to solid waste disposal increased?	Evaluation design: - Direct inquiry - Contribution analysis Empirical methods: - Document analysis - Key informant interviews - Focus group discussions	Project annual reports Project team MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal council members Joint Service Councils Civil society organizations Women organizations Refugee representatives / organization Residents / refugees	Qualitative data is expected to be good due to the number and diversity of key informants.	good

	Standard	To what extent has the intervention contributed to the achievement of objectives?	• Assessment based on the activities, TC-instruments and outputs of the project (contribution-analysis as focus of this assessment dimension and minimum standard, see annotated reports) • What would have happened without the project? (usually qualitative reflection)	the project's Theory of Change (see Section 2.2 of Inception Report)	Evaluation design: - Contribution analysis Empirical methods: - Document analysis - Key informant interviews - Focus group discussions - Street interviews	Theory of Change Latest results matrix Project team MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal council members Joint Service Councils Civil society organizations Women organizations Refugee representatives / organization Residents / refugees International development partners (at the national and local level): - EU - UNDP - World Bank - USAID Independent Jordan / SWM experts (academia)	Qualitative data is expected to be good due to the number and diversity of key informants. Quantitative data on impacts is expected to be sparse and indicative only.	moderate
	Standard	To what extent has the intervention contributed to the achievement of objectives at the level of the intended beneficiaries?		same as above	same as above	same as above	Qualitative data is expected to be good due to the number and diversity of key informants	good
	Standard	To what extent has the intervention contributed to the achievement of objectives at the level of particularly disadvantaged or vulnerable groups of beneficiaries and stakeholders? (These may be broken down by age, income, gender, ethnicity, etc.)?		same as above	same as above	same as above	same as above	good

	Standard	*Which internal factors (technical, organisational or financial) were decisive for achievement/non-achievement of the intervention's intended objectives?*	• Internal factors = within the project's sphere of responsibility / system boundary. The project is implemented jointly by GIZ and the official partner(s).	Based on the contribution analysis, what were the success (and fail) factors in the intervention	same as above	same as above	same as above	good
	Standard	*Which external factors were decisive for achievement/non-achievement of the intervention's intended objectives (taking into account the anticipated risks)?*	• External factors = outside the project's sphere of responsibility / system boundary. The project is implemented jointly by GIZ and the official partner(s).	Based on the contribution analysis, what were the critical external conditions / factors that contributed to the achievement / non-achievement of the objectives?	same as above	same as above	same as above	good
Quality of implementation	Standard	What assessment can be made of the quality of steering and implementation of the intervention in terms of the achievement of objectives? What assessment can be made of the quality of steering and implementation of, and participation in, the intervention by the partner/executing agency?	Capacity Works considerations: - Results-oriented monitoring (RoM / WoM) is established and used, e.g. for evidence-based decisions, risk management. Data are disaggregated by gender and marginalized groups. unintended positive and negative results are monitored. Conflict-sensitive monitoring and explicit risk-safety monitoring are particularly important for projects in fragile contexts. - A bindingly communicated strategy agreed with the partners is pursued - Involvement and cooperation of all relevant actors (including partners, civil society, private sector) - Steering: decisions influencing the project's results are made in time and evidence-informed. Decision processes are transparent. - Processes: Relevant change processes are anchored in the cooperation system; project-internal	The extent to which the project team, GIZ SWM Cluster, MoLA and the supported communities have actively and effectively steered on the achievement of the project objectives, including (i) regular context and results analysis; (ii) timely responding to project and context developments, (iii) using the M&E system; (iv) involving all stakeholders.	Evaluation design: - Direct inquiry Empirical methods: - Document analysis - Key informant interviews	Project annual reports Project team GIZ SWM Cluster MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal council members	Same as above (although relatively less people will be able to provide insight on this dimension, we rated the quality of data as good)	good

			processes are established and regularly reflected and optimised. - Learning and innovation: There is a learning and innovation-friendly work culture that promotes the exchange of experience; learning processes are established; context-specific adjustments are possible					
Unintended results	Standard	To what extent can unintended positive/negative direct results (social, economic, environmental and among vulnerable beneficiary groups) be observed/anticipated?	• The focus is on the outcome level, but for the analysis the unintended effects can also be included on the output level	Open inquiry amongst stakeholders and boundary partners after the (unintended) outcomes and impacts of the project, the benefits and risks emanating from them, and how the GIZ SWM Cluster responded to them.	Evaluation design: - Direct inquiry Empirical methods: - Document analysis - Key informant interviews - Focus group discussions	Annual reports Project team GIS SWM CLuster MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal council members Joint Service Councils Civil society organizations Women organizations Refugee representatives / organization Residents / refugees International development partners (at the national and local level): - EU - UNDP - World Bank - USAID Independent Jordan / SWM experts (academia)	Qualitative data is expected to be good due to the number and diversity of interviewees and focus group discussants.	good

	and Fragility	To what extent was the project able to ensure that escalating factors/ dividers[3] have not been strengthened (indirectly) by the project[4]? Has the project unintentionally (indirectly) supported violent or 'dividing' actors?		Same as row 5	Same as row 5	Same as row 5	Same as row 5	moderate
	Standard	What potential benefits/risks arise from the positive/negative unintended results? What assessment can be made of them?	• also check whether the risks were already mentioned and monitored in the design phase	Same as row 14	Same as row 14	Same as row 14	Same as row 14	good
	and Fragility	To what extent have risks and unintended-negative results in the context of conflict, fragility and violence[5] been monitored (context/conflict-sensitive monitoring) in a systematic way?		The extent to which the GIZ SWM Cluster applied Conflict Sensitive Program Management	Evaluation design: - Direct inquiry Empirical methods: - Document analysis - Key informant interviews	Project annual reports Project team GIZ SWM Cluster MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal council members	Qualitative data is expected to be good due to the number and diversity of interviewees and focus group discussants.	good
	Standard	How has the intervention responded to the potential benefits/risks of the positive/negative unintended results?	• Check if positive results at the outcome level have been monitored and set in value	Same as row 14	Same as row 14	Same as row 14	Same as row 14	good

(1) The first and second assessment dimensions are interrelated: If the project's contribution to achieving the objective is small (2nd assessment dimension), this must also be taken into account when evaluating the first assessment dimension.

(2) Deescalating factors/ connectors: e.g. peace-promoting actors and institutions, structural changes, peace-promoting norms and behavior. For more details on 'connectors' see: GIZ (2007): 'Peace and Conflict Assessment (PCA). Ein methodischer Rahmen zur konflikt- und friedensbezogenen Ausrichtung von EZ-Maßnahmen', p. 55/135.

(3) Escalating factors/ dividers: e.g. destructive institutions, structures, norms and behaviour. For more details on 'dividers' see: GIZ (2007): 'Peace and Conflict Assessment (PCA). Ein methodischer Rahmen zur konflikt- und friedensbezogenen Ausrichtung von EZ-Maßnahmen', p. 135.

(4) All projects in fragile contexts, projects with FS1 or FS2 markers and all transitional aid projects have to weaken escalating factors/dividers and have to mitigate risks in the context of conflict, fragility and violence. Projects with FS1 or FS2 markers should also consider how to strengthen deescalating factors/ connectors and how to address peace needs in its project objective/sub-objective?

(5) Risks in the context of conflict, fragility and violence: e.g. contextual (e.g. political instability, violence, economic crises, migration/refugee flows, drought, etc.), institutional (e.g. weak partner capacity, fiduciary risks, corruption, staff turnover, investment risks) and personnel (murder, robbery, kidnapping, medical care, etc.). For more details see: GIZ (2014): 'Context- and conflict-sensitive results-based monitoring system (RBM). Supplement to: The 'Guidelines on designing and using a results-based monitoring system (RBM) system.', p.27 and 28.

OECD-DAC Criterion Impact (higher-level development results) - What difference does the intervention make? (max. 100 points)
Based on recognisable higher-level development changes (at impact level), the criterion of "higher level development results (at impact level)" relates to the extent to which the intervention has already produced significant positive or negative, intended or unintended results at the overarching level (contributions to the observed changes) or is expected to do so in the future. This includes any differential results across different stakeholders and beneficiaries. This criterion refers to the results of the development intervention.

Assessment dimensions	**Filter - Project Type**	**Evaluation questions**	**Clarifications**	**Basis for Assessment / Evaluation indicators** *(e.g. module objective/programme indicators, selected hypotheses, or more generally a definition of the aspects to be used for evaluation)*	**Evaluation Design and empirical methods** (Design: e.g. Contribution analysis, Follow-the-Money Approach) (Methods: e.g. interviews, focus group discussions, document analysis, project/partner monitoring system, workshop, online survey, etc.)	**Data sources** (e.g. list of relevant documents, interviews with stakeholder category XY, specific data, specific monitoring data, specific workshop(s), etc.)	**Data Quality and limitations** (Description of limitations, assessment of data quality: poor, moderate, good, strong)	**Data Quality Assessment** (weak, moderate, good, strong)
Higher-level (intended) development changes[1]	Standard	To what extent can the higher-level development changes (social, economic and environmental dimensions and the interactions between them) to which the intervention will/is designed to contribute be identified/foreseen)? (Specify time frame where possible.)	• Consider module proposal for suggested impact and program objective indicators (program proposal), if it is not an individual measure • Potential basis for assessment: program objective indicators, identifiers, connection to the national strategy for implementing 2030 Agenda, connection to SDGs	The project's intended impacts are: improved public hygiene and nicer urban landscapes, ground water and soil protection, reduced tension and conflicts between residents and refugees, reduced stigmatization and marginalization of refugees, improved living conditions and security for residents and refugees, political stability in Jordan.	Evaluation design: - Direct quantitative and qualitative inquiry Empirical methods: - Document analysis - Key informant interviews - Focus group discussions - Street interviews	Latest Results Matrix Municipal data National surveys (if available) Project team MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal council members Joint Service Councils Civil society organizations Women organizations Refugee representatives / organization Residents / refugees	Qualitative data is expected to be good: the number and diversity of key informants will offer a fair impression on the extent that solid waste collection has improved and brought about the intended impacts. Meaningful quantitative data on the municipal performance in SWM (esp. waste collection rate) and impacts will be sparse and estimates only.	moderate
	Standard	To what extent can the higher-level development changes (social, economic, environmental dimensions and the interactions between them) be identified/foreseen at the level of the intended beneficiaries? (Specify time frame where possible.)		The project explicitly serves all residents and refugees in the supported municipalities. This question inquires whether residents and refugees experience (feel) the above impacts.	Same as above	Same as above	Qualitative data is expected to be good due to the number and diversity of key informants.	good

	Standard	To what extent can higher-level development changes to which the intervention will/is designed to contribute be identified/foreseen at the level of particularly disadvantaged/vulnerable groups of beneficiaries and stakeholders? (These may be broken down by age, income, gender, ethnicity, etc.) (Specify time frame where possible.)		The project explicitly serves all residents and refugees in the supported municipalities whereby the poorer population is expected to benefit disproportionately (as they possess less resources to cope with negative health impacts of street litter).	Same as above	Same as above	Same as above, although the lack of project focus on specific groups (e.g. poorer residents and women) will probably make most key informants less versed in the project impacts on specific groups of people.	moderate
Contribution to higher-level (intended) development changes	Standard	To what extent has the intervention actually contributed to the identified and/or foreseeable higher level development changes (social, economic, environmental dimensions and their interactions, taking into account political stability) that it was designed to bring about?	• Contribution analysis (evaluation design) as minimum standard and focus of this assessment dimension, further approaches are possible and welcome, see also annotated reports • Evaluation of the project's contribution to impacts based on an analysis of the results hypotheses from outcome to impact level	the project's Theory of Change (see Section 2.2 of Inception Report)	Evaluation design: - Contribution analysis Empirical methods: - Document analysis - Key informant interviews - Focus group discussions - Street interviews	Theory of Change Latest results matrix Project team MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal council members Joint Service Councils Civil society organizations Women organizations Refugee representatives / organization Residents / refugees International development partners (at the national and local level): - EU - UNDP - World Bank - USAID Independent Jordan / SWM experts (academia)	Qualitative data is expected to be good due to the number and diversity of key informants.	good

	Standard	To what extent has the intervention achieved its intended (original and, where applicable, revised) development objectives?	• This question can already be assessed in Dimension 1 Question 1, the contribution to impact is assessed in Dimension 2, Question 1	Same as row 4 and 8 (Note: this question inquires both into impact achievement and project contribution)	Same as row 4 and 8	Same as row 4 and 8	Same as row 4 and 9	good
	Standard	To what extent has the intervention achieved its (original and, where applicable, revised) development objectives at the level of the intended beneficiaries?		Same as row 6 and 8 (Note: this question inquires both into impact achievement and project contribution)	Same as row 6 and 8 (Note: this question inquires both into impact achievement and project contribution)	Same as row 6 and 8 (Note: this question inquires both into impact achievement and project contribution)	Same as row 6 and 8 (Note: this question inquires both into impact achievement and project contribution)	good
	Standard	To what extent has the intervention contributed to higher-level development changes/changes in the lives of particularly disadvantaged or vulnerable groups of beneficiaries and stakeholders that it was designed to bring about? (These may be broken down by age, income, gender, ethnicity, etc.).		Same as row 7 and 8 (Note: this question inquires both into impact achievement and project contribution)	Same as row 7 and 8 (Note: this question inquires both into impact achievement and project contribution)	Same as row 7 and 8 (Note: this question inquires both into impact achievement and project contribution)	Same as row 7 and 8 (Note: this question inquires both into impact achievement and project contribution)	good
	Standard	*Which internal factors (technical, organisational or financial) were decisive for achievement/non-achievement of the intervention's intended development objectives?*	• Internal factors = within the project's sphere of responsibility / system boundary. The project is implemented jointly by GIZ and the official partner(s)	Based on the contribution analysis, what were the success (and fail) factors in the intervention	Same as row 8	Same as row 8	Same as row 9	good
	Standard	*Which external factors were decisive for the achievement/non-achievement of the intervention's intended development objectives?*	• External factors = outside the project's sphere of responsibility / system boundary. The project is implemented jointly by GIZ and the official partner(s). • Take into account the activities of other actors or other policies, framework conditions, other policy areas, strategies or interests (German ministries, bilateral and multilateral development partners)	Based on the contribution analysis, what were the critical external conditions / factors that contributed to the achievement / non-achievement of the objectives?	Same as row 8	Same as row 8	Same as row 9	good

	Standard	To what extent has the intervention achieved structural or institutional changes (e.g. for organisations, systems and regulations)?		This question inquires into the type of change that has been achieved. This evaluation distinguishes between systemic and organization change. Systemic / transformational change: change in perspective, rationale and behaviour of key (groups of) agents which leads to a different organization / structure of the state, society or a sector. Organizational change: a change in the institution, organization or rules. Such a structural / institutional change can stem both from a rationale decision to organize the affairs of the state / society differently without changing the underlying rationale of the agents / institutions) or stem from a systemic change (see above).	Evaluation design: - Contribution analysis - Direct inquiry Empirical methods: - Key informant interviews - Focus group discussions	Project team MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal council members Joint Service Councils Civil society organizations Women organizations Refugee representatives / organization Residents / refugees International development partners (at the national and local level): - EU - UNDP - World Bank - USAID Independent Jordan / SWM experts (academia)	Qualitative data is expected to be good due to the number and diversity of key informants.	good
	Standard	To what extent did the intervention serve as a model and/or achieve broad-based impact?	• Scaling-up is a consciously designed process to anchor changes in organisations and cooperation systems (e.g. concepts, approaches, methods) to generate broad impact • There is vertical scaling-up, horizontal scaling-up, functional scaling-up or a combination of these[2] • also analyse possible potential and reasons for not exploiting it	This question inquires into the extent to which the project's approaches and lessons learned are taken up in other national or international development programs to extend the impact of the intervention (approach)	Evaluation design: - Direct inquiry Empirical methods: - Key informant interviews	Same as above	Same as above	good

	Standard	*How would the situation have developed without the intervention?*	• usually qualitative reflection, quantitative approaches welcome	This question inquires into possible scenarios that could have occurred without the project intervention.	Evaluation design: - Direct inquiry Empirical methods: - Key informant interviews - Focus group discussions	Same as above	Same as above	good
Contribution to higher-level (unintended) development changes	Standard	To what extent can higher-level, unintended development changes (social, economic and environmental dimensions and their interactions, taking into account political stability) be identified/foreseen? (Specify time frame where possible.)		Open inquiry amongst stakeholders and boundary partners after the (unintended) outcomes and impacts of the project and the benefits and risks emanating from them.	Evaluation design: - Direct inquiry Empirical methods: - Key informant interviews - Focus group discussions	Same as row 14	Same as row 14	good
	and Fragility	To what extent did the project have (unintended) negative or escalating effects on the conflict or the context of fragility (e.g. conflict dynamics, violence, legitimacy of state and non-state actors/institutions)? To what extent did the project have positive or deescalating effects on the conflict or the context of fragility (e.g. conflict dynamics, violence, legitimacy of state and non-state actors/institutions)?		Open inquiry amongst stakeholders into the project's impact on the (potential of) societal conflict? The extent to which escalating factors / dividers and deescalating factors / connectors have been identified and weakened / strengthened	Evaluation design: - Direct inquiry Empirical methods: - Key informant interviews - Focus group discussions	Same as row 14	Same as row 14	good
	Standard	To what extent has the intervention brought about foreseeable/identifiable unintended (positive and/or negative) higher-level development results?	• Analyse whether the risks were already known in the design phase • Check how the assessment of risks in connection with (unintended) negative or (not formally agreed) positive results at the impact level in the monitoring system has been carried out (e.g. use of 'compass') • measures taken to avoid or counteract the risks/ negative effects/	The question is a variant on the question in row 18. The difference between the two questions is whether the unintended impact is expected or has already occurred. The clarifications point into a different line of inquiry, namely to what extent the unintended impacts (and the benefits, risks, and trade-offs associated with them) had been foreseen.	Evaluation design: - Direct inquiry Empirical methods: - Key informant interviews - Focus group discussions	Same as row 14	Same as row 14	good

			trade-offs[3] • Determine relevant framework conditions for negative results and the project's reaction to them • Examine to what extent potential (not formally agreed) positive results and synergies between the ecological, economic and social development dimensions have been monitored and exploited					
	Standard	To what extent has the intervention contributed to foreseeable/identifiable unintended (positive and/or negative) higher-level development results at the level of particularly disadvantaged or vulnerable groups of beneficiaries and stakeholders? (These may be broken down by age, income, gender, ethnicity, etc.)		Assess whether the project's Theory of Change held up in practice	Evaluation design: - Contribution analysis Empirical methods: - Document analysis - Key informant interviews - Focus group discussions - Street interviews	Same as row 8	Same as row 8	good

(1) The first and second assessment dimensions are interrelated: If the project's contribution to achieving the objective is small (2nd assessment dimension), this must also be taken into account when evaluating the first assessment dimension.

(2) See GIZ 2016 'Guidelines on scaling-up for programme managers (AV) and planning officers'

(3) Risks, negative effects and trade-offs are separate aspects that should be discussed individually at this point.

OECD-DAC Criterion Efficiency - How well are resources being used? (max. 100 points)
This criterion describes the extent to which the intervention delivers results in an economic and timely way (relationship between input and output, outcome and impact level). The evaluation dimension "**production efficiency**" refers to the appropriateness of the relationship between inputs and outputs. The evaluation dimension "**allocation efficiency**" refers to the appropriateness of the relationship between the inputs and the results achieved (project/development objective; outcome/impact level) by the intervention. The "efficiency" criterion relates both to the intervention's design and implementation and to the results it achieves.

Assessment dimensions	**Filter - Project Type**	**Evaluation questions**	**Clarifications**	**Basis for Assessment / Evaluation indicators** *(e.g. module objective/programme indicators, selected hypotheses, or more generally a definition of the aspects to be used for evaluation)*	**Evaluation Design and empirical methods** (Design: e.g. Contribution analysis, Follow-the-Money Approach) (Methods: e.g. interviews, focus group discussions, document analysis, project/partner monitoring system, workshop, online survey, etc.)	**Data sources** (e.g. list of relevant documents, interviews with stakeholder category XY, specific data, specific monitoring data, specific workshop(s), etc.)	**Data Quality and limitations** (Description of limitations, assessment of data quality: poor, moderate, good, strong)	**Data Quality Assessment** (weak, moderate, good, strong)
Production efficiency	Standard	*How are the intervention's inputs (financial, human and material resources) distributed (e.g. by instruments, sectors, sub-interventions, taking into account the cost contributions of partners/executing agencies/other beneficiaries and stakeholders etc.)?*	• Description of the data: Costs per output, type of costs, agreed and provided partner contributions • Description of the deviations between original planned costs and actual costs (with comprehensible justification, changes are certainly desirable for increased efficiency)	The set of questions under production efficiency inquires into: - How much money was spent per output? - What were the most effective inputs? - Were there ineffective inputs? - Could the same results have been achieved with less resources? - Could better results have been achieved through a different allocation of resources? - What internal and external (contextual) factors / developments influenced the resource allocation choices? - Did internal or external coherence allow for a more efficient implementation? - How did the partner contributions contribute to the cost-effectiveness? - Did the project apply a Follow-the-money approach and analysis in project steering? - Did the project set-up (structure, processes, organization, etc.) enable / facilitate the efficient implementation and steering of the project? - How were resource savings used?	Evaluation design: - Follow-the-money approach - Contribution analysis - Yield maximization and cost minimization analysis Empirical methods: - Efficiency tool - Key informant interviews	Cost-unit commitment report Human resource allocation report Operational plan of the project Project team MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal workshops Municipal council members International development partners (at the national and local level), including EU, UNDP, World Bank and USAID Independent Jordan / SWM experts (academia)	Financial project data is according to GIZ standard. Allocation of cost categories over outputs is done based on expert-judgment from the project team (in consultation with the evaluation team). Qualitative data is expected to be good due to the number and diversity of key informants.	good

	Standard	To what extent have the intervention's inputs (financial, human and material resources) been used economically in relation to the outputs delivered (products, investment goods and services)? If possible, refer to data from other evaluations in a region or sector, for instance.	• Use of 'Efficiency tool' including instructions and use of the follow-the-money approach as evaluation design • Output level: Analysis of approaches and activities as well as TC instruments (personnel instruments, financing, materials and equipment)1 compared to possible alternatives with a focus on the minimum principle (use of comparative data if available) • The project is oriented on internal or external benchmarks in order to achieve its effects economically • Regular reflection of the resources used by the project with focus on economically use of resources and cost risks • The overarching costs of the project are in an appropriate proportion to the costs of the outputs	Same as above	Same as above	Same as above	Same as above	good
	Standard	To what extent could the intervention's outputs (products, investment goods and services) have been increased through the alternative use of inputs (financial, human and material resources)? If possible, refer to data from other evaluations of a region or sector, for instance. (If applicable, this question adds a complementary perspective*) * This case is always applicable in the technical cooperation	• Use of 'Efficiency tool' including instructions and use of the follow-the-money approach as evaluation design • Output level: Analysis of approaches and activities as well as TC instruments (personnel instruments, financing, materials and equipment)[1] compared to possible alternatives with focus on output maximization (use of comparative data if available) • Analysis of alternative options for allocating resources and shifts between outputs for output maximisation	Same as above	Same as above	Same as above	Same as above	good

		(TC), please answer the question bindingly	• saved resources can and should be used to maximise outputs • Reflection of the resources during the design phase and regularly during the implementation of the project with focus on output maximisation (with comprehensible justification, changes are certainly desirable for increased efficiency) • 'maximising outputs' means with the same resources, under the same conditions and with the same or better quality					
	Standard	Were the outputs (products, investment goods and services) produced on time and within the planned time frame?		The project outputs and outcomes are to be delivered by the end of October 2021.	Evaluation design: - Direct inquiry Empirical methods: - Document analysis - Key informant interviews	Project monitoring data (Results Matrix) Project annual reports Project completion report Project team MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal workshops Municipal council members	Quantitative data is expected to be good due to the project's reporting requirements. Qualitative data is expected to be good due to the number and diversity of key informants.	good
Allocation efficiency	Standard	*By what other means and at what cost could the results achieved (higher-level project objective) have been attained?*		Same as above - see row 4 (albeit at the outcome level)	Same as above - see row 4	Same as above - see row 4	Same as above - see row 4	good
	Standard	To what extent – compared with alternative designs for the intervention – could the results have been attained more cost-effectively?	• Outcome level: Analysis of approaches and activities as well as TC-instruments in comparison to possible alternatives with focus on minimum principle (use of comparative data if available) • Regular reflection in the project of the input-outcome relation and alternatives as well as cost risks • The partner	Same as above - see row 4 (albeit at the outcome level)	Same as above - see row 4	Same as above - see row 4	Same as above - see row 4	good

			contributions are proportionate to the costs for the outcome of the project					
	Standard	To what extent – compared with alternative designs for the intervention – could the positive results have been increased using the existing resources? (If applicable, this question adds a complementary perspective*) * This case is always applicable in the technical cooperation (TC), please answer the question bindingly	• Outcome level: Analysis of applied approaches and activities as well as TC-instruments compared to possible alternatives with focus on maximizing the outcome (real comparison if available) • The project manages its resources between the outputs in such a way that the maximum effects in terms of the module objective are achieved • Regular reflection in the project of the input-outcome relation and alternatives • Reflection and realization of possibilities for scaling-up • If additional funds (e.g. co-financing) have been raised: Effects on input-outcome ratio (e.g. via economies of scale) and the ratio of administrative costs to total costs • Losses in efficiency due to insufficient coordination and complementarity within German DC are sufficiently avoided	Same as above - see row 4 (albeit at the outcome level)	Same as above - see row 4	Same as above - see row 4	Same as above - see row 4	good

(1) see GIZ 2015: 'Integration of TC Instruments – Key Elements', based on BMZ 2014: Handbuch der bilateralen TZ Verfahrensinformation Nr. VI0362014 'Eckpunkte zur Instrumentenintegration'

OECD-DAC Criterion Sustainability - Will the benefits last? (max. 100 points)
The 'sustainability' criterion relates to continued long-term benefits (at the outcome and impact level) or the probability of continued long-term benefits – taking into account observed or foreseeable risks – over time, particularly after assistance has ended.

Assessment dimensions	**Filter - Project Type**	**Evaluation questions**	**Clarifications**	**Basis for Assessment / Evaluation indicators** *(e.g. module objective/programme indicators, selected hypotheses, or more generally a definition of the aspects to be used for evaluation)*	**Evaluation Design and empirical methods** (Design: e.g. Contribution analysis, Follow-the-Money Approach) (Methods: e.g. interviews, focus group discussions, document analysis, project/partner monitoring system, workshop, online survey, etc.)	**Data sources** (e.g. list of relevant documents, interviews with stakeholder category XY, specific data, specific monitoring data, specific workshop(s), etc.)	**Data Quality and limitations** (Description of limitations, assessment of data quality: poor, moderate, good, strong)	**Data Quality Assessment** (weak, moderate, good, strong)
Capacities of the beneficiaries and stakeholders	Standard	To what extent do the beneficiaries and stakeholders (individuals, groups and organisations, partners and executing agencies) have the institutional, human and financial resources as well as the willingness (ownership) required to sustain the positive results of the intervention over time (once assistance has drawn to a close)?	• Transitional Development Assistance (TDA) projects primarily address final beneficiaries, whose resilience to crises and recurring shocks is to be strengthened. The focus for TDA projects is thus often on the resilience of final beneficiaries and/or at least the continuity of the measure (see explanation in dimension 3) (clarification in the inception phase of the evaluation).	This question inquires into the extent to which the project's boundary partners and relevant stakeholders / reform actors have the interest, incentive, influence, capacity, resources, and tenacity to continue the work after GIZ' support ceases.	Evaluation design: - Direct inquiry Empirical methods: - Key informant interviews - Focus group discussions	Project team MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal workshops Municipal council members Joint Service Councils Civil society organizations Women organizations Refugee representatives / organization International development partners (at the national and local level) including EU, UNDP, World Bank, USAID. Independent Jordan / SWM experts (academia)	Qualitative data is expected to be good due to the number and diversity of key informants.	good
	Standard	To what extent do the beneficiaries and stakeholders (individuals, groups and organisations, partners and executing agencies) have the resilience to overcome future risks that could jeopardise the intervention's results?		This question builds on the previous one and adds the dimension of resilience.	Same as above	Same as above	Same as above	good

Contribution to supporting sustainable capacities	Standard	To what extent has the intervention contributed to the beneficiaries and stakeholders (individuals, groups and organisations, partners and executing agencies) having the institutional, human and financial resources as well as the willingness (ownership) required to sustain the intervention's positive results over time and to limit the impact of any negative results?	• Analysis of the preparation and documentation of learning experiences • Description of the anchoring of contents, approaches, methods and concepts in the partner system • Reference to exit strategy of the project • If there is a follow-on project, check to what extent the results of the evaluated project are taken up; the anchoring of the effects in the partner's organisation should be pursued independently of a follow-on project, since sustainability should be achieved even without donor funds • Transitional Development Assistance (TDA) projects primarily address final beneficiaries, whose resilience to crises and recurring shocks is to be strengthened. The focus for TDA projects is thus often on the resilience of final beneficiaries and/or at least the continuity of the measure (see explanation in dimension 3) (clarification in the inception phase of the evaluation)	the project's Theory of Change	Evaluation design: - Direct inquiry - Contribution analysis Empirical methods: - Document analysis - Key informant interviews - Focus group discussions	Theory of Change Latest Results Matrix Latest Annual Report Project completion report Project team MoLA Mayor's office Municipal Environmental and Fleet Management Departments Municipal workshops Municipal council members Joint Service Councils Civil society organizations Women organizations Refugee representatives / organization International development partners (at the national and local level) including EU, UNDP, World Bank, USAID. Independent Jordan / SWM experts (academia)	Qualitative data is expected to be good due to the number and diversity of key informants.	good
	Standard	To what extent has the intervention contributed to strengthening the resilience of the beneficiaries and stakeholders (individuals, groups and organisations,		Same as above	Same as above	Same as above	Same as above	good

		partners and executing agencies)?						
	Standard	To what extent has the intervention contributed to strengthening the resilience of particularly disadvantaged groups? (These may be broken down by age, income, gender, ethnicity, etc.)		Same as above	Same as above	Same as above	Same as above	good
Durability of results over time	Standard	*How stable is the context in which the intervention operates?*						
	Standard	*To what extent is the durability of the intervention's positive results influenced by the context?*	• Consideration of risks and potentials for the long-term stability of the results and description of the reaction of the project to these					
	Standard	To what extent can the positive (and any negative) results of the intervention be deemed durable?	• Consideration of the extent to which continued use of the results by partners and beneficiaries can be foreseen • Reference to conditions and their influence on the durability, longevity and resilience of the effects (outcome and impact) • In the case of projects in the field of Transitional Development Assistance (TDA), at least the continuity of the measure must be examined: To what extent will services or results be continued in future projects (of GIZ or other donors/organizations) or their sustainability ensured? (Clarification in the inception phase)	This question seeks to draw a conclusion from the analysis of the first two dimensions under this evaluation criterion and come to a prediction as to the likelihood that the key stakeholders will continue (to improve) solid waste collection and contributing to (enhanced) public hygiene, environmental protection and social cohesion. This depends on (i) the interests, incentives, influence, capacity, resources, and tenacity of the local stakeholders, (ii) the autonomy, resources and support they receive from the central government, and (iii) geopolitical and meteorological stability.	Evaluation design: - Deductive analysis Empirical methods: - Key informant interviews - Focus group discussions	Same as row 4	Same as row 4	good

Predecessor project, follow-on project and further evalutation questions

Assessment dimensions	**Evaluation questions**	**Basis for Assessment / Evaluation indicators** *(e.g. module objective/programme indicators, selected hypotheses, or more generally a definition of the aspects to be used for evaluation)*	**Evaluation Design and empirical methods** (Design: e.g. Contribution analysis, Follow-the-Money Approach) (Methods: e.g. interviews, focus group discussions, document analysis, project/partner monitoring system, workshop, online survey, etc.)	**Data sources** (e.g. list of relevant documents, interviews with stakeholder category XY, specific data, specific monitoring data, specific workshop(s), etc.)	**Data Quality and limitations** (Description of limitations, assessment of data quality: poor, moderate, good, strong)	**Data Quality Assessment** (weak, moderate, good, strong)
Impact of the predecessor project (if predecessor project exists)	*Which results were envisaged at the impact level of the predecessor project and which were achieved?*	The project is an individual measure. The Results Matrix does not include an impact statement and impact-level results indicators. Like the current project, the envisaged impacts can be deduced from BMZ Offer (2014). Like the current project, improved municipal solid waste collection and management was to improve public hygiene, reduce ground water and soil pollution, reduce tension and conflicts between residents and refugees, improve living conditions and security for residents and refugees, and thus contribute to political stability in Jordan.	Evaluation design: - Direct quantitative and qualitative inquiry - Contribution analysis Empirical methods: - Document analysis - Key informant interviews - Focus group discussions - Street interviews	Predecessor project completion report Project team GIZ SWM Cluster MoLA Mayor's office Municipal Environmental and Fleet Departments Municipal workshops Joint Service Council (Landfill management) Municipal council members Civil society organizations Women organizations Refugee representatives / organization Residents and refugees	The project team observed that there is limited to no reliable quantitative data available at the outcome level. This was confirmed by our discussions with the municipalities. The municipalities are not in a position to adequately define and collect information on the solid waste collection rate (in terms of tonnage produced and collected, per household and in total). Quantitative data at the impact level (on public hygiene, environmental pollution, societal tension, living conditions) are even sparser. Finally, the current project (under evaluation) directly continued the main activities of the predecessor project, making it challenging to delineate the impact of the predecessor and the current project. The evaluation will to a large extent need to rely on the collection of qualitative data and through detailed contribution analysis seek to delineate the respective contributions of the predecessor and current project to the observed outcomes and impacts.	moderate
	Which results of the predecessor are still visible today at impact level?	Same a above	Same a above	Same a above	Same as above	moderate
	Which results of the predecessor are only visible today at impact level?	Same a above	Same a above	Same a above	Same as above	moderate

	How were changes in the framework conditions handled over time (including transition between different projects)? Which decisions in previous projects influence the impact of the predecessor as well as the current project until today? How?	This question inquires how the predecessor project influenced / contributed to the current project (within a changing environment)	Evaluation design: - Direct qualitative inquiry - Contribution analysis Empirical methods: - Document analysis - Key informant interviews - Focus group discussions	Predecessor project completion report GIZ SWM Cluster MoMA Mayor's office Municipal Environmental and Fleet Departments Municipal workshops Joint Service Council (Landfill management) Municipal council members Civil society organizations Women organizations Refugee representatives / organization	The current project (under evaluation) directly continued the main activities of the predecessor project, making it likely difficult for most stakeholders to distinguish between the projects. It requires a good memory and sense of time of the stakeholders. Positive is that the local project team experts were present throughout both the predecessor and the current project, which allows us to understand the project's perspective on this question.	moderate
	What were factors for success / failure for the impact of the predecessor?	Same as above	Same as above	Same as above	Same as above	moderate
Sustainability of the predecessor project (if predecessor project exists)	*Which results were envisaged at the outcome level of the predecessor project and which were achieved?*	The predecessor project sought to improve municipal solid waste collection and management.	Evaluation design: - Direct quantitative and qualitative inquiry Empirical methods: - Document analysis - Key informant interviews - Focus group discussions - Street interviews	Predecessor project completion report GIZ SWM Cluster MoLA Mayor's office Municipal Environmental and Fleet Departments Municipal workshops Joint Service Councils Municipal council members Civil society organizations Women organizations Refugee representatives / organization Residents and refugees	Same as above (at the top: Cell G4)	moderate
	Which results at outcome level (and important outputs) are still present or have been further developed by the partners? (Without external funding vs. with external funding)	Same as above	Same as above	Same as above	Same as above	moderate

	How were the results of the predecessor anchored in the partner structure?	This question inquires whether and how the project's boundary partners have internalized the results and approaches of the predecessor project and, by extension, whether they are sustainable.	Evaluation design: - Contribution analysis Empirical methods: - Document analysis - Key informant interviews - Focus group discussions	Predecessor project completion report GIZ SWM Cluster MoLA Mayor's office Municipal Envirinmental and Fleet Departments Municipal service yards Municipal council members Civil society organizations Women organizations Refugee representatives / organization	Same as above (Cell G7)	moderate
	How were changes in the framework conditions handled over time (including transition between different projects)? Which decisions in previous projects influence the sustainability of the predecessor and the current project until today? How?	Same as row 7	Same as row 7	Same as row 7	Same as row 7	moderate
	What were factors for success / failure for the sustainability of the predecessor?	Same as row 7	Same as row 7	Same as row 7	Same as row 7	moderate
Follow-on project: Analysis of the design and recommendations for implementation (if a follow-on project exists)	Evaluability and design of the successor: Are the results model for the follow-on project including the results hypotheses, the results-oriented monitoring system (WoM) and the project objective indicators plausible (and in line with current standards)? Are there - also based on the evaluation of the current project - recommendations for improvements in the further course of the follow-on project?	The clarification poses two questions. The second question is the same as the follow-on evaluation question and is covered in the next row. The first question inquires whether - based on the evaluators' experience and the evaluation's lessons learned - the results model, monitoring system and objective indicators of the successor project are relevant, plausible, realistic and measurable.	Evaluation design: - Peer review Empirical methods: - Document analysis - Key informant Interview	BMZ Offer Follow-on Project Results Matrix Results Model GIZ SWM Cluster		good
	Based on the results of the evaluation of the current project: Which recommendations can be derived for the implementation of the follow-on project?	Based on the purpose, scope, and approach of the successor project and the lessons learned of the evaluation, how can the successor project design and/or implementation be further improved?	Evaluation design: - Peer review Empirical methods: - Document analysis - Key informant Interview	BMZ Offer Follow-on Project Results Matrix Results Model GIZ SWM Cluster	A thorough assessment of GIZ' past performance in SWM in Jordan will offer valuable and relevant lessons (and/or confirmations) for the follow-on project.	good

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Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn

Friedrich-Ebert-Allee 32 + 36
53113 Bonn, Germany
T: +49 228 44 60-0
F: +49 228 44 60-17 66

Dag-Hammarskjöld-Weg 1–5
65760 Eschborn, Germany
T: +49 6196 79-0
F: +49 6196 79-11 15

E: info@giz.de
I: www.giz.de

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH