Grant Aid for Environmentally Sound Management of Earthquake Debris and Safe Disposal of Hazardous Waste

Final Evaluation

Evaluation data collection: July-August 2024

Final Evaluation Report

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Acknowledgement

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Special thanks are extended to all project stakeholders and beneficiaries who participated in the interviews for their open views and candid opinions on implementation of the project and achievement of the planned targets.

Acronyms and Abbreviations

CDR	Combined Delivery Report
CO	Country Office
CPD	Country Program Document
FE	Final Evaluation
MoEUCC	Ministry of Environment, Urbanization and Climate Change
M&E	Monitoring and Evaluation
NGO	Non-Governmental Organisation
OCHA	UN Office for the Coordination of Humanitarian Affairs
PMC	Project Management Cost
PRF	Project Results Framework
ProDoc	Project Document
SDG	Sustainable Development Goal
TERRA	Türkiye Earthquakes Recovery and Reconstruction Assessment
TERREP	Türkiye Earthquake Recovery and Reconstruction Project
ToC	Theory of Change
ToR	Terms of Reference
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEG	United Nations Evaluation Group
UNSDCF	United Nations Sustainable Development Cooperation Framework
YTÜ	Yıldız Technical University

Table of Contents

Glossary of Evaluation-related Terms

Term	Definition
Baseline data	Data that describe the situation to be addressed by an intervention and serve as the starting point for measuring the performance of the intervention
Beneficiaries	The specific individuals or organizations for whose benefit an intervention is undertaken
Capacity development	The process by which individuals, organizations, institutions and societies develop their abilities individually and collectively to perform functions, solve problems and set and achieve objectives
Conclusion	A reasoned judgement based on a synthesis of empirical findings or factual statements corresponding to a specific circumstance
Effect	Intended or unintended change due directly or indirectly to an intervention
Effectiveness	The extent to which the development intervention's objectives were achieved, or are expected to be achieved
Efficiency	A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results
Finding	A factual statement about the programme or project based on empirical evidence gathered through monitoring and Evaluation activities
Impact	Positive and negative, intended and non-intended, directly and indirectly, long term effects produced by a development intervention
Indicator	Quantitative or qualitative factors that provide a means to measure the changes caused by an intervention
Lessons learned	Generalizations based on Evaluation experiences that abstract from the specific circumstances to broader situations
Logframe (logical framework approach)	Management tool used to facilitate the planning, implementation and Evaluation of an intervention. It involves identifying strategic elements (activities, outputs, outcome, impact) and their causal relationships, indicators, and assumptions that may affect success or failure. Based on RBM (results-based management) principles
Outcome	The likely or achieved (short- or medium-term) effects of an intervention's outputs
Output	The product, capital goods and/or service which results from an intervention; may also include a change resulting from the intervention which is relevant to the achievement of an outcome
Recommendation	A proposal for action to be taken in a specific circumstance, including the parties responsible for that action
Relevance	The extent to which the objectives of an intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donor's policies
Risk	Factor, normally outside the scope of an intervention, which may affect the achievement of an intervention's objectives
Sustainability	The continuation of benefits from an intervention, after the development assistance has been completed
Stakeholders	The specific individuals or organizations that have a role and interest in the objectives and implementation of a programme or project
Theory of Change	A set of assumptions, risks and external factors that describes how and why an intervention is intended to work.

Executive Summary

Project information table

Project Title	Grant Aid for Environmentally Sound Management of Earthquake Debris and Safe Disposal of Hazardous Waste		
UNDP Quantum ID#:	01001223	**Project Document signature date**	10.01.2024
Country:	Türkiye	**Date Project Manager hired:**	
Region:	Europe	**Inception Workshop date:**	N.A.
Focal Area:	Disaster Management	**Planned closing date:**	16 August 2024
		Actual closing date	16 August 2024
Executing Agency/ Implementing Partner:	UNDP and MoUECC under National Implementation Modality NIM)		
Project Financing	***at approval (US$)***	***At Terminal Evaluation (US$)***	
Donor financing:	4,833,584	4,777,014.47	

Evalution purpose, objectives and scope

The purpose of the Final Evaluation (the Evaluation) is to provide an impartial in-depth review of all aspects of the project and assess the expected results and specific objectives achieved against those stated in the Project Document. It also identifies the lessons learned and recommendations relevant to the planning, preparation and implementation of a possible follow-up project.

The Evaluation assesses the extent to which the planned project results have been achieved since the beginning of the project on 16 August 2023 until the end of the project on 15 August 2024.

Project description

The primary objective of the project is to support environmentally sound management of earthquake debris and hazardous waste through planning and establishment of debris recycling facilities/mobile crushers in the Hatay and Kahramanmaraş provinces that experienced the worst destruction in the February earthquakes. The project design includes assessment of all sites where earthquake debris is stored and preparation of a strategy and action plan to ensure the environmentally sound management of the full volume of earthquake debris, with a focus on reducing volume, recycling a maximum share of resources and safe disposal of hazardous waste. Specifically, the project aims at construction of two model sites for the recycling of earthquake rubble and provision of mobile crushing facilities for on-site debris processing.

Development of the project proposal started in March 2023. The draft project proposal was verified with the representatives of the Ministry of Environment, Urbanisation and Climate Change (MoEUCC) and approved by the local Project Appraisal Committee on 13 October 2023. The project was approved for the duration of one year and its implementation commenced on 16 August 2023. The project budget is US$ 4.833,584. The planned completion date is 15 August 2024.

Main findings and conclusions

Relevance and coherence

Quick formulation and launching of the project was relevant to the immediate response to the February 2023 earthquake. The project is aligned with the Government of Türkiye emergency response measures and reconstruction plans outlined in the Türkiye Earthquakes Recovery and Reconstruction Assessment (TERRA) that was compiled in the aftermath of the February 2023 earthquake.

The project is also aligned with the UNDP Country Programme Document for Türkiye, UN Sustainable Development Cooperation Framework, and supports number of UN Sustainable Development Goals (SDGs), namely SDG #3: SDG #5:SDG #12: SDG # 14: and SDG #15.

The project is also in line with the funding priorities of Government Japan in Türkiye

Effectiveness

- Preliminary assessment report on prioritisation and management of debris storage sites in the Hatay and Kahramanmaraş provinces
- 1 stationary debris recycling facility established in the Hatay province
- 1 stationary debris recycling facility established in the Kahramanmaraş province
- 3 mobile crushers for debris processing
- 14,880 of PPE units delivered for operators of the recycling facilities
- Operational Health and Safety training for 21 operators that will work at the debris recycling facilities completed
- Operational and supervision plan for the facilities prepared
- 2 asbestos testing equipment units procured
- 2 dust abatement systems procured for the recycling facilities
- Asbestos management plan prepared for safe debris handling and management
- International asbestos management guideline prepared for effective debris management
- Strategy & Roadmap Report for management of debris in Hatay and Kahramanmaraş
- Japan experience and practice in management of debris made available to the project beneficiaries
- Awareness workshops conducted with local stakeholders for validation of findings of the technical reports

Efficiency

The project was approved for 12-month duration and will be operationally concluded on the originally planned project closure date of 16 August 2024. Although the total duration of the project was not affected, several activities (in particular full operation of the stationary debris management centres,) were still in the process in the last weeks of the project and therefore not available for assessment of the evaluator during preparation of the draft Final Evalaution Report.

Apart from few minor issues, the Evaluator considers the overall resource allocation in the project budget to the individual project components reasonable and did not find any serious inefficiencies in the use of the allocated funds.

Country ownership

A strong country ownership of the project was one of the key assumptions made during the project design phase. The strong ownership by the core national stakeholders was sustained throughout the project implementation and proved to be one of the critical drivers of progress towards the planned results. The ownership was demonstrated by active participation of the stakeholders in various project activities.

Cross-cutting issues

The project was assigned gender marker 1 (limited contribution to gender equality), it demonstrated commitment to encourage women's inclusion and involvement in the awareness raising and capacity building activities of the project including but not limited to the provincial training and workshop programmes targeted to increase awareness about asbestos and other hazardous materials from earthquake debris.

A major part of the project comprised procurement of equipment. Hence, only very limited gender focus was included in the technical studies for debris mapping and prioritization and for development of debris management strategy and action plan. Women were suggested to attend and build capacity in awareness raising, validation workshop, international best practices training and OHS training.

Sustainability

The evaluation considers sustainability from the socio-economic, financial and environmental perspectives as moderately likely.

Progress to impact

The project established foundation for recycling and reuse of processed earthquake debris. However, due to its short duration it did not solve several technical and operational issues. The evaluator concludes that the current project can be seen as a catalyst for implementation of broader systemic efforts addressing prioritization and management of the earthquake debris sites. Further progress will much depend on availability of funds for replication in other provinces as well as on addressing technical, legislative and operational issues.

Evaluation rating table

1.Monitoring & Evaluation (M&E)	**FE Rating**[1]
M&E plan: design at entry	Satisfactory (S)
M&E plan: implementation	Satisfactory (S)
Overall quality of M&E	**Satisfactory (S)**
2.Performance of Implementing Agency & Executing Agency	**FE Rating**
Quality of UNDP Implementation/Oversight	Satisfactory (S)
Quality of Implementing Partner Execution	Satisfactory (S)
Overall quality implementation / execution	**Satisfactory (S)**
3.Assessment of Outcomes	**FE Rating**
Relevance	Relevant (R)
Effectiveness	Satisfactory (S)
Efficiency	Satisfactory (S)
Overall Project Outcome	**Satisfactory (S)**
4.Sustainability	**FE Rating**
Institutional framework and governance	Likely (L)
Financial	Moderately Likely (ML)
Socio-political	Moderately Likely (ML)
Environmental	Moderately Likely (ML)
Overall Likelihood of Sustainability	**Moderately Likely (ML)**

[1] FE ratings are explained in Annex 7.

Recommendation summary table

No.	Recommendation	Responsibility	Timeframe
1.	For procurement of complicated equipment items in its projects in Türkiye, UNDP should consider involvement of the national Public Procurement Authority for increased effectiveness and efficiency of the procurement process.	UNDP	Not specified
2.	Asbestos has been identified as a threat to occupational health and safety in management of earthquake debris. Therefore, development of an asbestos management plan and provison of asbestos detection equipment should be included as an essential and integral component in the design of future projects on debris mnagment.	UNDP	Not specified
3.	For formulation of projects on debris management, UNDP should carefully map already accumulated experience in the country for incorporation in the project design.	UNDP	Not specified
4.	UNDP should consider the impact of the required administrative procedures for EIA and operational licence on duration of projects on debris management.	UNDP	Not specified
5.	For formulation of projects on debris management, UNDP should carefully consider issues related to pre-sorting of the debris and reflect adequate activities in project design and budget	UNDP	Not specified
6.	Projects aiming at mapping debris storage sites should include assessment of situation of women living in the debris sites areas to examine impact on women and the different needs of men and women living in the debris area communitieds.	UNDP	Not specified
7.	Relevant authorites should accelerate all procedures for operation permits for the recycling facilities so that they could move to full scale operation.	Governorates	Immediately
8.	The Government should mobilise financial resources for provision of additional equipment, in particular for additional conveyor belts for improved pre-sorting of debris.	Government, Governorates	Immediately
9.	The Government should commission work on amendment of legislation that will determine conditions for use of products from processed debris in cement manufacturing.	Government	Immediately
10.	Relevant authorities should ensure that owners of the recycling facilities pay due consideration to environmental impacts of the facility operations.	Governorates	Immediately
11.	For handling of memorabilia in the process of debris pre-sorting, the Governorates should ensure that relevant international (Japanese) experience is reflected.	Governorates	Immediately

1. Introduction

1.1. Evaluation information table

Evaluation information		
Evaluation type	Project evaluation	
Final/midterm review/ other	Final evaluation	
Period under evaluation	**Start**	**End**
	16 August 2023	15 August 2024
Evaluator	Dalibor Kysela	
Evaluator email address	dkysela@gmx.at	
Evaluation dates	**Start**	**Completion**
	2-Jul-2024	31-Aug-2024

1.2. Evaluation purpose and objectives

The project *Grant Aid for Environmentally Sound Management of Earthquake Debris and Safe Disposal of Hazardous Waste* is funded by the Government of Japan and implemented by the UNDP Türkiye Country Office (CO) in close cooperation with the Ministry of Environment, Urbanization and Climate Change (MoEUCC).

The purpose of the Final Evaluation (the Evaluation) is to provide an impartial in-depth review of all aspects of the project and assess the expected results and specific objectives achieved against those stated in the Project Document. It will also identify the lessons learned and recommendations relevant to the planning, preparation and implementation of a possible follow-up project.

The Evaluation has the following specific objectives:

- To measure to what extent the project has contributed to supporting environmentally sound management of earthquake debris and safe disposal of hazardous waste;
- To measure project's degree of implementation, efficiency and quality delivered on expected results (outputs), against what was originally planned;
- To measure the project's contribution to the objectives set in the Türkiye Earthquakes Recovery and Reconstruction Assessment (TERRA), UNDP's EQ Response Strategy, UNDP Country Program Document (CPD) for 2021-2025, United Nations Sustainable Development Cooperation Framework (UNSDCF) for 2021-2025, and SDGs (Social Development Goals);
- To assess both negative and positive factors that have facilitated or hampered progress in achieving the project outcomes, including external factors/environment, weakness in design and management;
- To generate substantive evidence-based knowledge by identifying best practices and lessons learned that could be useful to other development interventions at national (scale

up) and international level (replicability) and to support the sustainability of the project or some of its components; and

- To provide a forward-looking perspective for UNDP's future positioning in relation to environmental aspects of earthquake/disaster response and early recovery actions, in particular pertaining to debris management.

The Evaluation makes assessment of the extent to which the planned project results have been achieved since the beginning of the project implementation on 16 August 2023, based on the Project Document.

The Evaluation looks into the project's processes, strategic partnerships and linkages in the specific country's context that proved critical in producing the intended or unintended results, the factors that facilitated and/or hindered the Project's effort to bring about the change related to its objectives.

The Evaluation assesses the cross-cutting aspects of the project, such as gender equality, disability and human rights and innovativeness in result areas.

The Evaluation was conducted according to the guidance, rules and procedures established and stipulated in the UNDP Evaluation Guidelines[2].

The Terms of Reference (ToR) for the Evaluation is provided as Annex 1.

1.3. Evaluation scope

The Evaluation assesses the extent to which the planned project results have been achieved since the beginning of the project on 16 August 2023 until the end of the project on 15 August 2024.

Based on the findings, the Evaluation provides evidence-based recommendations for future decision making in the area of concern, particularly in terms of potential future intentions, strategy of intervention, modalities of implementation.

The Evaluation was conducted according to the guidance, rules and procedures established and stipulated in the UNDP Evaluation Guidelines[3].

The Terms of Reference (ToR) for the Evaluation is provided as Annex 1.

1.4. Evaluation methodology

The framework for the Evaluation is based on standard criteria for final evaluations, namely relevance, coherence, effectiveness, efficiency, and sustainability. Under each evaluation criteria, it addressed a set of questions stipulated in the Terms of Reference. Additionally, the Evaluation compiles lessons learned from implementation and provides forward-looking recommendations.

[2] UNDP Evaluation Guidelines, Independent Evaluation Office of UNDP, 2021
[3] UNDP Evaluation Guidelines, Independent Evaluation Office of UNDP, 2021

The Evaluation followed a collaborative and participatory approach ensuring close engagement of the evaluator with the project team and core project stakeholders. The evaluation methodology, in particular the data collection part, was discussed with the project team during on-line meetings that were organised in the inception phase and was further refined during review and approval of the Inception Report. Given the highly technical nature and demonstration purpose of the project, key informant interviews were selected as the principal method for obtaining in-depth information about the key informants' experiences on creation of the debris management and disposal model and their opinions on the achievement of the planned results.

As an initial step, an initial desk review and preliminary analysis was conducted of selected documents covering the project design and implementation progress. The approved Project Document (ProDoc) was the starting point for the review in terms of understanding the basics on which the project was designed and funded.

Results of the initial review provided grounds for formulation of evaluation questions as discussion points that aim at gathering information from project stakeholders and beneficiaries about their attitudes and preferences as well as collecting factual information linked to the performance indicators from relevant sources. The evaluation questions were incorporated into the Evaluation Matrix that will serve as a framework for use during the data collection phase. The Evaluation Matrix is provided as Annex 2.

Due to the tight deadline for the Evaluation, the data collection focused on secondary data in published sources, reports and studies for the evaluation. These included the Project Document, technical studies produced by the project, as well as contextual documents produced by UNDP that provided useful information on overall situation in the earthquake-affected areas.

The data collection phase started with a detailed review of all relevant project documentation including documents prepared during the project formulation, planning, monitoring and implementation progress reports (substantive and financial), documents and reports related to parallel and complementary initiatives, as well as other available information on the specific context of the project.

As due to tight time deadlines it was not possible to organise a field mission of the evaluator to Türkiye, the other part of the data collection phase was based on on-line interviews with core project stakeholders. The main purpose of the interviews was to collect first-hand information through semi-structured key informants' interviews. The interviews were designed to solicit responses to a set of predetermined open-ended questions aiming to obtain in-depth information about the key informants' experiences from the project implementation and their opinions on the achievement of the planned results. The semi-structured format allowed the respondents to express their perceptions of the main issues related to the project design and implementation. The evaluation criteria and the questions from the Evaluation Matrix were used as a frame for raising additional and/or more specific questions on the issues discussed. The interviews also served the purpose of collecting some additional documents to support the evidence base of the Evaluation.

Instead of engaging each and every individual involved in the project activities, a purposive sampling strategy was employed to ensure representation of different stakeholder groups engaged in the project. Attention was paid to ensure a balance of views from both the Implementing and Executing Agencies as well as the project beneficiaries from the target regions. Where necessary, simultaneous interpretation was provided in order to ensure efficiency of the online interviews.

Due to the highly technical nature and demonstration purpose of the project as well as the gender marker 1 of the project (limited contribution to gender equality) there was no need to make any specific provision for collection of gender-related data during the Evaluation and no need to separate female interviewees.

The list of stakeholders interviewed is provided as Annexes 3 and the indicative list of interview questions as Annex 4.

In view of the nature of the evaluation questions and use of predominantly qualitative assessment approach, the collected data were processed using validation, interpretation, and abstraction techniques, ensuring its accuracy, and translating the data into usable formats or units of analysis related to the evaluation questions.

Evaluation conclusions are directly linked to the factual evidence and serve as a basis for recommending actions consistent with the conclusions. On the basis of the conclusions, recommendations for future actions are made as evidence-based proposals for action aimed at users of the Evaluation. The recommendations are formulated in a way that facilitate the development of a management response, i.e. are realistic and reflect an understanding of the commissioning organization and potential constraints to follow up. Each recommendation identifies its target group and stipulates the recommended action.

1.5. Evaluation ethics

The Evaluation was conducted in accordance with the principles outlined in the United Nations Evaluation Group (UNEG) Ethical Guidelines for Evaluations [4]. In accordance with the Guidelines, the Evaluation ensured the right of informants to provide information in confidence and ensure that sensitive information is not traceable to its source.

The Evaluation consultant declares no prior involvement in the project design or in its implementation and asserts full adherence to the professional standards of independence and impartiality. A signed Code of Conduct form is included as Annex 6.

1.6. Limitations to the Evaluation

Due to the exceptional circumstances in which the project was developed (in the immediate aftermath of the disaster and addressing disaster zone with intense recovery and reconstruction needs), the need for prompt response to recovery needs in the region necessitated swift action and effective implementation to comply with the donor's one year implementation deadline.

[4] UNEG Ethical Guidelines for Evaluation, 2020

Consequently, the limited documentation on the project implementation as opposed to regular modus operandi of reporting and documentation on regular projects implemented by UNDP was caused by the short (1 year) implementation period. The negative effect of the missing progress reports was mitigated through exchanges of the Evaluator with the project team.

Another limitation was the tight deadline for completion and the fact that several activities of the project were still on-going at the data collection phase and hence their results were not fully available for drafting of the Evaluation Report. As the stationary debris recycling centres were not operational during the data collection phase, the originally planned video tour of the sites could not be organised. The negative impact of this was mitigated through intensive work of the Evaluation Consultant during the interviews with the representatives of the two governorates .

The other limitation is the fact that the selection of stakeholders for interviews did not allow for extensive meetings with a wider selection of project stakeholders and beneficiaries. This limitation was addressed with support from the Project Management Unit (PMU) through a purposive sampling with careful selection of informants with the aim to ensure representation of key stakeholder groups.

Due to tight schedule for completion of the Evaluation and unexpected logistical challenges on the side of the Evaluator, it was not possible to organize evaluation mission of the Evaluator to Türkiye for in-person meetings with the project stakeholders and visit of the project sites. This does not constitute a major negative impact on findings as on-line interviews were scheduled with selected core project stakeholders.

2. Description of the intervention

2.1. Project start and duration

Development of the project proposal started in March 2023. The draft project proposal was verified with the representatives of the MoEUCC and approved by the local Project Appraisal Committee on 13 October 2023.

The project was approved for the duration of one year and its implementation commenced on 16 August 2023. The project budget is US$ 4.833,584[5]. The planned completion date is 15 August 2024.

2.2. Development context

On 6 February 2023, two devastating earthquakes with magnitude 7.7 and 7.6 on the Richter Scale struck Pazarcık and Elbistan in Kahramanmaraş, Türkiye. These earthquakes were the largest to hit Türkiye in the last century, and the most significant in the country's south-east region in hundreds of years. The earthquakes and aftershocks have caused catastrophic devastation, with almost 50,000 reported fatalities, 3.3 million people displaced, and 2.3 million people sheltered in tent camps and container settlements in the aftermath of the disaster.

The earthquakes have destroyed urban and rural structures across an enormous a territory of 110,000 km^2 encompassing 11 provinces - Kahramanmaraş, Gaziantep, Şanlıurfa, Diyarbakır, Adana, Adıyaman, Osmaniye, Hatay, Kilis, Malatya and Elazığ - which cover a vast area in southern and southeast Türkiye with a population of more than 15 million.

The affected region is host to a large share of Türkiye's most vulnerable groups, including:

• Refugees made up 14% of the region's population in 2020 compared to around 4% nationwide;

• Children accounted for one third of the population compared to one fifth nationwide;

• The poor: all provinces in the region had average income levels below the national average in 2020, on average 40% below; and

• Those with more limited education: in 2022, only 16% of the region had completed tertiary education compared to 21% across Türkiye;

• Women: in 2022, the share of women in total employment was around 26% in the region, compared to 32% nationwide.[6]

To address the impacts of the disaster and set priorities for recovery and reconstruction, the Government of Türkiye announced ambitious recovery and reconstruction plans and undertook the preparation of a preliminary assessment known as the Türkiye Earthquakes Recovery and Reconstruction Assessment (TERRA) ahead of a donor conference for Türkiye and Syria

[5] The project budget is provided as 700.000.000 Japan yens hence the USD amount depends on actual exchange rates.
[6] The territorial impact of the earthquakes in Türkiye: Policy Note, OECD 2023.

scheduled for Brussels on 20 March 2023. The TERRA was completed with support from the United Nations Development Programme (UNDP) on behalf of the UN family, the World Bank and the European Union.

The TERRA identified the following five principles to guide the reconstruction efforts:

- Build back better for resilient structures, institutions, communities;
- Disaster risk reduction in focus in education, policies and practices;
- Accountable decisions made with the participation of those affected;
- Leave no one behind in all relief, recovery and reconstruction efforts
- Employ green, nature-friendly solutions for a sustainable future.

The TERRA also listed priorities for recovery and reconstruction assistance in four sectors, namely society, economy, infrastructure and environment.

Drawing on its decades-long presence as a development partner in Türkiye, in the aftermath of the disaster UNDP compiled a catalogue of 31 potential projects to inform potential donors how their financial support can translate into results by working with UNDP, for short-, medium- and long-term term contributions to recovery and reconstruction, in line with national priorities and guidance.

UNDP's response strategy for the earthquakes is built on its wealth of global experience in helping countries to rebuild after earthquake disasters, and organised according to four pillars supporting an effective, human-centered, inclusive, and sustainable recovery process for disaster-affected communities. The current project was developed under Pillar 2: Restoration of critical infrastructure and protection of cultural heritage.

2.3. Immediate and development objectives of the project

The primary objective of the project is to support environmentally sound management of earthquake debris and hazardous waste through planning and establishment of debris recycling facilities/mobile crushers in the Hatay and Kahramanmaraş provinces that experienced the worst destruction in the February earthquakes. The project design includes assessment of all sites where earthquake debris is stored and preparation of a strategy and action plan to ensure the environmentally sound management of the full volume of earthquake debris, with a focus on reducing volume, recycling a maximum share of resources and safe disposal of hazardous waste. Specifically, the project aims at construction of two model sites for the recycling of earthquake rubble and provision of mobile crushing facilities for on-site debris processing.

2.4. Expected results

The project design envisages achievement of the project objective through delivery of the following 3 outputs, namely:

Output 1: Assess the most suitable places for establishing debris recycling facilities in Kahramanmaraş and Hatay;

Output 2: Prepare environmentally sound debris management strategy and action plan; and

Output 3: Commission two debris recycling facilities and supply mobile debris crushers.

The main project inputs towards the set results are provision of expertise, planning support, training and equipment for environmentally sound management of the full volume of earthquake debris, with a focus on reducing volume and recycling of resources and safe disposal of hazardous waste through constructing two model sites for the recycling of earthquake rubble and supply of mobile crushing facilities for location-based debris processing. The assistance also includes helping the government to map and establish participatory monitoring mechanisms for prevention of rubble and waste storage in unauthorized areas.

The Project Results Framework (PRF) including the planned results, baseline definition, activities, indicators, and targets is provided as Annex 5.

2.5. Main project stakeholders

The Project Document identified key direct project stakeholders, namely UNDP as the Implementing Agency, the MoEUCC as the main implementing partner, and the Hatay and Kahramanmaraş Governorates as the responsible parties. The delivery of the planned outputs of the project is based on collaboration with and support of other stakeholders, such as the Disaster and Emergency Management Authority (AFAD), Provincial Directorates of the MoEUCC and the Hatay and Kahramanmaraş metropolitan municipalities.

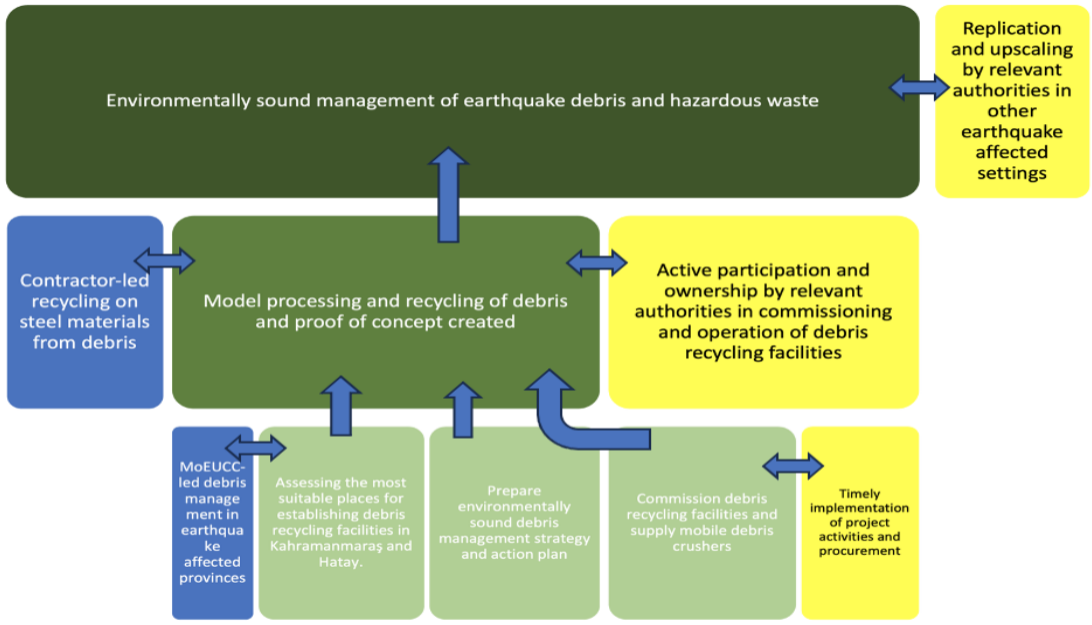
Direct beneficiaries of the project are representatives and employees of the Hatay and Kahramanmaraş Governorates, who gained knowledge, skills and experiences in localisation and management of earthquake debris in their territory as well as built their capacities for implementation of future emergency assistance projects in their areas of responsibility.

2.6. Theory of change

The Evaluation makes a critical assessment of the Project's Theory of Change, description of the project planned results as well as drivers and explicit assumptions for achievement of the results.

Section II of the approved Project Document contains a simplified diagram of the project Theory of Change (ToC) that displays the the baseline conditions and operating framework that constitute basis for UNDP intervention as well as main improvement needed areas and chosen approach, assumptions and solutions. The ToC diagram from the Project Document is reproduced as Figure 1 below.

Figure 1: Theory of change diagram (from the Project Document)



Assumptions: Yellow
Overall Objective: Dark Green
Outcome: Green
Outputs: Light Green
Current Situation/Operating Framework: Blue

There are few insufficiencies in formulation of external conditions required for the project results to lead to the next level of results, known as assumptions and drivers. Assumptions are defined as external conditions over which the project has no control. From this point of view, the project has full control over timely implementation of the project activities including procurement hence this can't be the assumption for leading from the outputs to the outcome. More appropriate assumptions would be timely delivery of procured equipment and active participation of operators and affected public in training and awareness raising workshops.

Drivers are defined as external conditions necessary for project results to lead to next-level results over which the project has a certain level of control. However, the ToC in the Project Document does not contain any specific drivers.

3. Findings

3.1. Project design/formulation

Formulation of the project was guided by the request of the Government of Türkiye for UNDP to make available global expertise in environmentally sound management of earthquake waste, in particular safe handling of debris and rubble. This includes recycling and reusing materials, safe disposal and handling of hazardous materials such as the asbestos, and prevention of storage of rubble in areas of nature protection where it can pose new threat.

3.1.1. Analysis of the project results framework

This section provides a critical assessment of the Project Results Framework (PRF) in terms of clarity, feasibility and sequence of the project outcomes and their links to the Project Objective. It also examines the specific indicators and their target values in terms of the SMART[7] criteria.

The project design is described in Section III of the Project Document that contains detailed description of the 10 project activities for delivery of the 3 project outputs. Section V of the Project Document then presents the project results framework (PRF) in a matrix format with a set of 6 indicators. For each indicator, a baseline is given as well as quantitative or qualitative targets for the project duration. The PRF also provides reference to the UNSDCF Programme and UNDP Country Programme for Türkiye, as well as the UNDP Strategic Plan.

The overall rationale and project logic is sound and realistic in response to the barriers identified and addressing the existing systemic, institutional, and technical capacity constraints of the project beneficiaries. All 6 indicators and their respective targets are compliant with the SMART criteria.

However, in line with the principles and common practice of the results-based management (RBM), a project results chain should list not only outputs but also immediate and eventually higher-level outcome(s). For this project, the PRF does not follow the standard objective-outcome-output template and does not mention the direct Project Outcome that describes the intended change as a result of delivery of the project outputs and a collective effort and contribution of national stakeholders. This situation is a reflection of the fact that the project was developed under exceptional disaster-induced needs and circumstances hence there was no immediate outcome of the project,

3.1.2. Assumptions and Risks

Identification of risks enables the implementing partners to recognize and address challenges that may limit the ability of the project to achieve the planned results.

Section III of the Project Document contains a risk matrix with description of total 4 identified risks rated in terms of probability and impact, as well as proposed mitigation measures as summarised in Table 2 below.

[7] SMART stands for Specific, Measurable, Achievable, Relevant, Time-bound.

Table 1: Risks and assumptions (as listed in the Project Document)

Risk description	Impact, Probability, Risk Level	Category	Response
Procurement process is delayed which will impact in disrupting timely project implementation	I = 4 P = 2 Risk level: Moderate	Organisational	Tender dossiers and technical specifications as well as market research for the procurement activities are already prepared with technical inputs of experts to ensure project duration is not delayed
Responsiveness of municipalities might slow down as a result of local administration elections which will impact in change of administrative level staff and timely project implementation	I = 2 P = 2 Risk level: Low	Strategic	Changes in the administrative and technical level staff due to local administration elections might slow down engagement and responsiveness of involved metropolitan municipalities. To minimize the risks in project interruption it is aimed to include municipal representatives in the Project Steering Committee including proper documentation of meeting minutes, discussion points, work plans, roles, and responsibilities. This should allow that information to be kept and can easily be given to newly assigned staff. Moreover, the communication with the municipalities will be coordinated by the MOEUCC through the governorates.
Operators might be under jeopardy of operational health and safety risks including accidents, injuries or health issues due to lack of interest and participation in project's capacity building activities or lack of proper enforcement mechanisms by the stakeholder duty-bearer institutions/contractors	I = 4 P = 1 Risk level: Low	Operational	Debris crushing operations might pose operational health and safety risks due to the sheer size and danger of the nature of operation and hazardous content of the debris wastes. In the absence of rigid OHS measures, operators run the risk of accidents, injuries and/or health risks. The project is planning to mitigate the risk in collaboration with the partners and especially with the municipalities in targeted provinces for effective participation to capacity building trainings on OHS underlining the benefits of health and environmental issues to the operators that will be involved in recycling processes. Project also plans to procure and provide PPE required for debris recycling operations.
Hazardous waste recycled by the project's debris recycling activities might not be disposed of properly or lead to spillage and pollution.	I = 4 P = 1 Risk level: Low	Social and environmental	Necessary equipment purchase to decrease the risk of hazardous waste for the staff that will work in the debris recycling facilities will be procured and distributed during the training sessions to the operators and information about the possible risks will be given. And the facilities will be established far away from the residential areas, farm lands, rivers, and water resources to decrease the risk. The facilities will be handed over to the governorates of Kahramanmaraş and Hatay according to the decision of MoEUCC, these facilities will be operated by the relevant municipalities.

The Evaluator considers the risk identification and rating at the project inception reasonable and sufficiently detailed, however, the probability of protracted procurement was underestimated. For a project with the vast majority of budget (almost 90%) earmarked for procurement of complex equipment items, both impact and probability of delays in the procurement should be rated as high risk.

3.1.3. Linkages between the project and other interventions within the sector

In the immediate aftermath of the earthquake, UNDP started implementation of the project *Immediate Response to Earthquake in Turkiye – 2023* that was initially funded by the UNDP core resources (also known as TRAC). Later, additional financing was secured from the Governments of Sweden and France, as well as from the UN Office for the Coordination of Humanitarian Affairs (OCHA).

In February 2024, UNDP launched new initiatives aimed at expanding support to the socio-economic recovery of the affected areas. These include the establishment of a women's entrepreneurship center in Kahramanmaras and creation of a community centres for elderly and disabled in Malatya, Adiyaman and Hatay. In this package, a project on procurement of equipment for a model recycling facility in Malatya, but funding was not received from the donor.

The main other project has been the World Bank support to the MoEUCC in implementing the Türkiye Earthquake Recovery and Reconstruction Project (TERREP). The objective of the project is to restore access to essential municipal and health services and resilient housing in selected provinces affected by the February 2023 earthquakes. The TERREP comprises of four components. The UNDP project is aligned with the first component of the TERREP, namely restoration of municipal infrastructure and services finances civil works (including demolition as applicable), goods, consulting, and non-consulting services needed to restore access to critical municipal services of affected people while enhancing disaster and climate resilience.

There have been activities on management of rubble in from demolished buildings in the Eskişehir province since 2019. This experience was considered in the design of the current project. Moreover, the project team analysed operation of the Eskişehir facitility through visit of the site and gaining detailed information about the operalisation details of the facility and invitation of the Eskişehir facitility operations manager for field observation during the commissioning of the recycling plant in Hatay.

3.1.4. Planned stakeholder participation and partnerships

The MoEUCC is the main implementing partner while the Hatay and Kahramanmaraş Governorates are the responsible parties. For achievement of the expected outputs of the project, collaboration of UNDP is envisaged with the implementing partner, responsible parties and other key stakeholders, such as the Disaster and Emergency Management Authority (AFAD), Provincial Directorate of the MoEUCC, as well as support of the Hatay and Kahramanmaraş metropolitan municipalities.

Table 2 provides the list of main stakeholders along with description of their respective roles in the project.

Table 2: List of main stakeholders for the project (as per the Project Document)

Stakeholder/Target Group	**Interests/Responsibility**	**Role in project**
Japan Government	As the donor, contributing to the earthquake recovery activities in Turkiye	Donor
Ministry of Environment, Urbanization and Climate Change (MoEUCC) DG Environmental Management	MoEUCC regulates and oversees debris management during post-earthquake period	Implementing Partner
Kahramanmaraş Governorate	As a responsible party to the project, provides support for the conduction, implementation and finalization of the procurement process of debris recycling facilities and mobile curshers. For Kahramanmaraş province and 13etters13g13e for the establishment of debris recycling facility.	Responsible Party
Hatay Governorate	As a responsible party to the project, provides support for the conduction, implementation and finalization of the procurement process of debris recycling facilities and mobile crushers. For Kahramanmaraş province and 13etters13g13e for the establishment of debris recycling facility.	Responsible Party
Public Institutions		
Presidency of Republic of Türkiye, Strategy and Budget Office (PSB)	The SBO's role is to accelerate the economic and social development of the Republic of Türkiye, the Presidency of Strategy and Budget, with the mission of making development balanced and sustainable.	A member of the PSC with a role to link the project results to the national development policy and oversight for international agreements.
Ministry of Foreign Affairs (MoFA)	MFA is responsible for conducting foreign relations of the Republic of Türkiye including diplomatic missions abroad and for the promotion of Turkish culture, as well as for implementing the country's foreign policy in accordance with its national interests.	A member of the PSC with a role to link the project results to the national development policy and oversight for international agreements.
Disaster and Emergency Management Presidency (AFAD)	Responsible for disaster and emergency management in Türkiye	Stakeholder
Municipalities, Regional and Local Administrations		
Metropolitan Municipalities of Hatay and Kahramanmaras	Implements the waste management regulations set by the MoEUCC	On behalf of the governorates, operates debris recycling facilities and mobile crushers
Provincial Directorates of Ministry of Environment, Urbanization and Climate Change	Monitoring and inspecting implementation of MoEUCC regulations at local level	Stakeholder
Civil Society, Associations and Unions		
Local Environmental NGOs	Advocacy and civil oversight over environmental matters	Stakeholder
Local Communities	Residents in the earthquake affected area that are potentially vulnerable to hazardous wastes and debris management activities	Final beneficiary

The stakeholder engagement plan summarised in Table 2 documents the systematic effort of UNDP to identify and engage with an array of different stakeholders. However, the plan does not disntiguish between core and tangential stakeholders.

3.1.5. Gender responsiveness of the project design

The project is assigned gender marker 1 as it is expected to make limited contribution to gender equality. Section III of the Project Document states that the project is designed in a gender-responsive manner to encourage women's inclusion and involvement in the awareness raising and capacity building activities of the project. It was expected to encourage equal participation of men and women in the project activities and collect gender disaggregated data during project participation in line with relevant UNDP corporate policies on gender.

In October 2023, assessment of social and environmental risks of the project was initiated according to the standard UNDP Social and Environmental Screening Procedure (SESP). Results of the SESP are in the SESP report presented in a separate document that considers two possibilities for contribution to gender equality and women's empowerment.

Through gender mainstreaming, the SESP report claims that the project can ensure that different needs and priorities of women and men are considered for development of inclusive and effective action plans that address the specific challenges faced by women in the context of earthquakes and waste management. Furthermore, the SESP report assumes that by building the technical and administrative capacities of local stakeholders, including women, the project empowers them to engage more effectively in debris management decision-making processes. The capacity building contributes to women's empowerment by increasing their knowledge and skills, allowing them to contribute to environmentally sound debris management and safeguard themselves against negative effects of asbestos and hazardous waste.

While the above assumptions of the SESP report are correct and reasonable, it should be recalled that the project received gender marker 1, meaning that gender equality was not critical in the project design and outputs at the project level could contribute in a limited way to gender equality, but not significantly. In conjunction with the prevailing focus of the project on procurement and commissioning of equipment, only some aspects of the project output (e.g. awareness raising) are expected to promote gender equality but not in a consistent way.

3.2. Project implementation

3.2.1. Adaptive management

Adaptive management is examined in terms of changes in the project implementation through adapting to changing political, regulatory, environmental, and other conditions outside of control of the project implementing team.

The main case of adaptive management was the rection of the project team to the impact of devaluation of Japanese yen against USD that reduced the project budget from 5.2 million to 4.8 million USD. Consequently, the budget allocation for equipment was sufficient for procurement of 3 mobile crushers instead of original 4.

The budget reduction prompted the project team to address the issue of asbestos content in the debris that was not included in the project design. The project has made available international best practice in the form of guidelines for asbestos handling and disposal. In line with this practice, organisations arranging, undertaking or funding debris clean-up which has a risk of exposure to asbestos containing waste have a duty of care to ensure workers are not exposed to asbestos fibres as a result of this work. The project increased the quantities of personal protective equipment for work with debris waste and provided appropriate training and awareness for persons coming into contact with, or potentially exposed to, asbestos fibres. Moreover, the project supported preparation of an asbestos management plan and procured 2 units of asbestos detection equipment for segregation and separate disposal of waste with high contamination of asbestos[8].

Pre-sorting of debris was not sufficiently considered in the project design either. In order to address the related challenges, the project made an effort to learn from experience of management of rubble from demolished buildings in Eskişehir. Based on a site visit with national experts and academicians to the Eskişehir construction and demolition waste management facility, the project supported procurement of a dust abatement system and assisted in elaboration of a detailed operations and supervision plan for sorting of the debris waste and identified legal and technical measures to be taken for reuse of processed debris in construction and promotion of circular economy.

Another case of adaptive management was establishment of a Harmonised Approach to Cash Transfers (HACT) in order to expedite delivery of procured equipment and thus reduce the risk of negative impact of the limited project duration on the effectiveness of implementation.

3.2.2. Actual stakeholder participation

In line with the principles of the National Implementation Modality (NIM), the UNDP CO in Türkiye established close cooperation with the Ministry of Environment, Urbanization and Climate Change, Directorate General of Environmental Management. This partnership was not only critical for timely development of the project but also enabled the project to be fully

[8] Officially asbestos waste is classified as hazardous when it contains more than 0.1 % asbestos fibre per cubic centimetre (0.1f/cm3).

embedded into relevant national institutions, structures and systems. Furthermore, it was essential for timely identification and mobilisation of relevant national expertise and proved to be one of the key factors for effective overall implementation and achievement of the project planned results.

For provision of assistance on technical matters, the UNDP CO engaged with the Yıldız Technical University (YTÜ). This partnership was important for conduct of initial technical investigations in the provincial centres and districts of Kahramanmaraş and Hatay, for identification of actual earthquake debris locations, and for analysis of information and data received from the central and local government officials in the two provinces.

The partnership with YTÜ was also instrumental for preparation of a debris management strategy and roadmap that covers all stages of debris management (collection, transportation, handling, disposal and stakeholder participation) upon consideration of legal, institutional, financial and technical aspects. Last but not least, the association with YTÜ was required for reaching out to the target beneficiaries through awareness raising and training workshops on environmentally friendly management of earthquake debris for officials of the governorates and of provincial Directorate of the MoEUCC.

Another type of partnerships was established with the representatives of the Governorates for presentation and validation of the technical report and the debris management strategy produced by the YTÜ. This partnership served for active engagement with elected representatives of the target beneficiaries for provision of immediate feedback on the usability of the technical outputs of the project. However, the governorates of the target provinces were assigned only as a responsible party to the project, with the main duty to provide support for the conduct, implementation and finalization of the procurement process of debris recycling facilities and mobile crushers as well as being the operators of the recycling and crushing facilities. According to the interviews, more active involvement of the governorates in the equipment procurement process (starting with development of the technical specification for the equipment) would be beneficial both for effectiveness and efficiency of the project.

The engagement of the UNDP CO with relevant national partners is in line with the UNDP partnership strategy and enhanced effectiveness of the project implementation. The established partnership relations have laid a strong foundation for further work of the national partners with UNDP. However, no engagements of the project were reported with community-based organisations (CBOs) and non-governmental organisations (NGOs). This can be seen as a missed opportunity for extension of the project to the target beneficiaries as both CBOs and NGOs can assist in addressing specific needs, offering context-specific and culturally sensitive solutions and fostering collective decision-making for a positive change at the grassroots level.

3.2.3. Project Finance

Analysis of the project financial aspects is based on the information sourced from the annual UNDP Combined Delivery Reports (CDRs) for the duration of the project. This analysis aims at assessment of project financial delivery by years and by products, as well as the share of the project management budget line in the total project budget. The financial data contained in this

section is an extract of UNDP financial records and are provisional. The final data on project expenditures will be reflected in the project final report.

The total grant for this project as per the approved Project Document was US$ 4,431,229. Table 3 below displays the breakdown of expenditures from the project grant by the years of the project implementation period and by project outputs.

Table 3: Actual expenditures by project activities/components and years of implementation (as of 30 October 2024)

Project Component	Expenditures in the year (US$)		
	2023	**2024**	**2023-2024**
Activity 1	20,812.02	49,772.80	70,584.82
Activity 2	-	86,182.54	86,182.54
Activity 3	-	4,166,197.63	4,166,197.63
Project Management	-	-	98,942,76
General Management Support	-	-	355,106.71
Total	**20,812.02**	**4,302,157.97**	**4,777,014.47**

Data in Table 3 further shows that only less than 1% of the total disbursements were made in the year 2023 (August to December).

Table 4 below provides comparison of the planned and actual expenditures by the project components.

Table 4: Planned and actual disbursement of the project grant by activities/components (as of 30 October 2024)

Project Component	**Planned Budget (US$)**	**Expenditures (US$)**	**% as per Planned Budget**
Output 1	5,000	70,584.82	1,411.70
Output 2	50,000	86,182.54	172.37
Output 3	4,148,822	4,166,197.63	100.42
Project Management	227,407	98,942.76	43.51
General Management Support	402,355	355,106.71	88.26
Total	**4,833,584**	**4,777,014.46**	**98.83**

Data in Table 4 shows that the total realised expenditures at the Final Evaluation was US$ 4,777,014,47 that is 98.83% of the total project grant.

Percentage of the total project budget allocated for project management (PM) serves as an indicator of the project cost-effectiveness. The PM allocation in the budget was 4.7 % of the total grant that is considered sufficient for a project of this size.

There was no reported co-financing of the project by any of the recognized project partners. As lack of funds in the end precluded achievement of the main objective of the project, to secure some level of co-financing would have been beneficial.

Overall, the final evaluation found that a well-established financial management and control system was in place and that relevant financial management regulations and reporting procedures were followed during the entire period of the project implementation.

3.2.4. Monitoring and evaluation

3.2.4.1.Monitoring and evaluation: design at entry

Section VI of the Project Document presents the monitoring and evaluation plans prepared in compliance with the UNDP requirements outlined in the UNDP Programme and Operations Policies and Procedures (POPP) and the UNDP Evaluation Policy. The plans define basic oversight, monitoring and evaluation actions to be taken during the project implementation.

The Monitoring Plan envisaged the project to be monitored through continued monitoring and annual reporting by the project team and biannual project Quality Assurance by the project team and UNDP CO. The principal result of the monitoring activities is the Annual Project Report according to the UNDP reporting requirements. The Evaluation Plan contains a single provision for an independent Final Evaluation.

Both Plans prepared at the project design stage were well conceived and articulated for tracking the progress toward achieving the planned results. Also, the budgetary allocation for the Evaluation Plan was cost-effective.

3.2.4.2.Monitoring and evaluation: implementation

The main subject of the discussion here is the implementation of the originally planned components of the monitoring and evaluation plans.

According to the initial Social and Environmental Screening Procedure (SESP), the project was assigned low risk rating for social and environmental risks. Nevertheless, in line with the UNDP CO practice, the two risks identified through the SESP were transferred into the project risk matrix and further tracked. .

Implementation of the Monitoring Plan consisted by collection of data by the project team and their analysis against the results indicators in the RRF. Although the Project Document envisaged establishment of the project governance mechanism in the form of a Steering Committee to guide and oversee the implementation of the project, this arrangement was actually not followed due to the fact that the project was approved for implementation under emergency response conditions and the Steering Committee was not established. While the project held frequent meetings with the MoUECC, there were no records of the topic discussed and decisions made in the consequence.

On 12 August 2024, an on-line meeting was held with participation of representatives of UNDP, the MoEUCC, the Presidency of Strategy and Budget Office Türkiye, as well as the Embassy of Japan. Although the meeting was held as the Steering Committee Meeting, as mentioned above the Sterring Committee was not established. The meeting was devoted to presentation of the project results and therefore it was in fact a tripartite review meeting.

Near the end of the project implementing period, the project contracted national consultants for preparation of two documents, namely an Operation Plan and an Asbestos Management Plan to serve as technical guidance for proper management and operation of the debris recycling facilities Additionally, yet another consultant was recruited to prepare an Exit Strategy for the project. The three documents were made available to the Evaluator only during the review of the Draft Evaluation Report.

3.2.5. Performance of UNDP

Under the National Implementation Modality (NIM), UNDP assumed accountability for the effective and efficient use of resources for the achievement of programme results in conjunction with the MUECC as the Implementing Partner. This encompassed the design of the project, the assessment of capacities of the Implementing Partners, conduct of procurement of goods and services, commissioning and implementation of the Final Evaluation as well as overall monitoring of progress towards intended outputs and appropriate use of resources.

The Project Manager managed the project on a day-to-day basis through an active role in the project monitoring, participation in field visits, consultations, and review meetings with various project stakeholders. The PM also prepared Annual Work Plan. The Project Associate was responsible for administrative support to the project.

The evaluator concludes that the project was managed in line with the provisions of the NIM did not find any significant issues on performance of UNDP in implementation of the project.

3.3. Project results

This part of the FE report contains an assessment of results as measured by broader aspects such as: relevance, effectiveness, efficiency, country ownership, gender equality and other cross-cutting issues, sustainability, catalytic role, and progress to impact.

3.3.1. Relevance and coherence

This section summarizes the assessment to what extent is the project linked to national development priorities of the recipient country, the strategic priorities of UNDP and Japan in Türkiye, as well as to the UN Sustainable Development Goals.

Regarding the national context, interviewed project stakeholders have clearly pointed out that the project is highly relevant in two aspects. Firstly, its quick formulation and launching added to the immediate response. Secondly, the project is aligned with the Government of Türkiye emergency response measures and reconstruction plans outlined in the Türkiye Earthquakes Recovery and Reconstruction Assessment (TERRA) that was compiled in the aftermath of the February 2023 earthquake. The TERRA document recognises that sound management of waste resulting from the disaster is critical for the environment and that both urgent actions and long-term solutions are required in order to reduce ecological damage and manage natural resources efficiently, in line with the “build back better” approach.

The project responds to the need for urgent actions and short-term measures listed in Section 8.5.3.2 of TERRA for prevention of uncontrolled storage of debris in vulnerable sites that poses a risk to degradation of the ecosystem. It directly contributes to three short-term priority actions of TERRA in the field of environment, namely:

- *Assist local and national staff on how to work with hazardous materials and hazardous waste, including disposal of asbestos;*
- *Ensure safe debris management/removal for the affected population and the ecosystems; and*

- *Employ remote sensing techniques and on-the-ground inspections of debris and waste disposals in critical ecosystems and habitats*

The project is also highly relevant in the sense that debris removal is considered an essential part of recovery and inevitable step on the path towards reconstruction. It is also a vehicle for support to socio-economic recovery of local communities facing insecure livelihoods following the disaster.

Furthermore, the project is aligned with the UNDP Country Programme Document (CPD), namely:

- *Output 3.4 Chemicals and waste prevented, managed and disposed of in an environmentally sound manner in crisis and non-crisis urban settings*

The project is also aligned with two out of the four pillars of UNDP's corporate strategy of response to natural disasters, namely:

- *Pillar 1 – Support to government-led crisis response and recovery planning, and*
- *Pillar 2 – Restoration of critical infrastructure and protection of cultural heritage*

It also contributes to achievement of the UN Sustainable Development Cooperation Framework (UNSDCF), specifically

- *Outcome 3.1: By 2025, all relevant actors take measures to accelerate climate action, to promote responsible production and consumption, to improve the management of risks and threats to people, and to ensure sustainable management of the environment and natural resources in urban and ecosystem hinterlands.*

The project is directly linked to a number of UN Sustainable Development Goals (SDGs), namely SDG #3: Good health and well-being; SDG #5: Gender equality; SDG #12: Responsible consumption and production, SDG # 14: Life below water, and SDG #15: Life on land.

The project is in line with the intention of the Japanese Government inrelation to transfer of Japanese experience in post crisis debris management. Türkiye has been amongst recipient countries for such project together with e.g. Haiti, Syria and Iraq

Based on the above, the project is rated **highly relevant** for the national response plans to national disasters, the strategic priorities of UNDP and UNSDCF, as well as with regard to contribution to the UN Sustainable Development Goals.

3.3.2. Effectiveness

The information presented in this section was sourced from the available progress reports and presentations, technical studies and reports produced by the project and verified with information collected through interviews with key project stakeholders. The list of documents consulted is provided as Annex 7 to this report.

The principal questions discussed in this section are whether and how the results as per the PRF have been achieved. Table 5 below contains a summary of the actually delivered project results. The tabular summary is followed by a narrative text with additional information and details on how and why the results have or have not been achieved. By this token, the text summarizes

important facts and issues related to the project results and achievement of specific targets under each of the project indicators.

Table 5: Status of project deliverables

Output Indicator	Baseline	EOP Target	Status at Final Evaluation (as of August 2024)
1.1 Assessment for identification of locations for the debris recycling plants in Kahramanmaraş and Hatay	No	Yes	Report "Management of Earthquake Debris Waste in Kahramanmaraş Province and Identification of Dumpsites – Preliminary Assessment Report"
2.1 Sex-disaggregated number of participants (sex-disaggregated) attending workshops	0	50	Workshops in the two provinces with total 78 participants (20 female and 58 male)
2.2 Strategy and action plan developed	No	Yes	"Debris Waste Management for Hatay and Kahramanmaraş Provinces: Strategy & Roadmap Report" "Final Debris Strategy Report: International Technical Support for Disaster Waste Management & Recycling of Debris"
3.1a Number of recycling facilities	0	2	1 stationary recycling facility delivered to Hatay 1 stationary recycling facility delivered to Kahramanmaraş Operations and supervision plan prepared for debris
3.1b Number of mobile crushers	0	2	2 mobile crushers delivered to Hatay 1 mobile crusher delivered to Kahramanmaraş
3.2 Sex-disaggregated number of trainees who received operational training	0	20	2 OHS training workshops with participation of 21 (7+14) males
3.3 Number of pieces of PPE	0	1,000	14,880 of PPE units 2 asbestos testing equipment units procured Asbestos management plan prepared for debris

Output 1: Assess the most suitable places for establishing debris recycling facilities in Kahramanmaraş and Hatay

The project contracted the Yıldız Technical University (YTÜ) for assessment of debris and rubble temporary storage sites in the two project target provinces. A report titled "Management of Earthquake Debris Waste in Kahramanmaraş Province and Identification of Debris Dumpsites – Preliminary Assessment Report" was issued in September 2023. The report is based on the information and data collected through field visits and interviews with representatives of relevant institutions conducted by the YTÜ project team in Hatay on 15 – 18 August 2023 and in Kahramanmaraş on 13 – 15 September 2023.

The Information and data for the report were by the provincial officials of the Ministry of Interior Disaster and Emergency Management Presidency (AFAD), as well as the provincial directorates of the MOEUCC and metropolitan and district municipalities in the two provinces.

The assessment part of the report is based on investigation of individual debris and rubble sites with respect to the storage and recycling of demolition waste already in existing dumpsites as well as estimation of waste expected to be generated later through demolitions. The YTÜ team of experts visited both the possible sites predetermined on the map and dumpsites designated later by local administrations and competent institutions for the storage of demolition waste in the centres and districts of Hatay and Kahramanmaraş.

The report contains preliminary assessment of 26 locations of debris dumpsites Identified in the Hatay province while total 18 dumpsites were found in the Kahramanmaraş province. As a result of these examinations, debris dumpsites were prioritised for recycling using a multicriteria decision-making method that includes such criteria as distance to the nearest settlement, distance to pastures, forests and rivers, land use status, as well as geological properties and topographic conditions of the site including risk of landslide on the site.

Considering the field observations, expert interviews, and consideration of the environmental and health risks currently present at the examined sites, two other criteria were also added to the assessment, namely i) presence of waste that needs to be prioritized for relocation to eliminate environmental impacts, and ii) suitability for recycling of waste currently in storage areas. The geographical distribution of the sites according to the priority ranking resulting from the calculations was presented on maps.

The study also observed that due to the urgency of the situation, no sorting activities were carried out on the debris removed at the first stage, but later, recovery activities started to be carried out at the sites where such waste was stored. Once the debris from the buildings already destroyed or urgently to be demolished was removed, the debris of the severely or moderately damaged buildings went through a recovery process at certain sites and the remaining non-recovered waste was transported to dumpsites. Around 60 such on-site sorting locations were reportedly found in the centre of Hatay.

The report highlighted importance of acting in accordance with the presented priority rankings of earthquake debris sites in order to avoid possible damages to the environment and human health and for ensure economically beneficial recovery of demolition waste through recycling of materials with economic value.

Output 2: Prepare environmentally sound debris management strategy and action plan

For validation of findings and conclusions of the debris mapping report and the strategy and action plan (see below under Indicator 2.2), the project convened local stakeholders for workshops on 15 – 16 January 2024 in the Kahramanmaraş and Hatay provinces. The purpose of the workshops was to ensure that any issues or concerns are identified and taken into consideration. The agenda of the workshops included presentation of assessment of demolition waste and waste storage sites by the YTÜ experts followed by discussion of technical and administrative issues for environmentally friendly management of demolition waste.

Indicator 2.2: Strategy and action plan developed

For preparation of the debris management strategy and action plan, the project recruited the team of experts from YTÜ. A report titled “Debris Waste Management for Hatay and Kahramanmaraş Provinces: Strategy & Roadmap Report” was issued in December 2023.

The report outlined the work required for management the debris waste and their safe disposal ensuring reduction of the amount of waste to be stored and recovery of limited natural resources and provided details of the following aspects:

• Characteristics of demolition wasts and the hazardous components they may contain, their measurement and limit values, management and relevant legislation;

• Legislation related to debris field management, planning, occupational health and safety and management; and

• Issues and legislation related to site selection, arrangement and operation of the site, discharge of waste to the site, crushing-separation of wastes, storage and transportation of separated materials within the scope of dump area management.

In addition to the above, the project recruited a Japanese consulting company to summarise and make available experience from the 2011 Great East Japan Earthquake in terms of the measures introduced for recycling, recovery and/or reuse of the disaster waste. A report titled "Final Debris Strategy Report: International Technical Support for Disaster Waste Management & Recycling of Debris" was issued in March 2024.

The central part of the report describes specific disaster waste treatment and management, summarises methods for securing temporary debris storage sites, work at temporary storage sites, waste separation and specific treatment of the waste, including reuse and recycling. It also introduces specific initiatives for safety management and hazardous waste disposal and provides basic insight into handling of memorabilia and valuables.

The report was presented at a workshop conducted by a Japanese expert with participation of relevant actors from the Japan Government for transfer of Japanese knowhow, promotion of Japanese technologies for recycling of earthquake debris, and facilitation of information exchange between the Turkish Government and Government of Japan.

Output 3: Commission two debris recycling facilities and supply mobile debris crushers

The project procured two sets of equipment for a stationary debris recycling facility. The facility in the Hatay province was commissioned in May 2024. At the time of drafting of this report, work on commissioning of the similar facility in the Kahramanmaraş province was still ongoing.

Two mobile crushers were procured and delivered to the Hatay province. Due to deterioration of the exchange rate of the Japanese currency during the project, the project budget was decreased from 5.3 million to 4,8 Million USD and the allocated amount for Output 3 of the project was not enough to procure of additional two mobile crushers hence only one mobile crusher was procured and delivered to the Kahramanmaraş province. The remaining funds were used for procurement of equipment for dust abatement system and for asbestos management .

Operational Health and Safety (OHS) trainings were provided for 21 (7+14) operators and sets PPE equipment for Hatay and Kahramanaraş provinces were procured and delivered.

The original project design included procurement of limited quantities of personal protective equipment (PPE), including gloves, goggles, disposable or replacement clothing, adequate footwear and respiratory protective equipment (RPE). Discussions with the stakeholders on assessment of the work at the debris recycling facilities resulted in decision to increase the quantities of the as the planned 1,000 pieces of PPE was considered insufficient for the operators of the debris recycling facilities as some of PPE items should be changed every day due to operational health and safety measures. As a result, market research was made, and a

quantity calculation method was conducted based on annual need and the PPE quantities were increased.

As the potentially high content of asbestos in the debris was recognized, the project supported preparation of a detailed operations and supervision plan that includes segregation of debris into piles, pre-screening the piles for asbestos through sampling for laboratory analysis, and processing the piles according to the test results with eventual removal of hazardous asbestos containing materials.

The project has achieved almost all of the planned targets in the PRF. Due to the external factor of currency depreciation that was beyond control of the project, the latter has not fully met the expectations vis-à-vis procurement and delivery of planned quantities of mobile crushers. Moreover, due to protracted equipment procurement, delayed commissioning and operational challenges of the stationary debris recycling centres, the project could not fully demonstrate the functionality of the debris management model. Although the project successfully completed activities related to commissioning of the two debris recycling facilities, including waste characterisation, training of operators, identification of material flow, elaboration of an Operation Plan, and conduct of trial operations, the facilities were not in fully operational mode at the time of the project completion. On the other hand, due to adaptive management the project was successful in addressing the management of asbestos in the debris and abatement of dust during operation that were not addressed in the project design.

Based on the above, effectiveness of the project implementation is rated **Satisfactory[9].**

3.3.3. Efficiency

The main issues examined in relation to efficiency were whether the management structure outlined in the Project Document and the allocated resources (financial, time, staff technical and gender expertise) were adequate for timely delivery of the expected results and to address gender inequalities.

In general, resources, whether funds, personnel, time, and expertise, were allocated and utilised prudently in order to attain the planned outputs within the agreed project timeframe. The project management framework, which included a monitoring strategy and a results framework, was effective in producing the expected results.

The major factor in project efficiency was the project approach with so much emphasis put on equipment procurement. As a matter of fact, vast majority of the project budget (93.6%) was allocated for procurement of stationary recycling facilities and mobile crushers, including basic training of equipment operators. Therefore, the current project is not typical for development assistance interventions implemented by UNDP as the latter does not have sufficient experience with procurement of relatively complicated equipment items. Although the risk of delays in the procurement process and their negative impact on disruption of timely project

[9] Perormance ratings are explained in Annex7.

implementation was correctly identified (risk No. 1 in the project risk matrix), its probability was underestimated.

In reality, the process of procurement and installation of the equipment was protracted. This is reflected by cumulative expenditures after one third of the project total implementation period (August – December 2023) that reached only less than 1 % of the total project grant. At the beginning of the implementation, it was realised that to achieve compliance with relevant UNDP procurement rules would seriously slow down the procurement process. Consequently, it was decided to conduct the procurement according to the Turkish Procurement Law. Hence the responsibility of equipment procurement was with the MoUECC with assistance of the Governorates. Although the Technical Specifications for the equipment procurement were developed relatively quickly through coordination of all actors, the equipment was actually delivered in May 2024 (Hatay) and July 2024 (Kahramanmaraş). Therefore, the equipment for the stationary recycling centres was installed but was not operational at the time of the Final Evaluation.

Another factor impacting the project efficiency was the necessity to obtain operating licence for the recycling centres. Although the Environmental Impact Assessment required by the Turkish legislation was completed, there were issues of occupational health and safety for operators of the equipment that fall under the responsibility of the Ministry of Labour and Social Security that was not included in the initial mapping of project stakeholders. At the time of the Final Evaluation, the request from the operators for the operational licence of the recycling facilities (expected to be valid for 5 years) was completed for the Hatay facility and still under in the MoUECC approval process for the Kahramanaraş facility.

The Evaluator also made some observations on the budget allocation. Firstly, the allocation of funds for mapping of debris a rubble sites (US$ 5,000 for Output 1) was insufficient. The funds allocation insufficiency is clearly visible from the budget-to-actual comparison where the actual expenditure under Output 1 immensely exceeded the original allocation. Furthermore, there was zero allocation of funds for Activity 2.3, namely for development of the debris management strategy and action plan.

Apart from the above minor issues, the Evaluator considers the overall resource allocation in the project budget to the individual project components reasonable and did not find any serious inefficiencies in the use of the allocated funds.

The staff allocation according to the original Project Document was also not fully followed as the original PM was transitioned to a position of the portfolio manager in the UNDP CO. However, this limitation did not have impact on implemention of the project..

The project was approved for 12-month duration and will be operationally concluded on the originally planned project closure date of 16 August 2024. Although the total duration of the project was not affected, several activities (in particular full operation of the stationary debris management centres, production of final narrative report) were still in the process in the last weeks of the project and therefore not available for assessment of the evaluator.

The Evaluator considers that both effectiveness and efficiency could have been improved if there have been a better preparedness at the national level to act in the circumstances of the

aftermath to the February 2023 earthquake. This conclusion makes reference to several insufficiencies in the preparedness to deal with disasters and disaster risk managementidentified in the TERRA report..

Based on the above, efficiency of the project implementation is rated **Satisfactory.**

3.3.4. Country ownership

As mentioned under 'Relevance and coherence', the project objective is in line with the national development priorities and plans on disaster response and management. A strong country ownership of the project was one of the key assumptions made during the project design phase. The project was designed upon extensive consultations with core stakeholders.

The strong ownership by the core national stakeholders was sustained throughout the project implementation and proved to be one of the critical drivers of progress towards the planned results. The ownership was demonstrated by active participation of the stakeholders in various project activities.

However, awareness activities targeted mainly core stakeholders from the national and sub-national governments. Although initiation of the project was covered by the media, there was only marginal extension of information about progress in implementation towardstangential stakeholders such as media, civil society and the private sector that would have put the project more in the spotlight and would have facilitated generation of support from the general public.

It can be therefore concluded that the strong project ownership by all stakeholders does not originate only from alignment of the project to relevant national priorities and action plans, but it also results from the proactive stakeholder participation in the project implementation and in targeted awareness activities.

Interviews with direct project beneficiaries demonstrated strong ownership of the project results. However, such ownership might not be sufficient for progress to impact of the project due to the evident inability of the several stakeholders to provide co-financing for the project. Therefore, progress to impact in the short-term will depend on willingness to allocate funding from local budgets, on ability to mobilise additional external funding from available financial mechanisms, and last but not least on potential to adopt financing through models and strategies for more inclusion of the private sector.

3.3.5. Cross-cutting themes

As project received gender marker 1 (limited contribution to gender equality), it demonstrated commitment to encourage women's inclusion and involvement in the awareness raising and capacity building activities of the project including but not limited to the provincial training and workshop programmes targeted to increase awareness about asbestos and other hazardous materials from earthquake debris.

While it is understood that no gender focus is possible for projects with procurement of equipment comprising vast majority of the project budget, the only response on gender was collection of gender-disaggregated data in the two awareness events in January 2024. There could have been more gender focus included in the technical studies for debris mapping and

prioritization and for development of debris management strategy and action plan, e.g. on utilization of women's capacities, knowledge and skills for debris mapping and management efforts,.

Another important cross-cutting theme, namely how the project has contributed to a rights-based approach, and following the concept of leave no one behind, was also part of the implementation. The project extended to vulnerable and disadvantaged groups through the support for establishment of environmentally friendly debris recycling facilities aiming at removal of the debris from the temporary storage sites and critical hotspots in areas whose population is most vulnerable consisting of dislocated people and people living in temporary settlements. Such activities contribute to prevention of environmental pollution and to improved heath and living conditions for the vulnerable and disadvantaged groups.

The project team in close cooperation with the two governorates decided on location of the debris recycling facilities in Enek storage site for the Hatay province and Karacasu site for the Kahramanmaraş province. The selection was based on the initial SESP for the project that called for location of the recycling facilities away from residential areas, farmlands, rivers, and water resources for minimization of the risk to and was informed by the data provided in the assessment study on debris dumpsites produced by YTÜ under the project. By using the objective criteria defined in the study, the project significantly minimized the risk of negative environmental and health impacts particularly on the dislocated people living in temporary settements.

However, in the absence of a field-level and beneficiary centered analysis, there is no information available on the extent to which the intervention met equity, poverty and gender needs, or to what extent all areas with vulnerable communities were affected.

3.3.6. Progress to impact

The project's ultimate objective was to demonstrate the functional model for debris management. Participant interviews stated that the change factor in this intervention was high. The project established foundation for recycling and reuse of processed earthquake debris. However, due to its short duration it did not solve several technical and operational issues.

The evaluator concludes that the current project can be seen as a catalyst for implementation of broader systemic efforts addressing prioritization and management of the earthquake debris sites. The project has made a tangible contribution to building capacities for debris management and post-earthquake recovery. Further progress will much depend on availability of funds for replication in other provinces as well as on addressing technical, legislative and operational issues.

As to the future positioning of UNDP,, the project proved the relevance of UNDP's active role role in addressing the crisis response and recovery. It also added to the already accumulated expertise of UNDP in earthquake response programmes, in particular those related to environmentally sound debris management. There is no doubt that UNDP should continue to participate in future government-led crisis response and recovery planning in Turkiye. However, design and implementation of future projects should consider the recommendations provide at the end of this report.

3.3.7. Sustainability

Sustainability of a project is judged by the commitment of the beneficiary country to continue and eventually replicate or upscale the project activities beyond the project completion date. The project has commissioned preparation of an Exit Strategy that was issued in August 2024. Besides provision of summary of the project achievements, the document also addresses various aspects of sustainability and provides recommendations for immediate actions. However, it is more a guideline for ensuring sustainable operation of the recycling facilities rather than addressing the sustaibńability of the project results.

The evaluation identifies key risks to sustainability and explains how these risks may affect continuation of the project benefits after the project closes. The sustainability assessment covers institutional/governance, socio-economic, financial and environmental risks.

Institutional/governance: The project supported building of human and institutional capacities relevant for management of debris sites and recycling of rubbles. The institutional strengthening resulting from the project is an enlargement of commitments and capacities for the already existing early recovery programmes. However, there is a need for further enforcement of prevention and risk management capabilities of AFAD, relevant ministries, provincial directorates, and municipalities. Nevrtheless, due to the continued political commitment of the national and province governments, the risk to institutional and governance sustainability is negligible.

Socio-economic: Deployment of rubbles recycling measures has the potential to recycle and thus save valuable material resources and contribute to job creation and further development of companies involved in debris management. However, during the implementation several issues of occupational health safety emerged, such as need to work long hours using the PPE, that is not attractive to the domestic work force. The socio-economic sustainability depends on possibilities to attract workers for the debris recycling facilities either from the domestic labour market or from abroad.

Financial: The main financial risk originates from the lack of funding for equipment procurement from the central and regional government budgets. Consequently, the amount of financing available, replication and upscaling remains low. Therefore, the financial risk to sustainability is substantial.

Environmental: Environmental benefits of earthquake debris management are obvious. There are several materials that can be recycled not only for environmental but also for economic benefits. Particularly concrete can be recovered and crushed for reuse as aggregate (for use in ready-mix concrete or other applications) or it can be recycled through the cement manufacturing process in controlled amounts, either as an alternative raw material to produce clinker or as an additional component when grinding clinker, gypsum and other additives to cement. However, the project beneficiaries were not aware of the existing legislation in Turkiye that allows for use of recycled concrete in cement manufacturing.

On the other hand, there is a potential negative environmental risk of unsafe management of asbestos-containing waste.

Different management options can be applied for asbestos management, that have different costs and impacts on the environment. The environmental impact assessment points out the importance of an in-situ pre-treatment of the rubbles and of an enhanced refining, addressed at the achievement of high quality inert. On the other hand, the economic analysis suggests that the best option is to transport everything to the treatment site, and to carry out a simple treatment of the rubbles. Consequently, there are conflicting scenarios, where an enhanced pre-treatment of the rubbles is positive from an environmental point of view, but negative for the increase in the management costs. In case of involvement of the private sector in the debris management, the economic criteria might overwhelm for any decision taken by the recycling centre managers. However, the fact that resulting environmental load may have a long-term effect with even more significant economic consequences should not be neglected.

The summary of sustainability ratings is in Table 6 below.

Table 6: Sustainability ratings

Sustainability aspect	**TE rating**
Institutional/governance	Likely
Socio-economic	Moderately Likely
Financial	Moderately Likely
Environmental	Moderately Likely
Overall Likelihood of Sustainability	**Moderately Likely**

4. Main findings, conclusions, recommendations and lessons learned

4.1. Main findings and conclusions

Formulation of the project was guided by the request of the Government of Türkiye for UNDP to make available global expertise in environmentally sound management of earthquake waste, in particular safe handling of debris and rubble. This includes recycling and reusing materials in reconstruction, safe disposal and handling of hazardous materials such as the asbestos, and prevention of storage of rubble in areas of nature protection where it can pose new threat.

In the national context, the project is highly relevant in two aspects. Firstly, its quick formulation and launching added to the immediate response to the February 2023 earthquake. Secondly, the project is aligned with the Government of Türkiye emergency response measures and reconstruction plans outlined in the Türkiye Earthquakes Recovery and Reconstruction Assessment (TERRA) that was compiled in the aftermath of the February 2023 earthquake. The TERRA document recognises that sound management of waste resulting from the disaster is critical for the environment and that both urgent actions and long-term solutions are required in order to reduce ecological damage and manage natural resources efficiently.

In addition to the relevance for the recipient country, the project is in line with priorities contained in the planning documents of the UN system and UNDP in Türkiye, as well as it directly or indirectly contributes to several UN Sustainable Development Goals.

The project procured two sets of equipment for a stationary debris recycling facility. The facility in the Hatay province was installed in April 2024 while the facility in the Kahramanmaraş province in July 2024. In addition, the project procured three mobile crushers, two for Hatay and one for Kahramanmaraş. More than 14,000 pieces of personal protective equipment was provided for the two provinces as well as Operational Health and Safety (OHS) training. Due to several technical and occupational health issues, the commissioning of the two stationary facilities was delayed and at the time of the Final Evaluation they were working in the test modality.

In addition to delivery of equipment, the project supported preliminary assessment of 26 locations of debris dumpsites in the Hatay province and 18 dumpsites in the Kahramanmaraş province. As a result of these examinations, debris dumpsites were prioritised for recycling using a multicriteria decision-making method that includes such criteria as distance to the nearest settlement, distance to pastures, forests and rivers, land use status, as well as geological properties and topographic conditions of the site.

Based on the preliminary assessment, the project supported preparation of a report on the debris management strategy and action plan. The report specified the work required for management of the debris wastes and their safe disposal ensuring reduction of the amount of waste to be stored and recovery of limited natural resources and provided details of debris composition characterisation, legislation related to debris management, and on storage and transportation of separated materials within the scope of dump area management.

4.2. Recommendations

The following recommendations are based on the findings section of this report. They are oriented on future programming regarding early response and recovery, both reinforcing and learning from experience accumulated from the issues and challenges that were faced during planning and implementation of this project. Therefore, there is no specific time frame for completion of the recommendations as their purpose is intended for future programming of similar interventions.

Specific conclusions and recommendations for UNDP:

Conclusion 1: Projects on debris management that rely on procurement of equipment and services in emergency situation need to streamline the procurement procedures to be swift, flexible and unbureaucratic. As the project design put much emphasis on procurement of relatively complicated equipment for debris recycling centres, the procurement process should have been better organised in order to avoid delays. It is advisable to use national expertise in procurement, if available.

> *Recommendation 1: For procurement of complicated equipment items in its projects in Türkiye, UNDP should consider involvement of the national Public Procurement Authority for increased effectiveness and efficiency of the procurement process.*

Conclusion 2: Design of the project did not contain measures to address the threat to health and occupational safety due to handling debris with increased level of asbestos. The project team deserves a full credit for acknowledgement of this risk during the project implementation and adaptive management interventions for addressing the risk through preparation of an asbestos management plan and procurement of asbestos detection equipment for the debris recycling centres.

Recommendation 2: Asbestos has been identified as a threat to occupational health and safety in management of earthquake debris. Therefore, development of an asbestos management plan and provision of asbestos detection equipment should be included as an essential and integral component in the design of future projects on debris mnagment.

Conclusion 3: There has been some experience in management of construction and demolition waste in the Eskişehir province, but such experience was not sufficiently considered in the design of the current project.

> *Recommendation 3: For formulation of projects on debris management, UNDP should carefully map already accumulated experience in the country for incorporation in the project design.*

Conclusion 4: Establishment of a debris management facility requires several permissions from the authorities, including completion of EIA and obtaining license for operation of the facility. Given the time needed for procurement of complicated equipment items, the 12-months duration of the project was not sufficient for completion of all required procedures.

Recommendation 4: UNDP should consider the impact of the required administrative procedures for EIA and operational licence on duration of projects on debris management.

Conclusion 5: Operation of the debris recycling facilities face several technical and operational challenges that should be considered in the design and implementation of the projects on debris management.

Recommendation 5: For formulation of projects on debris management, UNDP should carefully consider issues related to pre-sorting of the debris and reflect adequate activities in project design and budget

Conclusion 6. The project activities were heavily shifted towards procurement of equipment and production of studies on mapping of debris storage sites. There was no focus on situation of women in communities living in the areas of the debris sites.

Recommendation 6: Projects aiming at mapping debris storage sites should include assessment of situation of women living in the debris sites areas to examine impact on women and the different needs of men and women living in the debris area communitieds.

Specific conclusions and recommendations for the Governments

Conclusion 6: Due to its limited duration, the project was not able to successfully demonstrate functionality of the model for earthquake debris management. After the project operational completion, the Government should continue the work towards full functionality of the model developed under the project.

Recommendation 7: The relevant authorities should accelerate all procedures for operation permits for the recycling facilities so that they could move to full scale operation.

Conclusion 7: Provision of additional equipment items will address technical challenges related to pre-sorting of the debris and increase the quality and usefulness of the product from processing of debris.

Recommendation 8: The Government should mobilise financial resources for provision of additional equipment, in particular for additional conveyor belts for improved pre-sorting of debris.

Conclusion 8: The reuse of earthquake-induced structural waste can reduce the environmental impact and mitigate the demand for raw materials. However, the project beneficiaries were not aware of the legislation that allows for the reuse of products from processed debris in cement manufacturing.

Recommendation 9: The Government should provide information to the operators of the recycling facilities on legislation that determines conditions for use of products from processed debris in cement manufacturing.

Conclusion 9: There are risks to environmental sustainability and operational health safety in case of involvement of private sector in debris processing as economic concerns could prevail over environmental and OHS considerations.

Recommendation 10: The Governorates should ensure that owners of the recycling facilities pay due consideration to environmental impacts of the facility operations.

Conclusion 10: As the debris originate from homes of people, they contain significant amount of memorabilia that should be handled in a sensitive manner.

Recommendation 11: For handling of memorabilia in the process of debris pre-sorting, the Governorates should ensure that relevant international (Japanese) experience is reflected.

4.3. Lessons learned

Strong ownership of the project by core project stakeholders, demonstrated by active participation and engagement of relevant institutions in the project activities is one of the main drivers of progress towards achievement of the results.

A lesson should be learned from procurement planning. Experience from this project shows that UNDP procurement systems are not flexible enough to facilitate fast-track procurement of complex equipment items. In this particular project, it proved beneficial to use the national procurement system. Such system allows for increased participation of the beneficiaries, however, they should be involved throughout the entire procurement process. There is still an important role for UNDP to mobilise international expertise for preparation of technical documentation for the procurement.

Implementation of this project proved that for projects related to provision of equipment for debris recycling facilities, it is insufficient to consider only the time required for equipment procurement, installation and commissioning. If a project aims at demonstration of functionality of a technological model, it is inevitable to consider the need to conduct required procedures such as environmental impact assessment and obtain necessary permits from authrorities. Time needed for completion of the procedures and permit applications should be factored in design of the projects as full operation of the facilities is necessary for demonstration of the functional model.

This project was adopted as an emergency assistance project hence it did not follow the usual UNDP implementation reporting and governance patterns. The Final Evaluation was commissioned at the time when a number of activities were still ongoing and not completed. The tight timeline for the evaluation forced the Evaluator to draft the Final Report when the bulk of project deliverables was not available. Although the deliverables (reports from workshops, operation plans, exit strategy, etc.) were provided later after completion of the project, this is not a healthy situation. It would be useful to consider starting the Final Evaluation only once the bulk of deliverables is available and could be shared with the Evaluator during the inception phase.

Annex 1: Evaluation Terms of Reference

Terms of Reference for Ics and RLAs through /GPN ExpRes

Services/Work Description: This Terms of Reference (ToR) specify the details for the assignment of an Individual Contract for Final evaluation of the "Grant Aid for Environmentally Sound Management of Earthquake Debris and Safe Disposal of Hazardous Waste Project" Project financed by the Japan Government, implemented by UNDP Türkiye Country Office (CO) in close cooperation with the Ministry of Environment, Urbanization and Climate Change (MoEUCC). The project commenced in 2023 and aims to support environmentally sound management of earthquake debris and hazardous waste through planning and establishment of debris recycling facilities/mobile crushers in the most affected hotspots in Hatay and Kahramanmaraş provinces that experienced the worst destruction in the February earthquakes. The evaluation will focus on the assessment of the activities implemented and whether the activities led to the achievement of the planned results and objectives in accordance with the Project Document and Donor Agreement. As a result of this evaluation, identification of the lessons learned, and recommendations is expected from the evaluator to improve the quality of the planning, preparation and implementation of subsequent projects in future.

Project/Programme Title: 001001223 – **"**Grant Aid for Environmentally Sound Management of Earthquake Debris and Safe Disposal of Hazardous Waste" Project

Consultancy Title: Final Evaluation of "Grant Aid for Environmentally Sound Management of Earthquake Debris and Safe Disposal of Hazardous Waste" Project

Duty Station: Duty Station for the Assignment is **home-based**. The Consultant will be requested to travel to provinces where the Project has been implemented as indicated in the expected interview schedule.

Duration: Approximately 15 days

Expected start & end dates: June 2024– 31 August 2024 (starting date is indicative and may be updated considering actual contract signature date)

1. BACKGROUND

United Nations Development Programme (UNDP) is the UN's global development network, an organization advocating for change and connecting countries to knowledge, experience and resources to help people build a better life.

UNDP Climate Change and Environment (CCE) Portfolio's strategy is focusing on promoting change at scale through investing in national capacity to respond in addition to piloting and prototyping development solutions that have the potential to lead to transformational change. Also, a key element of the strategy is to apply the integrated ecosystem approach, to help establish mechanisms to value ecosystem services with a view to addressing the market failures to fully reflect the true value of ecosystem services.

Two major earthquakes (Eqs) devastated 11 provinces in southern Turkiye in February 2023. The disaster killed more than 50,000 people, destroyed 313,000 buildings and left 3.3 million homeless across 110,000 sq km. Damages and losses from the Eqs were estimated in March 2023 at US$103.6 billion. One year later, millions in the region continue to live in temporary accommodation, either in collective housing, container cities or tents. Several million people have abandoned the EQ region entirely, resulting in an acute shortage of skilled labour for businesses that remain active. It is foreseen that both humanitarian and development assistance will continue to be vital for many years.

The region struck by the EQs Is also hosting half of the 3.7 million Syrians who have been offered a temporary refuge In Turkiye from the civil war in their own country. In parallel to the destructive effects of EQ disasters, Turkiye's and UNDP's actions in refugee context became more challenging. Despite this, UNDP's efforts to help refugees increase employability and social cohesion while promoting a transition to self-reliant formal employment remains a top UNDP priority.

As emergency response measures continue, the Government of Turkiye has announced ambitious recovery and reconstruction plans, including a commitment to rebuild hundreds of thousands of housing units. To assess the financial impact of the Eqs and set priorities for recovery and reconstruction, the Government undertook the preparation of a preliminary assessment called the Turkiye Earthquakes Recovery and Reconstruction Assessment (TERRA) ahead of a donor conference for Turkiye and Syria scheduled for Brussels on 20 March 2023. The TERRA was completed with support from the United Nations Development Programme (UNDP), coordinating on behalf of the UN family, and the World Bank and the European Union.

The framework of the priorities of"UNDP'Turkiye within EQ Response actions is guided by TERRA, UNDP's EQ Response Strategy, Country Program Document (CPD) covering 2021-2025 outputs and United Nations Sustainable Development Cooperation Framework (UNSDCF) for 2021-2025 outcomes. TERRA indicates four interconnected sectoral priorities for recovery and reconstruction, including; Society, Economy, Infrastructure and Environment.

TERRA Priorities:

- Build back better for resilient structures, institutions, communities.
- Disaster risk reduction in focus in education, policies and practices.
- Accountable decisions made with the participation of those affected.
- Leave no one behind in all relief, recovery and reconstruction efforts.

- Employ green, nature-friendly solutions for a sustainable future.

Parallel to this strategic direction, UNDP Turkiye EQ Response Strategy has based its actions on four pillars;

2. Support to Government led crisis response and recovery planning
ii) Restoration of critical infrastructure and protection of cultural heritage
iii) Supporting livelihoods and socioeconomic recovery
iv) "Leave no one behind" through targeted support to vulnerable groups

UNDP's Early Recovery actions involve specific customized solutions to EQ-induced problems in the affected region:

- Providing social and financial support to affected vulnerable populations
- Strengthening public services in EQ zone and host provinces
- Rebuilding social care and education service
- Supporting debris clearance and management in line with environmental and occupational health and safety standards
- Repairing and reconstructing high-priority municipal infrastructure and services including solid waste management
- Providing water, sanitation and hygiene (WASH) support
- Fostering the recovery of small and medium-sized enterprises
- Supporting job-creation opportunities and skill formation
- Supporting protection and recovery of cultural heritage in the affected regions
- Supporting temporary settlements with sustainable water and wastewater infrastructure and efficient water and sanitation equipment

Early Recovery actions under this project were planned and implemented in line with the following CPD output:

Output 3.4 Chemicals and waste prevented, managed and disposed of in an environmentally sound manner in crisis and non-crisis urban settings.

"Grant Aid for Environmentally Sound Management of Earthquake Debris and Safe Disposal of Hazardous Waste"Project" under CCE Portfolio is funded by the Japan Government and has been executed by UNDP in partnership with the MoEUCC, General Directorate of Environmental Management. The project aims to support environmentally sound management of earthquake debris and hazardous waste through planning and establishment of debris recycling facilities/mobile crushers in the most affected hotspots in Hatay and Kahramanmaraş provinces that experienced the worst destruction in the February earthquakes. The project assesses all sites where earthquake debris is stored. The project prepares a strategy and action plan to ensure the environmentally sound management of the full volume of earthquake debris, with a focus on reducing volume, recycling a maximum share of resources and safe disposal of hazardous waste. The project aims to construct two model sites for the recycling of earthquake rubble and supply mobile crushing facilities for location-based debris processing.
The project will carry out several activities aimed at Grant Aid for Environmentally Sound Management of Earthquake Debris and Safe Disposal of Hazardous Wastes:

Output 1: Assessing the most suitable places for establishing debris recycling facilities in Kahramanmaraş and Hatay.

Activity 1.1:	Assessing the location of debris and rubble temporary storage sites, in collaboration with relevant Ministries to the debris recycling facilities are located in the most optimum places for efficiency and effectiveness.
Activity 1.2:	Validating the assessment with the Ministry of Environment, Urbanization and Climate Change and Governorates. By this assessment, it would be possible to allocate resources more effectively.
Activity 1.3:	Maintaining coordination with relevant Ministries and civil society actors to ensure that the most optimum locations are listed. This will help ensure that any issues or concerns are identified and addressed promptly to prevent further damage or harm.
Output 2:	Prepare environmentally sound debris management strategy and action plan.
Activity 2.1:	Liaising and collaboration with central and local authorities to initiate the process for environmentally sound debris management strategy at the regional level.
Activity 2.2:	Conducting workshops and training sessions to increase understanding, public awareness and build support for environmentally sound management of debris.
Activity 2.3:	Providing expertise and technical support to the authorities in the process of drafting environmentally sound debris management strategy and action plan.
Activity 2.4:	Finalizing environmentally sound debris management strategy and action plan with inputs of central and local authorities and in consultation with local communities.
Output 3:	Commission two debris recycling facilities and supply mobile debris crushers.
Activity 3.1:	Installing and commissioning two debris recycling facilities and supplying mobile debris crushers in Kahramanmaras and Hatay in accordance with the debris management plan and in high-priority locations with critical hotspots. Each recycling facility will include feeding bunkers, vibrating bunkers, primary impact crushers, secondary impact crushers, vibrating screen, magnetic separator, belt conveyors, metal detector, magnet, transformer, truck scales (60-80 tons), automatic identification system and foundation concrete, dust suppression system and prefabricated administrative building.
Activity 3.2:	Training operators and preparing guidelines and standard operating procedures.
Activity 3.3:	Providing operational health and safety equipment and relevant training to ensure the safety of personnel involved in the debris recycling process

Brief Description of the Current Project:

Title of the action:	Grant Aid for Environmentally Sound Management of Earthquake Debris and Safe Disposal of Hazardous Waste"Project
Contracting Authority:	Ministry of Environment, Urbanisation and Climate Change, General Directorate of Environmental Management Address: Mustafa Kemal Mahallesi Eskişehir Devlet Yolu (Dumlupınar Bulvarı) 9. km. No: 278 Çankaya Ankara / Türkiye Telephone: +90 312 410 10 00
Organisation:	For the Contribution Agreement: United Nations Development Programme (UNDP) Türkiye Country Office UNDP, Oran Mahallesi, Mustafa Fehmi Gerçeker Sokak No:12, 06450, Çankaya, Ankara/Türkiye Telephone: +90 312 454 11 00 Telex/Fax: +90 312 496 14 63
End Recipient:	Ministry of Environment, Urbanization and Climate Change, General Directorate of Environmental Management, Circular Economy and Waste Management Department Address : Mustafa Kemal Mahallesi Eskişehir Devlet Yolu (Dumlupınar Bulvarı) 9. km. No: 278 Çankaya Ankara / Türkiye Telephone : +90 312 410 10 00
Location of the action:	Türkiye
Total duration of the action:	12 months
Total budget for the action:	EUR 4,833,584
Objectives of the action:	The project aims to support environmentally sound management of earthquake debris and hazardous waste through planning and establishment of debris recycling facilities/mobile crushers in the most affected hotspots in Hatay and Kahramanmaraş provinces that experienced the worst destruction in the February earthquakes.
Target groups[10]:	The following target groups can be considered under this action: • The relevant staff of MoEUCC in central and provincial level from the following departments: o Department of Circular Economy and Waste Management o Provincial directorates of Hatay and Kahramanmaraş provinces In addition to target groups the following Governorates are the stakeholders: • Hatay Governorate • Kahramanmaraş Governorate However, in addition to this, the project will have specific target groups: • Municipalities
Final beneficiaries[11]:	The final beneficiaries of the project are Hatay and Kahramanmaraş Governorates
Estimated results:	Output 1: Assessing the most suitable places for establishing debris recycling facilities in Kahramanmaraş and Hatay Output 2: Prepare environmentally sound debris management strategy and action plan. Output 3: Commission two debris recycling facilities and supply mobile debris crushers.
UNSDCF outcome served (2021-2025)	Outcome 3.1: By 2025, all relevant actors take measures to accelerate climate action, to promote responsible production and consumption, to improve the management of risks and threats to people, and to ensure sustainable management of the environment and natural resources in urban and ecosystem hinterlands.
UNDSC outcome and CPD Output served (2021-2025)	Output 3.4: Chemicals and waste prevented, managed and disposed of in an environmentally sound manner in crisis and non-crisis urban settings Output 3.4.1: Number of interventions on waste management to strengthen core local public authorities

[10] "Target groups" are the groups/entities who will directly benefit from the action at the action purpose level.

[11] "Final beneficiaries" are those who will benefit from the action in the long term at the level of the society or sector at large.

	functions.
Primary SDGs served	3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination 12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution 15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

Summary of Project and the Progress:

Outputs: Output 1: Assessing the most suitable places for establishing debris recycling facilities in Kahramanmaraş and Hatay.

	Main activities	**Expected output**
1.	Assessing the location of debris and rubble temporary storage sites, in collaboration with relevant Ministries to the debris recycling facilities are located in the most optimum places for effificency and effectiveness.	Project Reports Debris Assessment and Mapping Report produced.
2.	Validating the assessment with the Ministry of Environment, Urbanization and Climate Change and Governorates. By this assessment,it would be possible to allocate resources more effectively	
3.	Maintaining coordination with relevant Ministries and civil society actors to ensure that the most optimum locations are listed. This will help ensure that any issues or concerns are identified and addressed promptly to prevent further damage or harm.	

Output 2 – Prepare environmentally sound debris management strategy and action plan.

	Main activities	**Expected output**
2.1	Liaising and collaboration with central and local authorities to initiate the process for environmentally sound debris management strategy at the regional level.	● 78 (50 Male/ 28 Female participants attended to workshops A Workshop event in Hatay and Kahramanmaraş provinces was conducted.
2.2	Conducting workshops and training sessions to increase understanding, public awareness and build support for environmentally sound management of debris.	● 2 workshops have been conducted in Hatay and Kahramanmaraş.
2.3	Providing expertise and technical support to the authorities in the process of drafting environmentally sound debris management strategy and action plan.	Expertise and technical support for developing a strategy and action plan have been provided.
2.4	Finalizing environmentally sound debris management strategy and action plan with inputs of central and local authorities and in consultation with local communities.	● Strategy and Action Plan Developed.

Output 3 – Commission two debris recycling facilities and supply mobile debris crushers.

	Main activities	**Expected output**
3.1	Installing and commissioning two debris recycling facilities and supplying mobile debris crushers in Kahramanmaras and Hatay in accordance with the debris management plan and in high-priority locations with critical hotspots. Each recycling facility will include feeding bunkers, vibrating bunkers, primary impact crushers, secondary impact crushers, vibrating screen, magnetic separator, belt conveyors, metal detector, magnet, transformer, truck scales (60-80 tons), automatic identification system and foundation concrete, dust suppression system and prefabricated administrative building	● A.Number of recycling facilities ● B. Number of Mobile Crushers **Partially completed, one recycling facility has been established for Hatay Province, 2 Mobile crushers procured and delivered for Hatay province.** **For Kahramanmaraş province, the establishment of recycling facility and provision of mobile crusher process is ongoing.** **According to the project document normally 4 mobile crushers was planned to be procured at the beginning but after it was decided to procure 3 mobile crushers instead of 4 as the budget is not sufficient to procure 4 mobile crushers due to the fluctuation rate in the Japanese Yen currency, the project budget was decreased**

		approximately 500.000 USD when the project was signed and that is not sufficient to procure 4 mobile crushers.
3.2	Training operators and preparing guidelines and standard operating procedures.	● Sex disaggregated number of trainees who received operational training **Partially Delivered, the training of operators for Hatay province completed. In total 7 operators completed the training.** **For Kahramanmaraş the trainings will be completed after the establishment of the recycling facility.**
3.3	Providing operational health and safety equipment and relevant training to ensure the safety of personnel involved in the debris recycling process	● Number of pieces of PPE **Completed for Hatay province, but not Completed for Kahramanmaraş province, the procurement process is ongoing.**

3. SCOPE OF WORK, RESPONSIBILITIES AND DESCRIPTION OF THE PROPOSED WORK

An Individual Contract (IC) on Final Project Evaluation for **"Grant Aid for Environmentally Sound Management of Earthquake Debris and Safe Disposal of Hazardous Waste"Project"** will be initiated for preparing an independent evaluation that measures the expected results and specific objectives achieved against those stated in the Project Document and identifies the lessons learned and recommendations relevant to the planning, preparation and implementation of a possible subsequent project.

This final evaluation has the following ***specific objectives***:

To measure to what extent the project has contributed to supporting environmentally sound management of earthquake debris and safe disposal of hazardous waste.

To measure project's degree of implementation, efficiency and quality delivered on expected results (outputs), against what was originally planned.

To measure the project's contribution to the objectives set in the Turkiye Earthquakes Recovery and Reconstruction Assessment (TERRA), UNDP's EQ Response Strategy, UNDP Country Program Document (CPD) for 2021-2025, United Nations Sustainable Development Cooperation Framework (UNSDCF) for 2021-2025, and SDGs (Social Development Goals).

To assess both negative and positive factors that have facilitated or hampered progress in achieving the project outcomes, including external factors/environment, weakness in design and management.

To generate substantive evidence-based knowledge by identifying best practices and lessons learned that could be useful to other development interventions at national (scale up) and international level (replicability) and to support the sustainability of the project or some of its components.

To provide a forward-looking perspective for UNDP's future positioning in relation to environmental aspects of earthquake/disaster response and early recovery actions, in particular pertaining to debris management.

Evaluation criteria and key guiding questions

In the light of the evaluation parameters, the Evaluation Consultant is expected to analyze data and share its findings, conclusions and recommendations generated by this analysis. As a reference point for the evaluation, the Consultant is provided with indicative evaluation questions below; which are expected to be amended, elaborated and submitted as part of the Inception Report and shall be included as an annex to the final report described below.

Relevance:

Under this parameter, the Consultant will analyze the extent to which the objectives of this intervention are consistent with the needs of environmentally sound management of earthquake debris and safe disposal of hazardous waste, the needs of the country, national strategies and relevant legislation.

1. To what extent was the project design relevant in addressing the arising needs around sustainable management of debris and safe disposal of hazardous waste?
2. To what extent was the design and strategy of the project complementary to demolition waste legislation?
3. To what extent was the design and strategy of the activities are aligned with pillars in UNDP's EQ Response Strategy, priorities of TERRA, UN and UNDP priorities (UNSDCF and CPD)?
4. To what extent was the theory of change applied in the project relevant to serving the needs of the local partners and the community affected from the earthquake disaster?
5. To what extent does the project create synergy/linkages with other projects and interventions in the country i.e. other projects implemented for supporting early recovery services in Türkiye?
6. To what extent does the project fit into the comparative advantages of UNDP's global experience and presence in the area of debris management?

Effectiveness:

Under this parameter, the Consultant will analyze to what extent the Project objectives have been achieved or how likely they are to be achieved:

1. To what extent has the project contributed to the fulfilment of the objectives of priorities of TERRA, UNDP's EQ Response Strategy, UNSDCF and CPD goals?
2. To what extent has the project achieved the objectives and targets of the results framework in the Project Document? (The Consultant is expected to provide detailed analysis of 1) planned activities and results and 2) achievement of results.)
3. What are the key factors contributing to project success or underachievement? How might this be improved in the future?
4. To what extent could the project create a model processing and recycling of debris and proof of concept?

5. To what extent and in what ways has ownership – or the lack of it – by the implementing partners impacted the effectiveness of the project?
6. How effective was UNDP's partnership strategy employed by the project?

Efficiency:

Under this parameter, the Consultant will analyze to what extent the resources/inputs (funds, time, human resources, etc.) have been turned into results and the results have been delivered with the least costly way possible:

1.To what extent were the project outputs delivered on time and with high quality?

2.To what extent has the project ensured value for money?

3.To what extent were resource mobilization efforts successful? Was funding sufficient for the achievement of results? (funding analysis)

4. What was the progress of the project in financial terms, indicating amounts committed and disbursed (total amounts & as percentage of total) by UNDP?

5.To what extent and in what ways has ownership – or the lack of it – by the implementing partner impacted on the efficiency of the project?

6.To what extent was there any identified synergy between UNDP initiatives/projects that contributed to reducing costs while supporting results?

7.How well did project management work for achievement of results?

8.To what extent did project monitoring provide management with a stream of data that allowed it to learn and adjust implementation accordingly?

9.What type of (administrative, financial and managerial) obstacles did the project face and to what extent have this affected its efficiency?

Sustainability:

Under this parameter, the Consultant will analyze to what extent the project's positive actions are likely to continue after the end of the project:

1. To what extent have implementing partners demonstrated ownership of the model and proof of concept created by the project? To what extent has this project induced prospect for active policies targeting target groups to be pursued by the beneficiary institutions to improve the overall efficiency of their services?
2. To what extent will the project achievements be sustained? What are the challenges and opportunities?
3. To what extent will the project be replicable or scaled up in other earthquake affected regions and serve transformative change in the area of debris management in the country?
4. To what extent will the benefits and outcomes continue after external donor funding ends? What is the likelihood of financial and economic resources not being available once the donor assistance ends?
5. What can be done to maximize the likelihood of sustainable outcomes and to what extent does an effective exit strategy exist?

Cross-Cutting Issues:

All the above-mentioned evaluation questions should include an assessment of the extent to which programme design, implementation and monitoring have taken the following cross cutting issues into consideration:

1. To what extent have gender equality and the empowerment of women been considered in the design, implementation and monitoring of the project?
2. To what extent has the project contributed to leaving no one behind agenda including protecting the health and safety of local communities, dislocated people and people living in temporary settlements?
3. To what extent has the project contributed to crisis management and recovery issues?

Forward-Looking Issues:

Where should UNDP position itself in Turkiye in relation to environmental aspects of earthquake/disaster response and early recovery actions, in particular pertaining to debris management based on the outcomes of this project evaluation?

Methodology and Approach

The methodology and techniques to be used in the evaluation should be described in detail in the Inception Report and the Final Evaluation Report, and should contain, at minimum, information on the instruments used for data collection and analysis, whether these documents, interviews, questionnaires or participatory techniques following high level of research ethics and impartiality.

It is strongly suggested that the evaluation should use a mixed method approach whenever possible – collecting and analyzing both qualitative and quantitative data using multiple sources in order to draw valid and evidence-based findings and conclusions and practical recommendations. The evaluator is expected not only to collect quantitative/qualitative data but also is highly encouraged to review all relevant reports providing quantitative data collected by project.

However, the evaluator is expected to propose and determine a sound evaluation design and methodology (including detailed methodology to answer each evaluation question) and submit it to UNDP in the inception report following a review of all key relevant documents and meeting with UNDP and the project team. Final decisions about the specific design and methods for the evaluation will be made through consultation among UNDP, the Evaluation Consultant and key stakeholders about what is appropriate and feasible to meet the evaluation purpose and objectives as well as answer the evaluation questions, given limitations of budget, time and data.

Methods to be used by the evaluator to collect and analyze the required data shall include but not limited to:

Desk Review: This should include a review of alliance with;

- Project document
- Result Framework/M&E Framework
- Project Quality Assurance Report
- Annual Work Plan
- Project Final Report

Semi-structured interviews with key stakeholders including UNDP, Japan Government, Government partners, UN colleagues and so on.

- Development of evaluation questions around relevance, effectiveness, efficiency and sustainability and designed for stakeholders to be interviewed
- **Key informant interviews** with relevant stakeholders from government agencies, donor, UN Agencies, beneficiaries supported by project.
- All interviews should be undertaken in full confidence and anonymity. (The final evaluation report should not assign specific comments of individuals)

- Analysis of project 's funding, budgets and expenditure generated from Quantum.
- Analysis and interpretation of qualitative and quantitative data available from various credible sources.
- Data review and analysis of monitoring and other data sources and methods.

The evaluator will ensure triangulation of the various data sources, data and evidence will be triangulated with multiple sources to address evaluation questions. The final methodological approach including interview schedule and data to be used in the evaluation should be clearly outlined in the inception report and fully discussed and agreed between UNDP, stakeholders and the Evaluation Consultant.

Ethical Principles and Premises of The Evaluation

The evaluation of the project is to be carried out according to ethical principles and standards established by the UNEG.

- Anonymity and confidentiality. The evaluation must respect the rights of individuals who provide information, ensuring their anonymity and confidentiality.
- Responsibility. The report must mention any dispute or difference of opinion that may have arisen between the Evaluation Consultant and Project Team in connection with the findings and/or recommendations. The Evaluation Consultant must corroborate all assertions and disagreements.
- Integrity. The Evaluation Consultant will be responsible for highlighting issues not specifically mentioned in the ToR, if this is needed to obtain a more complete analysis of the intervention.
- Independence. The Evaluation Consultant should ensure its independence from the intervention under review and must not be associated with its management or any element thereof.
- Incidents. If problems arise during the interviews, or at any other stage of the evaluation, they must be reported immediately to UNDP. If this is not done, the existence of such problems may in no case be used to justify the failure to obtain the results stipulated by UNDP in this Terms of Reference.
- Validation of information. The Evaluation Consultant will be responsible for ensuring the accuracy of the information collected while preparing the reports and will be ultimately responsible for the information presented in the evaluation report.
- Intellectual property. In handling information sources, the Consultant shall respect the intellectual property rights of the institutions and communities that are under review.
- Delivery of reports/deliverables. If delivery of the reports/deliverables is delayed, or in the event that the quality of the reports delivered is lower than of the quality desired by UNDP, the Evaluation Consultant will not be entitled for any payment regarding that specific report/deliverable, even person/days for submission of the report/deliverable has been invested.

EXPECTED INTERVIEW AND SITE VISIT SCHEDULE

Partners/ Stakeholder(s) to be Interviewed	Location[12]	Estimated Day(s) of Interview	Method
MoEUCC, General Directorate of Environmental Management - Department of Circular Economy and Waste	Ankara	0.25	In person or remote
Japan Government	Ankara	0.25	In person or remote
UNDP Project Team	Ankara	0.5	In person or remote
Sample Governorate staff trained by the project	Hatay and Kahramanmaraş provinces	0.5	In person and/or remote
Visit to facilities for on-the-spot check and interviews with governorate administrations	Hatay and/or Kahramanmaraş	1	In person
	ESTIMATED TOTAL	**2.5**	

The locations of partners and stakeholders do not rule out the probability of a remote monitoring mission if approved by the Commissioning Unit under exceptional circumstances. The names of cities are there to inform the reader about the location of stakeholders and do not mean that the Individual Consultant must pay an in-person field visit to each city indicated in this list.

Gender and Human Rights-based Approach

As part of the requirement, evaluation must include an assessment of the extent to which the design, implementation, and results of the project have incorporated gender equality perspective and rights-based approach.
In addition, the methodology used in the final evaluation, including data collection and analysis methods should be human rights and gender-sensitive to the greatest extent possible, with evaluation data and findings disaggregated by sex, ethnicity, age, etc. Detailed analysis on disaggregated data will be undertaken as part of final evaluation from which findings are consolidated to make recommendations and identify lessons learned for enhanced gender responsive and rights-based approach of the project. These evaluation approach and methodology should consider different types of groups in the project intervention – women, youth, minorities, and vulnerable groups.

[12] Location refers to where the stakeholder is located. The evaluator may or may not undertake an in-person interview depending on UNDP's approval based on available resources or any other limitation.

3. Expected Outputs and deliverables

Final Evaluation is expected to be conducted between June 2024 and 31 August 2024 and take approximately 15 working days. The Evaluation Consultant is expected to submit the following deliverables to the satisfaction of UNDP:

#	Deliverable	Due Date	Review and Approvals Required
1	Inception Report	08 July 2024	Reviewed and approved by Evaluation Manager in consultation with the CCE Portfolio Manager
2	Draft Evaluation Report	21 July 2024	Reviewed and approved by Evaluation Manager in consultation with the CCE Portfolio Manager
3	Final Evaluation Report + Audit Trail	9 August 2024	Reviewed and approved by Evaluation Manager in consultation with the CCE Portfolio Manager
4	De-briefing/ Presentation	12 August 2024	Reviewed and approved by Evaluation Manager in consultation with the CCE Portfolio Manager

*: All final evaluation reports will be quality assessed by the UNDP Independent Evaluation Office (IEO). Details of the IEO's quality assessment of decentralized evaluations can be found in Section 6 of the UNDP Evaluation Guidelines.

Deliverable	Indicative person/days to complete the deliverable*	Related Activity	Responsible Party	Expected Date of Completion**
Inception Report	**3**	Kick off meeting	UNDP	04.07.2024
		Review of relevant documentation and submission of the draft Inception Report	Consultant	05.07.2024
		Providing feedback to Draft Inception Report	UNDP	08.07.2024
		Finalized Inception Report based on the feedback received from UNDP	Consultant	08.07.2024
Draft Evaluation Report	**7.5**	Data collection and interviews with UNDP and key stakeholders	Consultant	08.07.2024-12.07.2024
		Online Mission Wrap-Up Meeting to present initial findings	Consultant	16.07.2024
		Delivery of Draft Evaluation Report compiling findings from data collection and interviews with key stakeholders	Consultant	21.07.2024
Final Evaluation Report + Audit Trail	**4**	Review the Draft Evaluation Report and provide feedback	UNDP, Evaluation Reference Group	29.07.2024
		Delivery of the Final Evaluation Report + Audit Trail by taking into consideration the feedback from UNDP and Evaluation Reference Group	Consultant	09.08.2024
De-briefing/Presentation	**0.5**	**De-briefing/Presentation to UNDP and Stakeholders**	Consultant	12.08.2024

*** The number of person/days are solely provided to give the Evaluation Consultant an idea on the work to be undertaken. The payments shall be realized in accordance with Section VI – Price and Schedule of Payments, irrespective of the number of person/days to be invested for the completion of each respective deliverable.**

**** Dates may be changed according to the actual contract start date.**

1) Inception Report:

This report will be 30 pages maximum in length and will propose the methods, sources and procedures to be used for carrying out the independent evaluation The report should justify why the said methods are the most appropriate, given the set of evaluation questions identified in the ToR. This document will be used as an initial point of agreement and understanding between the Evaluation Consultant and UNDP. In principle, the report is expected to contain the outline stated in **Annex A** of this Terms of Reference.

2) Draft Evaluation Report:

The draft evaluation report will contain the same sections as the final report detailed under Annex B. It will also contain an executive summary of no more than 5 pages that includes a brief description of the project, its context and current situation, the purpose of the evaluation, its methodology and its main findings, conclusions and recommendations. UNDP will disseminate the draft evaluation report to the evaluation reference group in order to seek their comments and suggestions. Comments and suggestions of UNDP and Evaluation Reference Group will be collected in an audit trail and will be shared with the Evaluation Consultant for it to make final revisions.

3) Final Evaluation Report + Audit Trail:

The final evaluation report will also contain an executive summary of no more than 5 pages that includes a brief description of the project, its context and current situation, the purpose of the evaluation, its methodology and its main findings, conclusions, and recommendations. The report should contain, at minimum, information on the instruments used for data collection and analysis, whether these documents, interviews, questionnaires, or participatory techniques following high level of research ethics and impartiality. In addition, the Final Evaluation Report should contain clear recommendations that are concrete, feasible and easy to understand. The Final Evaluation Report will be shared with UNDP to be disseminated to the key stakeholders. In principle, this report is expected to contain the sections stated in **Annex B** of this Terms of Reference. The Evaluation Consultant will also submit its answers to the Audit Trail to show the actions taken/not taken and revisions made/not made in line with suggestions and recommendations of UNDP and Evaluation Reference Group providing detailed justifications in each case.

4) Presentation/Debriefing

A meeting will be organized with key stakeholders including UNDP and Evaluation Reference Group members to present findings, conclusions, and recommendations. The meeting will be held either via ZOOM or if conditions permit in person at UNDP Türkiye Office in Ankara. The presentation will be on main findings and lessons learned but will also be forward looking in proposing recommendations that are actionable by UNDP and its implementing partners.

4. Institutional arrangements/reporting lines

UNDP has full ownership of the activity and of its final product. Thus, any public mention (including through social media) about the activity should state clearly that ownership. In addition, any public appearance or related published work related to the activity should be coordinated and approved by UNDP in advance. Likewise, any visibility material or product produced for this assignment must be in the name of UNDP.

The Evaluation Consultant shall be responsible to the Evaluation Manager (in this case UNDP's Monitoring and Evaluation and Knowledge Management Analyst) for the completion of the tasks and duties assigned throughout this Terms of Reference. All the reports are subject to approval from the Evaluation Manager, for the payments to be affected to Service Provider.

The following are the key actors involved in the implementation of this Final Evaluation:

5. **Evaluation Manager**

This role will be conducted by the **Monitoring and Evaluation and Knowledge Management Analyst of UNDP** who will have the following functions:

Supervise the evaluation process throughout the main phases of the evaluation (preparation of the ToR, implementation and management and use of the evaluation)

Participate in the selection and recruitment of the Individual Consultant

Provide the Individual Consultant with administrative support and required data and documentation.

Ensure the evaluation deliverables meet the required quality

Safeguard the independence of the exercise, including the selection of the Individual Consultant

Review the Inception Report, Draft Evaluation and Final Evaluation Reports and give necessary approvals on behalf of UNDP

Collect and consolidate comments on draft evaluation reports and share with the evaluation team for finalization of the evaluation report

Contribute to the development of management responses and key actions to all recommendations addressed to UNDP

Ensure evaluation terms of reference, final evaluation reports, management responses are publicly available through Evaluation Resource Center within the specified timeframe

Facilitate, monitor and report on implementation of management responses on a periodic basis

Climate Change and Environment Portfolio Manager will have the following functions:

Establish the Evaluation Reference Group with key project partners when needed

Ensure and safeguard the independence of the evaluation

Provide comments and clarifications on the Terms of Reference, Draft Inception Report and Draft Evaluation Reports

Ensure the Individual Consultant's access to all information, data and documentation relevant to the intervention, as well as to key actors and informants who are expected to participate in interviews, focus groups or other information-gathering methods

Respond to evaluation recommendations by providing management responses and key actions

Ensure dissemination of the evaluation report to key stakeholders

Be responsible for implementation of key actions of the management response

3.Evaluation Consultant will be responsible for the overall coordination and quality of the final evaluation report to be produced. It is the Evaluation Consultant who will be held accountable to UNDP in the quality of the final product. The consultant will conduct the evaluation study by fulfilling their contractual duties and responsibilities in line with this ToR, United Nations Evaluation Group (UNEG) norms and standards and ethical guidelines and in full compliance with the UNDP Evaluation Policy and Guidelines. This includes submission of all deliverables stipulated under Article XIII (Terms and Payments) of this ToR, to the satisfaction of UNDP. Individual Consultant's functions do not include any managerial, supervisory and/or representative functions in UNDP, end beneficiaries and implementing partners. All documents and data provided to the Individual Consultant are confidential and cannot be used for any other purpose or shared with a third party without any written approval from UNDP. The scope of work for the Consultant of this evaluation will include but not be limited to:

- To develop and finalize the inception report that will include elaboration of how each evaluation question will be answered along with proposed methods, proposed sources of data, and data collection and analysis procedures;
- To design the tools and data collection;
- To conduct data collection, analysis and interpretation;
- To develop the draft evaluation report;
- To finalize the evaluation report;
- To present of findings and de-brief
- To plan, execute and report, kickoff and feedback meetings and debriefings;
- To ensure compliance with the Final Evaluation TOR; and
- To utilize best practice evaluation methodologies

4.Evaluation Reference Group: This group is composed of the representatives of the major stakeholders in the project and will review and provide advice on the quality of the evaluation process, as well as on the evaluation products (more specifically comments and suggestions on the draft report and final report) and options for improvement.

Reporting Line

The Evaluation Consultant will be responsible to the Evaluation Manager (in this case UNDP's Monitoring and Evaluation and Knowledge Management Analyst) for the completion of the tasks and duties assigned throughout this Terms of Reference. All the reports are subject to approval from the Evaluation Manager, for the payments to be affected to the Individual Consultant.

Reporting Language and Conditions

The reporting language will be English. All information should be provided in an electronic version in word format. The Evaluation Consultant shall be solely liable for the accuracy and reliability of the data provided, along with links to sources of information used.

Title Rights

The title rights, copyrights and all other rights whatsoever nature in any material produced under the provisions of this ToR will be vested exclusively in UNDP.

Travel:

Duty Station for the Assignment is home-based. The Consultant will be requested to travel to provinces where the Project has been implemented as indicated in the expected interview schedule table above. All the costs associated with travel, accommodation and any other living costs shall be borne by UNDP. UNDP will arrange economy class roundtrip flight tickets through its contracted Travel Agency.

The costs of these missions may either be;

Arranged and covered by UNDP CO from the respective project budget without making any reimbursements to the Consultant, through UNDP's official Travel Agency or,

Reimbursed to the Consultant upon the submission of the receipts/invoices of the expenses by the Consultants and approval of the UNDP. The reimbursement of each cost item is subject to the following constraints/conditions provided in below table or,

Covered by the combination of both options.

The following guidance on travel compensation is provided as per UNDP practice:

Cost item	Constraints	Conditions of Reimbursement
Travel (intercity transportation)	Full-fare economy class tickets	1- Approval by UNDP of the cost items before the initiation of travel 2- Submission of the invoices/receipt, etc. by the Consultant with the UNDP's F-10 Form 3- Acceptance and approval by UNDP of the invoices and F-10 Form.
Accommodation	Up to 50% of the effective DSA rate of UNDP for the respective location	
Breakfast	Up to 6% of the effective DSA rate of UNDP for the respective location	
Lunch	Up to 12% of the effective DSA rate of UNDP for the respective location	
Dinner	Up to 12% of the effective DSA rate of UNDP for the location	
Other Expenses (intra city transportations, transfer cost from /to terminals, etc.)	Up to 20% of effective DSA rate of UNDP for the respective location	

As per UNDSS rules, the IC is responsible for completing necessary online security trainings and submitting certificates and travel clearance prior to assignment-related travels.

"Interviews" referred in this Terms of Reference comprises such telecommuting and online conferencing tools as well. All travel arrangements shall be subject to pre-approval of the UNDP.

Travel:

- International travel will be required to Turkiye during the final evaluation mission;
- The BSAFE course must be successfully completed prior to commencement of travel;
- Individual Consultants are responsible for ensuring they have vaccinations/inoculations when travelling to certain countries, as designated by the UN Medical Director.
- Consultants are required to comply with the UN security directives set forth under: https://dss.un.org/dssweb/
- All related travel expenses will be covered and will be reimbursed as per UNDP rules and regulations upon submission of an F-10 claim form and supporting documents.

Responsibilities of the evaluators:

- The consultants should have the needed skills to carry out the assignment. The evaluation will be fully independent, the consultants will retain enough flexibility to determine the best approach in collecting and analysing data for the outcome evaluation,
- Responsible for the follow-up on attaining all documents and reports as needed.

Responsibilities of UNDP:

- To facilitate the evaluation process, the UNDP M&E and KM Analyst (Evaluation Manager) will assist in connecting the evaluator with the senior management, and key stakeholders. In addition, the UNDP will assist in organizing the field visits and meetings. During the evaluation, UNDP will help identify key partners for interviews by the evaluation team.

However, in the unlikely case of a resurge in COVID-19 pandemic cases and subsequent restrictive measures posed by the government of Türkiye, at UNDP's discretion, field visits and interviews defined under Expected Interview Schedule might be held virtually through telecommuting and online conferencing tools, or any other alternative method to protect the safety of consultant, key actors and informants whilst ensuring the successful conduct of evaluation mission. "Interviews" referred to in this Terms of Reference comprises such telecommuting and online conferencing tools as well. All travel arrangements shall be subject to pre-approval of the UNDP. In the event that field visits cannot be performed, the travel, accommodation and any other living expenses pertaining to relevant deliverable shall not be paid to the Consultant.

COVID-19 Specific Measures:

The Consultant shall review all local regulations, as well as that of UN and UNDP concerning the measures, he/she must take during performance of the contract in the context of COVID-19. The Consultant shall take all measures against COVID-19 imposed by local regulations as well as by UN and UNDP during performance of the contract to protect his/her health and social rights, as well as UNDP personnel, Project Stakeholders and third parties. Pursuant to "Clause 12- Indemnification" of UNDP General Terms and Conditions for Contracts, the Consultant shall indemnify, defend, and hold and save harmless, UNDP, and its officials, agents and employees, from and against all suits, proceedings, claims, demands, losses and liability of any kind or nature brought by any third party against UNDP, including, but not limited to, all litigation costs and expenses, attorney's fees, settlement payments and damages, based on, arising from, or relating to COVID-19 measures that must be taken by the Consultant in the context of the contract. UNDP shall not be held accountable for any Covid-19 related health risks or events that are caused by negligence of the Consultant and/or any other third party.

Facilities To Be Provided by UNDP

UNDP Türkiye CO won't be providing a facility for the Consultant to work during the contract. UNDP will provide background materials for Evaluation Consultant's review, reference and use. Neither UNDP nor any of the project partners are required to provide any physical facility for the work of the Consultant. However, depending on the availability of physical facilities (e.g., working space, computer, printer, telephone lines, internet connection, etc.) and at the discretion of UNDP and/or the relevant project partners, such facilities may be provided at the disposal of the Consultant. UNDP and/or the relevant project partners will facilitate meetings between the Consultant and other stakeholders, when needed.

Evaluators' Ethics

The evaluation of the project is to be carried out according to ethical principles and standards established by the UNEG.

- **Anonymity and confidentiality**. The evaluation must respect the rights of individuals who provide information, ensuring their anonymity and confidentiality.
- **Responsibility**. The report must mention any dispute or difference of opinion that may have arisen between the Evaluation Consultant and Project Team in connection with the findings and/or recommendations. The Evaluation Consultant must corroborate all assertions and disagreements.
- **Integrity.** The Evaluation Consultant will be responsible for highlighting issues not specifically mentioned in the ToR if this is needed to obtain a more complete analysis of the intervention.
- **Independence**. The Evaluation Consultant should ensure its independence from the intervention under review and must not be associated with its management or any element thereof.
- **Incidents**. If problems arise during the interviews, or at any other stage of the evaluation, they must be reported immediately to UNDP. If this is not done, the existence of such problems may in no case be used to justify the failure to obtain the results stipulated by UNDP in this Terms of Reference.
- **Validation of information.** The Evaluation Consultant will be responsible for ensuring the accuracy of the information collected while preparing the reports and will be ultimately responsible for the information presented in the evaluation report.
- **Intellectual property.** In handling information sources, the Consultant shall respect the intellectual property rights of the institutions and communities that are under review.
- **Delivery of reports/deliverables.** If delivery of the reports/deliverables is delayed, or in the event that the quality of the reports delivered is lower than of the quality desired by UNDP, the Evaluation Consultant will not be entitled for any payment regarding that specific report/deliverable, even person/days for submission of the report/deliverable has been invested.

1. Experience and qualifications

I. Academic Qualifications:

Required: Bachelor's degree in environmental engineering, environmental sciences, chemistry, or any other relevant discipline or field. (20 points)

Asset: Master's or Ph.D. Degree in relevant areas such as engineering, environmental sciences, chemistry, or any other relevant discipline or field. (10 points)

II. Years of experience:

Required: Minimum 7 years of overall professional experience in research design, field work, qualitative, quantitative and mixed-method research strategies, including but not limited to focus groups, surveys and interview techniques. (15 points

Asset: More than 10 years of overall professional experience in research design, field work, qualitative, quantitative and mixed-method research strategies, including but not limited to focus groups, surveys and interview techniques. (5 points)

III. Language: Excellent command of spoken and written English. (3 points)

IV. Competencies:

Notes:

- Internships (paid/unpaid) are not considered professional experience.
- Obligatory military service is not considered professional experience.
- Professional experience gained in an international setting is considered international experience.
- Experience gained prior to completion of undergraduate studies is not considered professional experienc

2. Payment Modality

The contract price is a fixed price regardless of extension of the herein specific duration. The amount paid to the Evaluation Consultant shall be gross and inclusive of all associated costs such as social security, pension and income tax, etc. The daily fee amount proposed in the price proposal for the Consultant should be indicated in gross terms and hence should be inclusive of costs related to tax, social security premium, pension, visa (if needed) etc. UNDP will not make any further clarification on costs related to tax, social security premium, pension, visa etc. It is the applicants' responsibility to make necessary inquiries on these matters. Consultant will not receive any additional payment for whatsoever reason.

Tax Obligations: The Evaluation Consultant is solely responsible for all taxation or other assessments on any income derived from UNDP. UNDP will not make any withholding from payments for the purposes of income tax. UNDP is exempt from any liabilities regarding taxation and will not reimburse any such taxation to the IC.

Payment for deliverables shall be effected by UNDP within 30 days upon issuance of Confirmation of Service Receipt for deliverables, and acceptance and approval of the related invoice by UNDP. If the deliverables are not produced and delivered by the Consultant to the satisfaction of UNDP, no payment will be made even if the Consultant has invested time to produce and deliver such deliverables.

Payments will be affected to the Consultant in line with the percentages listed in the following table, upon acceptance of deliverables by UNDP.

Deliverable	Percentage of Payment	Condition of Payment
1. Inception Report	**10 % of the Total Contract Amount**	Within thirty (30) days from the date of approval by UNDP Evaluation Manager in consultation with the CCE Portfolio Manager
2. Draft Evaluation Report	**60 % of the Total Contract Amount**	
3. Final Evaluation Report + Audit Trail	**20 % of the Total Contract Amount**	
4. Presentation/De-briefing	**10 % of the Total Contract Amount**	

If the IC is a Turkish national residing in Turkiye, the payment shall be realized in Turkish Liras (TRY).

Payment amount will be converted from United States Dollar (USD) to Turkish Liras (TRY) by the UN operational rate of exchange valid on money transfer. If the Individual Contractor is not a Turkish national, the payments shall be effected in United States Dollar. UN Operational Exchange rates can be accessed through https://treasury.un.org/operationalrates/OperationalRates.php

Without submission and approval (by UNDP) of the above listed deliverables in due time and quality, the Evaluation Consultant shall not be entitled to receive any payment from the UNDP even if time has been invested in this assignment.

Annex 2: Evaluation Matrix

Evaluative Criteria/Questions	Indicators	Sources	Methodology
Relevance:			
• To what extent was the project design relevant in addressing the arising needs around sustainable management of debris and safe disposal of hazardous waste?	• The project design includes explicit results related to management of earthquake debris and disposal of hazardous waste • The project design responds to the needs by the national partners or TERRA.	• Project Document • TERRA report	• Desk review of documents • Interviews of the project stakeholders
• To what extent was the design and strategy of the project complementary to demolition waste legislation?	• The project design is in line with the national demolition waste legislation	• Project Document • National legislative provisions on demolition waste	• Desk review of documents • Stakeholder interviews
• To what extent was the design and strategy of the activities are aligned with pillars in UNDP's EQ Response Strategy, priorities of TERRA, UN and UNDP priorities (UNSDCF and CPD)?	• The project design is in line with relevant priorities of UN and UNDP in Turkiye	• Project Document • UNDP EQ strategy and UNSDCF and CPD documents	• Review and analysis of documents • Stakeholder interviews
• To what extent was the Theory of Change applied in the project relevant to serving the needs of the local partners and the community affected from the earthquake disaster?	• The Theory of Change clearly indicates how project interventions and projected results will contribute to the addressing the needs of communities affected from the earthquake disaster? • The results framework is comprehensive and demonstrates systematic links to the ToC	• Project Document	• Desk review of documents • Stakeholder interviews
• To what extent does the project create synergy/linkages with other projects and interventions in the country i.e. other projects implemented for supporting early recovery services in Türkiye?	• The Project Document and reports contain links to other relevant projects implemented by the MEUCC	• Project Document • Stakeholder mapping/engagement plan and reporting	• Desk review of documents • Stakeholder interviews
Effectiveness:			

Evaluative Criteria/Questions	Indicators	Sources	Methodology
• To what extent has the project contributed to the fulfilment of the objectives of priorities of TERRA, UNDP's EQ Response Strategy, UNSDCF and CPD goals?	• Project results contribute to TERRA, UNDP's EQ Response Strategy, UNSDCF and CPD goals	• Project progress reports	• Desk review of documents • Stakeholder interviews
• To what extent has the project achieved the objectives and targets of the results framework in the Project Document?	• The project has met or exceeded the output end-of-project targets • Logical framework used during implementation as a management and M&E tool	• Progress Reports • Project monitoring reports	• Desk review of documents • Stakeholder interviews • Virtual site tours
• What are the key factors contributing to project success or underachievement? How might this be improved in the future?	• Relation of external and internal factors to the level of project success • Lessons learned captured periodically during implementation and/or at project end	• Progress Reports • Project monitoring reports	• Desk review of documents • Stakeholder interviews
• To what extent could the project create a model processing and recycling of debris and proof of concept?	• Degree of acceptance of the model concept by stakeholders	• Completion Report	• Desk review of documents • Stakeholder interviews
• To what extent and in what ways has ownership – or the lack of it – by the implementing partners impacted the effectiveness of the project?	• Active participation of project partners	• Progress Reports • Project monitoring reports	• Desk review of documents • Stakeholder interviews
• How effective was UNDP's partnership strategy employed by the project?	• A partnership framework in place and its contribution to coordination of parallel initiatives, involvement of key partners and identification of complementarities	• Progress Reports • Project monitoring reports	• Desk review of documents • Stakeholder interviews
Efficiency			
• To what extent were the project outputs delivered on time and with high quality?	• Adherence to the time frames defined in the project workplans • Extent to which funds were utilized effectively and contributed to achievement of project results	• Workplans and progress reports • Project monitoring reports	• Desk review of documents • Stakeholder interviews
• To what extent has the project ensured value for money?	• Transparency of the financial planning and adherence to financial plans	• Financial plans and progress reports • Financial monitoring reports	• Desk review of documents • Stakeholder interviews

Evaluative Criteria/Questions	Indicators	Sources	Methodology
• To what extent were resource mobilization efforts successful? Was funding sufficient for the achievement of results?	• Co-financing was realized and tracked continuously throughout the project lifecycle • Co-financiers actively engaged throughout project implementation	• Co-financing 15etters • Financial monitoring reports	• Desk review of documents • Stakeholder interviews
• What was the progress of the project in financial terms, indicating amounts committed and disbursed (total amounts & as percentage of total) by UNDP?	• Transparency of the financial planning and adherence to financial plans	• Financial plans and progress reports • Financial monitoring reports	• Desk review of documents • Stakeholder interviews
• To what extent and in what ways has ownership – or the lack of it – by the implementing partner impacted on the efficiency of the project?	• Project partners co-financing mobilized for the project	• Co-financing letters • Financial monitoring reports	• Desk review of documents • Stakeholder interviews
• To what extent was there any identified synergy between UNDP initiatives/projects that contributed to reducing costs while supporting results?	• Evidence of cost reduction through coordination and/or resource sharing with parallel UNDP projects	• Progress reports and monitoring reports from parallel projects	• Desk review of documents • Stakeholder interviews
• How well did project management work for achievement of results?	• Effective and properly staffed project management • Demonstrated adaptive management with changes integrated into project planning and implementation through adjustments to annual work plans, budgets and activities	• Progress Reports • Project monitoring reports	• Desk review of documents • Stakeholder interviews
• To what extent did project monitoring provide management with a stream of data that allowed it to learn and adjust implementation accordingly?	• Adherence to the M&E Plan	• Progress Report • Project monitoring reports	• Desk review of documents • Stakeholder interviews
• What type of (administrative, financial and managerial) obstacles did the project face and to what extent have this affected its efficiency?	• Deviations from administrative, financial and managerial regulations and procedures • Adequate management inputs and processes, including budgeting and procurement	• Progress Reports • Project monitoring reports	• Desk review of documents • Stakeholder interviews
Sustainability			

Evaluative Criteria/Questions	Indicators	Sources	Methodology
• To what extent have implementing partners demonstrated ownership of the model and proof of concept created by the project? To what extent has this project induced prospect for active policies targeting target groups to be pursued by the beneficiary institutions to improve the overall efficiency of their services?	• Key stakeholders assigned with specific, agreed roles and responsibilities for follow-up activities • Evidence of policies supporting future application of the model debris processing/recycling stations and mobile crushing facilities created by the project	• Progress Reports • Project monitoring reports	• Desk review of documents • Stakeholder interviews
• To what extent will the project achievements be sustained? What are the challenges and opportunities?	• Commitment to follow-up activities based on the model debris processing/recycling stations and mobile crushing facilities created by the project	• Progress Reports • Project monitoring reports	• Desk review of documents • Stakeholder interviews
• To what extent will the project be replicable or scaled up in other earthquake affected regions and serve transformative change in the area of debris management in the country?	• Plans for follow-up activities based on the model debris processing/recycling stations and mobile crushing facilities created by the project	• Progress Reports • Project monitoring reports	• Desk review of documents • Stakeholder interviews
• To what extent will the benefits and outcomes continue after external donor funding ends? What is the likelihood of financial and economic resources not being available once the donor assistance ends?	• Availability funding (external and governmental) for debris processing/recycling stations and mobile crushing facilities	• Progress Reports • Project monitoring reports	• Desk review of documents • Stakeholder interviews
• What can be done to maximize the likelihood of sustainable outcomes and to what extent does an effective exit strategy exist?	• Existence of exit strategy that identifies relevant factors (socio-economic, political, requiring attention in the future	• Progress Reports • Project monitoring reports	• Desk review of documents • Stakeholder interviews
Forward-looking issues			
• What should be the UNDP positioning in Turkiye in relation to environmental aspects of earthquake/disaster and debris management/	• Evidence of relevance and effectiveness of UNDP activities in	• Information from other projects • Contextual information	• Desk review of documents • Stakeholder interviews
Cross-cutting issues:			

Evaluative Criteria/Questions	Indicators	Sources	Methodology
• To what extent have gender equality and the empowerment of women been considered in the design, implementation and monitoring of the project?	• Evidence of gender focus in all phases of the project	• Project Document • Progress Reports • Project monitoring reports	• Desk review of documents • Stakeholder interviews
• To what extent has the project contributed to leaving no one behind agenda including protecting the health and safety of local communities, dislocated people and people living in temporary settlements?	• Level of attention of the project to needs and priorities of local communities, dislocated people and people living in temporary settlements	• Progress Reports • Project monitoring reports • Contextual information	• Desk review of documents and contextual information • Stakeholder interviews
• To what extent has the project contributed to crisis management and recovery issues?	• Evidence of use of the model debris processing/recycling stations and mobile crushing facilities in projects on crisis management and recovery	• Progress Reports • Project monitoring reports • Contextual information	• Desk review of documents and contextual information • Stakeholder interviews

Annex 3: List of people interviewed

Institution	Name	Position
UNDP CO Ankara	Nurettin Cemil Gokpinar	M&E and KM Analyst
	Meral Mungan Arda	Portfolio Manager, Climate Change and Environment
	Beyza Onal	Project Associate
Ministry of Environment, Urbanisation and Climate Change, Ankara	Sabriye Ayhan	Head, Department of Circular Economy and Waste Management
	Demet Erdoğan	Branch Manager, Department of Circular Economy and Waste Management
Kahramanmaraş Governorate	Mesut Bayraktar	Head of Investment Monitoring Department
Hatay Governorate	Doğukan Fatih Aydın	Field Manager
	Mehmet Abik	Technical Expert
Provincial Directorate of Ministry of Environment Environment, Urbanization and Climate Change, Antakya	Oya Aslan Bayram	Deputy Provincial Director
	Tarık Küçük	Environmental Engineer
	Eyüp Eyüboğlu	Environmental Engineer
	Cihat Budancamanak	Environmental Engineer
İskenderun Municipality Hatay	Emine Gül	Programme Coordinator
Altınözü Municipality Hatay	Ali Alpaslan	Environmental Engineer
Göksun Municipality Kahramanmaraş	Halil Yaşar	Environmental Engineer

Annex 4: Indicative list of interview questions

Questions for the PMU and UNDP CO

- To what extent did the project respond to the national disaster management plans and policies?
- What do you think about the design of the project?
- What is the comparative advantage of UNDP for implementation of this project?
- Were there enough financial resources in the project budget?
- Did the project incorporate the perspectives of vulnerable groups? What could be improved in this regard?
- Which were the main partnerships and/or networks established for implementation of the project?
- What do you think about the project's interaction with stakeholder organizations and local experts?
- How has the actual level of stakeholder engagement influenced achievement of the project results and national ownership of the project?
- Were there any efforts made for synergies and complementarities with other initiatives to avoid duplication of efforts?
- What have been the main project achievements and why do you think so?
- What were the main challenges for achieving the planned results? Were alternative approaches considered during implementation?
-
- Were there any changes in the project management arrangements compared with the Project Document?
- Were there external factors influencing the project implementation?
- Which were the main cases of adaptive management?
- Will the project achievements be sustained beyond the project completion? Why do you think so?
- What is the risk that stakeholder ownership will not be sufficient to sustain the results / benefits of the project?

Questions for the representatives of the Government (Ministries, Funds, Project Board)

- To what extent did the project respond to the national disaster management plans and policies? If there is a similar project in the future, what should be the main aspects to be included?
- What is the comparative advantage of UNDP for implementation of this project? How would you rate the actual project implementation by UNDP?
- What have been the main project achievements and why do you think so?
- Were there any efforts made for synergies and complementarities with other initiatives to avoid duplication of efforts?
- Was the staffing of the project team sufficient and adequate?
- Were there external factors influencing the project implementation?
- Did the project incorporate the perspectives of local communities ? What could be improved in this regard?

- In which areas can the project be replicated and/or upscaled?
- What is the likelihood that adequate financial and human resources will be available after the project closure to sustain the achieved results?
- Are there any socio-economic, political, or environmental risks that could jeopardize the sustainability of the project results?
- Is there sufficient public / stakeholder awareness to support sustainability of the project?
- Were successful aspects of the project communicated to the appropriate parties?

Questions for representatives of the Governorates /

- To what extent did the project respond to the priorities and needs ofthe two Governorates ? If there is a similar project in the future, what should be the main aspects to be included?
- Does the concept model developed by the project have the potential to contribute to safe and sustainable management of EQ debris?
- Which were the main partnerships and/or networks established for implementation of the project at the Governorate level?
- What were the main challenges for the project at the local level? How were they addressed?
- What do you think about the project's interaction with stakeholder organizations and local experts?
- Were there any other initiatives addressing debris management in your province/city? If so, were there any efforts to gain synergies and avoid duplication?
- Were there external factors influencing the project implementation?
- Will the project achievements at the level of your province/city be sustained beyond the project completion? Why do you think so?
- Has the project led to increased capacities at the province/city level? What could have been done differently?
- Has there been any co-financing to the project from the level of your province/city? If so, from which sources?
- Are there any changes in the debris management issues that can be attributed to the project achievements?
- Did the project incorporate the perspectives of local communities in your province/city? What could be improved in this regard?

Questions for the donor

- To what extent does the project respond to the strategic priorities of Japan Government worldwide and specifically in Turkiye?
- What do you think about the design of the project?
- What is the comparative advantage of UNDP for implementation of this project?
- Which other initiatives in the post-earthquake recovery and/or reconstruction does your country support in Turkiye and why?
- Do you think the Japanese know how and expertise was used to full extent for delivery of planned results?
- Did the project incorporate the perspectives oflocal communities ? What could be improved in this regard?

- Were there any efforts made for synergies and complementarities with other initiatives to avoid duplication of efforts?
- What have been the main project achievements and why do you think so?
- What were the main challenges for achieving the planned results?
- Were there external factors influencing the project implementation?
- Which were the main cases of adaptive management?
- To what extent has the project integrated gender equality, women's empowerment, human rights, and South-South cooperation?

Annex 5: Project Results Framework

Intended Outcome as stated in the UNSDCF/Country [or Regional] Programme Results and Resource Framework: UNSDCF Outcome 3.1: By 2025, all relevant actors take measures to accelerate climate action, to promote responsible production and consumption, to improve the management of risks and threats to people, and to ensure sustainable management of the environment and natural resources in urban and ecosystem hinterlands.
Outcome indicators as stated in the Country Programme [or Regional] Results and Resources Framework, including baseline and targets: Output 3.4 Chemicals and waste prevented, managed and disposed of in an environmentally sound manner in crisis and non -crisis urban settings 3.4.1 Number of interventions on waste management to strengthen core local public authorities' functions
Applicable Output(s) from the UNDP Strategic Plan: Building resilience: strengthening countries and institutions to prevent, mitigate and respond to crisis, conflict, natural disasters, climate and social and economic shocks Resilience: Supporting countries and communities in building resilience to diverse shocks and crises, including conflict, climate change, disasters and epidemics. Environment: Putting nature and the environment at the heart of national economies and planning; helping governments protect, manage and value their natural assets.
Project title and Quantum Project Number: Environmentally Sound Management of Earthquake Debris and Safe Disposal of Hazardous Waste, PN: 01001223.

EXPECTED OUTPUTS	OUTPUT INDICATORS	DATA SOURCE	BASELINE		TARGETS (by frequency of data collection)			DATA COLLECTION METHODS & RISKS
			Value	Year	2023	2024	FINAL	
Output 1: Assess the most suitable places for establishing debris recycling facilities in Kahramanmaraş and Hatay	1.1 Assessment for identification of locations for the debris recycling plants in Kahramanmaraş and Hatay	Project Reports	No	No	Yes	Yes	*Yes*	Through project-based monitoring and evaluation tools & systems
Output 2: Prepare environmentally sound debris management strategy and action plan.	2.1 Sex-disaggregated number of participants (sex-disaggregated) attending workshops	Project Reports	0	0	0	50	50	Through project-based M&E tools & systems
	2.2 Strategy and action plan developed	Project Reports	No	2023	Yes	Yes	Yes	Through project-based M&E tools & systems
Output 3:Commission two debris recycling facilities and supply mobile debris crushers.	3.1.a Number of recycling facilities	Project Reports	0	2023	0	2	2	Through project-based M&E tools & systems
	3.1.b Number of mobile crushers		0		0	2	2	
	3.2 Sex-disaggregated number of trainees who received operational training	Project Reports	0	2023	0	20	20	Through project-based M&E tools & systems
	3.3 Number of pieces of PPE	Project Reports	0	2023	0	1000	1000	Through project-based M&E tools & systems

Annex 6: List of documents consulted

1. Grant Aid Environmentally Sound Management of Earthquake Debris and Safe Disposal of Hazardous Waste, Project Document, UNDP, 2023
2. Grant Aid Environmentally Sound Management of Earthquake Debris and Safe Disposal of Hazardous Waste, Social and Environmental Screening Procedure Template, UNDP, 2023
3. Recovery and Reconstruction after the 2023 Earthquakes in Türkiye: UNDP offer and proposed projects, UNDP, 2023
4. Six Months after the Earthquakes in Türkiye, UNDP, August 2023
5. Grant Aid Environmentally Sound Management of Earthquake Debris and Safe Disposal of Hazardous Waste, Annual Workplan, UNDP, August 2023
6. Grant Aid Environmentally Sound Management of Earthquake Debris and Safe Disposal of Hazardous Waste, Presentation on progress by the UNDP CO, June 2024
7. Report on Assessment of Debris Dumpsites for Hatay and Kahramanmaraş Provinces, UNDP, September 2023
8. Debris Waste Management for Hatay and Kahramanmaraş Provinces: Strategy and Roadmap Report, Yildiz Technical University, December 2023
9. Final Debris Strategy Report, NTT Data Institute of Management Consulting Inc., March 2024
10. Türkiye Earthquakes Recovery and Reconstruction Assessment, Government of Türkiye, 2024
11. Asbestos Handling and Disposal Guidelines: International Best Practice, UNDP/UNEP
12. UNDP Revised Evaluation Policy, UNDP, 2019
13. UNDP Evaluation Guidelines, Independent Evaluation Office of UNDP, 2021
14. Glossary of Key Terms in Evaluation and Results Based Management, OECD, 2010
15. Ethical Guidelines for Evaluations, UNEG, 2020

Annex 7: Performance Ratings

Outcome ratings

Highly Satisfactory (HS)	Level of outcomes achieved clearly exceeds expectations and/or there were no short comings
Satisfactory (S)	Level of outcomes achieved was as expected and/or there were no or minor short comings
Moderately Satisfactory (MS)	Level of outcomes achieved more or less as expected and/or there were moderate short comings
Moderately Unsatisfactory (MU)	Level of outcomes achieved somewhat lower than expected and/or there were significant shortcomings
Unsatisfactory (U)	Level of outcomes achieved substantially lower than expected and/or there were major short comings
Highly Unsatisfactory (U)	Only a negligible level of outcomes achieved and/or there were severe short comings
Unable to Assess (UA)	The available information does not allow an assessment of the level of outcome achievements

Sustainability ratings

Likely (L)	There is little or no risks to sustainability
Moderately Likely (ML)	There are moderate risks to sustainability
Moderately Unlikely (MU)	There are significant risks to sustainability
Unlikely (U)	There are severe risks to sustainability
Unable to Assess (UA)	Unable to assess the expected incidence and magnitude of risks to sustainability

Annex 8: Evaluation Consultant Agreement Form

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Evaluators:

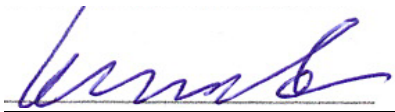
1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of Evaluation findings along with information on their limitations and have this accessible to all affected by the Evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals and must balance an Evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting Evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the Evaluation. Knowing that Evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the Evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the Evaluation.

Name of Consultant: Dalibor Kysela

Name of Consultancy Organization (where relevant)**:** N.A.

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at Vienna 3 July 2024

Signature: 

Audit Trail – annexed separately