



Republic of Türkiye Ministry of Environment, Urbanization and Climate Change

General Directorate of Construction Affairs

TÜRKİYE EARTHQUAKE RECOVERY AND RECONSTRUCTION PROJECT (TERRP)

Subproject Name DESSUP-05 Central District of Elazığ Province Rural Housing

Project – Group 3 - Cluster 2 (62 rural houses)

Document Name Environmental and Social Management Plan

Version 0.0

Submission Date 25/09/2024





	Prepared by	Reviewed by
	Ahmet Nozoğlu – Environmental Engineer	
Version 0.0 Date 25.09.2024	Yeşim Mutlu – Social Expert Zafer Ganioğlu – Social Expert	EMAY International Engineering and Consultancy Inc. – Project Director
	Gökhan Dinçel – A Class Occupational Safety Specialist	

This Environmental and Social Management Plan is developed by the EMAY within the scope of "Consultancy Services for Design Review and Reconstruction Supervision of Rural Housing (Ref: TERRP/CS-DESSUP-05)" under Türkiye Earthquake Recovery and Reconstruction Project.





Table of Contents

Table o	of Contents	.3
	Tables	
List of F	Figures	.4
	Abbreviations	
	ntroduction	
	The Rationale of the Environmental and Social Management PlanPlan	
	egal and Institutional Framework	
	Project Description	
4.1 P	Project Settlements	
4.1.1	Tadım Village	.9
4.1.2	0	
4.1.3	,	
4.1.4		
4.1.5	100.8020 (00.1111) , 11180	
	Project Characteristics	
	Key Considerations	
	nformation Activities and Stakeholder Engagement for ESMP	
	Environmental and Social Management Plan	
	dices	
	dix-1. List of the Subproject Parcels	
	dix-2. E&S Screening Forms	
Append	dix-3. Grievance and Suggestion Form	50
Append	dix-4. Grievance Closure Form	52
Append	dix-5. Site Photographs	53
Site P	Photographs of Tadım Village	53
Site P	Photographs of Ballıca Village	55
Site P	Photographs of Kuyulu Village	57
Site P	Photographs of Kavaktepe Village	50
	Photographs of Yedigöze (Germili) Village	
Append	dix 6. Photographs of SEMs	55
Append	dix 7. SEM Participant Lists	57
Append	dix 8. SEM Presentation	58
Append	dix 9. Project Brochure	72
Append	dix 10. Project Poster	73





List of Tables

Fable 1. Project Description	9
Table 2. Close Settlements to the Project Area in Tadım Village	11
Table 3. Close Settlements to the Project Area in Ballıca Village	12
Table 4. Close Settlements to the 136/1 Parcel in Kuyulu Village	14
Table 5. Close Settlements to the 154/1 Parcel in Kuyulu Village	15
Table 6. Close Settlements to the Project Area in Kavaktepe Village	16
Table 7. Close Settlements to the Project Area in Yedigöze (Germili) Village	18
Table 8. Stakeholder Engagement Meetings in the Villages Listed Under DESSUP-05 Group 3 Cluster 2	20
Table 9. Questions Posed and Answers in the Stakeholder Engagement Meetings	20
Table 10. Environmental and Social Management Plan	25
Table 11. General Screening Evaluation	47
List of Figures	
Figure 1. Satellite Image of 162/15 Parcel Area in Tadım Village	10
Figure 2. Area of Influence in the Village of Tadım	10
Figure 3. Satellite Image of the 113/A Parcel in Ballıca Village	11
Figure 4. Area of Influence in the Village of Ballıca	12
Figure 5. Satellite Image of 136/1 Parcel in Kuyulu Village	
Figure 6. Satellite Image of 154/1 Parcel in Kuyulu Village	13
Figure 7. Area of Influence for 136/1 Parcel in the Village of Kuyulu	14
Figure 8. Area of Influence for 154/1 Parcel in the Village of Kuyulu	14
Figure 9. Satellite Image of 149/1 Parcel in Kavaktepe Village	
Figure 10. Area of Influence in the Village of Kavaktepe	
Figure 11. Satellite Image of 2555 Parcel in Yedigöze (Germili) Village	
Figure 12. Area of Influence in the Village of Yedigöze (Germili)	18





List of Abbreviations

AFAD : Disaster and Emergency Management Presidency

AoI : Area of Influence

C-ESMP : Contractor Environmental and Social Management Plan

CFP: Chance Find Procedure

CHS : Community Health and Safety

DSI : State Hydraulic Works

E&S : Environmental and Social

EBRD : European Bank for Reconstruction and DevelopmentEMAY : EMAY International Engineering and Consultancy Inc.

ESHS: Environmental, Social, Health and Safety

ESMF : Environmental and Social Management Framework

ESMP : Environmental and Social Management Plan

ESS : Environmental and Social Standard

GDCA : General Directorate of Construction Affairs

GRM : Grievance Redress Mechanism

IFC : International Finance Corporation

LMP : Labor Management Procedure

MoEUCC: Ministry of Environment, Urbanization and Climate Change

OGM : General Directorate of Forestry
OHS : Occupational Health and Safety

PAP : Project Affected Person

PCA : Preventive/Corrective Action

PDOEUCC: Provincial Directorate of Environment, Urbanization and Climate Change

PIU : Project Implementation Unit
PPE : Personal Protective Equipment
PPP : Pollution Prevention Plan

PWWTP : Package Wastewater Treatment Plant

RCA : Root Cause Analysis
RP : Resettlement Plan

SEA : Sexual Exploitation and Abuse
 SEM : Stakeholder Engagement Meeting
 SEP : Stakeholder Engagement Plan

SH : Sexual Harassment

TEDAŞ : Türkiye Electricity Distribution Inc.

TERRP: Türkiye Earthquake Recovery and Reconstruction Project

TMP : Traffic Management Plan

WB : World Bank

WBG : World Bank Group
 WMP : Waste Management Plan
 WSWW : Water Supply and Wastewater
 WWTP : Wastewater Treatment Plant





1 Introduction

The World Bank (WB) is supporting the Ministry of Environment, Urbanization and Climate Change (MoEUCC) in implementing the Türkiye Earthquake Recovery and Reconstruction Project (TERRP). WB finances TERRP activities under Component 3, Rural Housing Reconstruction and Recovery, and Component 4.3, Project Management, Monitoring and Evaluation.

TERRP will overall support restoring access to essential municipal and health services and earthquake-resilient rural housing in selected provinces affected by the February 2023 earthquakes in Türkiye. The MoEUCC is implementing the Project activities for Components 3 and 4.3, in close collaboration with the Disaster and Emergency Management Presidency (AFAD). AFAD will carry out tasks as part of its ongoing organizational and legal mandates in collaboration with the MoEUCC.

Under the scope of TERRP DESSUP-05, a total of 124 rural houses will be constructed in 12 villages listed in Group-3. These villages have been divided into 2 clusters as Cluster-1 and Cluster-2. This Environmental and Social Management Plan (ESMP) was prepared for Cluster-2, which consists of 62 rural houses to be constructed in the villages of Tadım (15), Ballıca (7), Kuyulu (18), Kavaktepe (10) and Yedigöze (Germili) (12) in the Central District of Elazığ Province.

This ESMP aims to assess the potential negative environmental-social risks and impacts that may result from the construction of a total of 62 rural houses and to minimize or completely eliminate these impacts. The destroyed or severely damaged houses and basic infrastructures in the selected villages will be reconstructed in new settlement locations. The details regarding the villages, new settlements, number of rural houses to be reconstructed, etc. will be given in the following chapters of the plan.

This ESMP also includes health and safety measures, stakeholder engagement activities to be carried out, and the establishment of a Grievance Redress Mechanism (GRM). Finally, the ESMP outlines the responsibilities of relevant parties within the sub-project scope.





2 The Rationale of the Environmental and Social Management Plan

In accordance with the Environmental and Social Framework (ESMF) of the TERRP, the Project Implementation Unit (PIU) operating within the General Directorate of Construction Affairs (GDCA) of MoEUCC has completed the Environmental and Social (E&S) Screening, and the Screening Studies are given in Appendix-2. The project's E&S Risk Rating was assessed as "moderate", based on anticipated environmental and social risks and impacts. Following the guidelines outlined in the ESMF and based on the findings of the E&S screening and subsequent assessment, the project-level ESMP needed to be customized for the subproject namely "DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 – Cluster 1" (hereinafter "the Project").

EMAY International Engineering and Consultancy Inc. (EMAY) under its assignment "Consultancy Services for Design Review and Reconstruction Supervision of Rural Housing" with the name of the 'Supervision Consultant' took the responsibility to prepare the ESMP in Annex-4 of the Environmental and Social Management Framework for the subproject. In the course of these studies, EMAY visited the subproject sites in the Central District on 21-22-23 March, 2024 having meetings with the mukhtars of the relevant villages (Tadım, Ballıca, Kuyulu, Kavaktepe and Yedigöze) and examine the new locations where the rural houses to be constructed.

It is the responsibility of the Contractor to regularly review, revise, and update the ESMP according to its planning and decisions. The ESMP contains site-specific measures developed based on the available information. During the planning and construction phases, adjustments to construction methods may occur due to feasibility and technical considerations. In the event of such changes in the Contractor's construction approach, the ESMP must be reviewed and revised by the Contractor and then submitted to EMAY for review. The Contractor must ensure that the ESMP accurately reflects site conditions and will proactively incorporate any revisions into the plan. The Waste Management Plan, Pollution Prevention Plan, Labor Management Plan, OHS Plan, Community Health, Safety and Traffic Management Plan, etc., will be prepared by the Contractor, reviewed by EMAY and submitted to the PIU for approval, including the company's opinions.





3 Legal and Institutional Framework

The TERRP's ESMF provides a comprehensive overview of the legal and institutional framework in Section 3. This section outlines Türkiye's legal framework, followed by a brief explanation of the national environmental and social assessment regulatory process, including permitting, and identifies any disparities between the WB Environmental and Social Standards (ESSs) and legislative requirements.

During the development of the ESMP, both the WB ESSs and the national legislation applied for Project-related activities are taken into account. Feasible and effective mitigation measures are then documented based on these considerations.

The ESMF for the Project (both English and Turkish) could be found at the following website:

English:

https://webdosya.csb.gov.tr/db/kadiyap_en/menu/esmf_20240313034306.pdf

Turkish:

https://webdosya.csb.gov.tr/db/kadiyap/menu/csyc_20240313033738.pdf





4 Project Description

Within the scope of the Project (Group 3 – Cluster 2), a total of 62 rural houses will be constructed in Tadım (15 houses), Ballıca (7 houses), Kuyulu (18 houses), Kavaktepe (10 houses) and Yedigöze (12 houses) Villages in new locations in Central District of Elazığ Province. The details regarding the villages, number of houses and new locations are summarized in Table 1, and in the following sub-titles.

Table 1. Project Description

District	Settlement	Number of Rural Houses	Number of Stories	New Location (lot/parcel)	Area of the Parcel (m²)	Registry Status of the New Location
Central	Tadım Village	15	1-Storey	162/15	456,689.79	Pastureland
Central	Ballıca Village	7	1-Storey	113/A	19,011	Land allocated for earthquake housing
Camtual	Central Kuyulu Village	8	1 Chauses	136/1	5,879.20	Invigate d Field
Central		10	1-Storey	154/1	18,309.85	Irrigated Field
Central	Kavaktepe Village	10	1-Storey	149/1	50,100.53	Raw Soil
Central	Yedigöze (Germili) Village	12	1-Storey	0/2555	107,406.49	Pastureland

All works and operations of the housing to be built for disaster victims, including site selection, were transferred from the Disaster and Emergency Management Presidency (AFAD) to the Ministry of Environment, Urbanization and Climate Change with an official letter dated 08.12.2023 and numbered 771633 in order to use public resources economically and efficiently. Accordingly, the parcel was selected by Elazığ Provincial Directorate of Environment, Urbanization and Climate Change (PDoEUCC) affiliated to MoEUCC.

None of the sub-projects will involve any risks of forced labor, child labor and other harmful forms of labor. Direct, contracted, local, and primary supply workers will be used in the construction process. Occupational Health and Safety (OHS) risks will be managed by the hierarchy of controls. All measures will be involved in OHS Plan. With the measures to be taken during both the construction and operation phases, there will be no moving out, and people's business/commercial/livelihood activities will not be disrupted. Nor will there be any foreseen adverse impacts on the vulnerable individuals or groups. Finally, the locals have given their consent to the parcels determined by PDoEUCC for rural housing construction.

Water will be provided from the relevant villages for construction site office areas and from wells for construction site use, by obtaining the necessary official letters. An impermeable septic tank will be built for wastewater, and domestic wastewater will be collected here and conveyed to the Wastewater Treatment Plant by sewage trucks, with the agreement to be made with Elazığ Municipality or the Special Provincial Administration.

A temporary storage area will be created for solid waste that will be generated in construction office areas and construction sites, and they will be stored separately according to their types in this storage area. Domestic solid waste will be collected by the Special Provincial Administration. Other hazardous/non-hazardous wastes will be delivered to licensed recycling/disposal facilities.

For the rural houses to be built, the necessary permission will be obtained from the relevant electricity distribution company and the electricity to the houses will be supplied from the permitted power line. During the construction phase, generators will be used for the electricity needs. If there is a power line close to the construction site, the relevant electricity distribution company will be contacted, and electricity can be used from the power line after the necessary permissions are obtained.

4.1 Project Settlements

4.1.1 Tadım Village

The sub-project includes the construction of 15 rural houses, and construction of roads and pavement within the parcel, the installation of street lighting, sewerage and drinking water network and the impermeable septic tank on a new location within parcel 162/15 in Tadım Village, Central District.

TERRP

DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 2 (62 rural houses)





The parcel is registered as pastureland and has a total area of $456,689.79 \text{ m}^2$ but approximately 2% of the parcel $(9,000 \text{ m}^2)$ will be used within the scope of the project. No action will be taken regarding the entire parcel. The allocated parcel area shown in Figure 1 to be used for the Project.

The parcel and the construction site as well as the close dwellings and facilities are shown in Figure 2 and the distances to the close dwellings and other facilities and features are given in Table 2.



Figure 1. Satellite Image of 162/15 Parcel Area in Tadım Village



Figure 2. Area of Influence in the Village of Tadım





Table 2. Close Settlements to the Project Area in Tadım Village

Dwelling / Facilities / Features	Air Distance (m)
Dwelling1 (DW1)	54
Dwelling2 (DW2)	120
Dwelling3 (DW3)	400
Dwelling4 (DW4)	285
Earthquake Houses-1 (EHs-1)	12
Earthquake Houses-2 (EHs-2)	20
Poultry Farm1 (P1)	514
Poultry Farm2 (P2)	290
Water Tank (WT)	120
Irrigation Channel (IR)	184
Tadım Village Center (VC)	795

4.1.2 Ballıca Village

The sub-project includes the construction of 7 rural houses on 113/A parcel, and construction of roads and pavement within the parcel, installation of street lighting, sewerage and drinking water network, and impermeable septic tank in Ballıca Village, Central District.

The selected parcel is unregistered and allocated for earthquake housing by MoEUCC and has a total area of 19,011 m². The allocated parcel area is shown in Figure 3.

The area of influence (AoI), close dwellings and other facilities and features are given in Figure 4 and the distances are presented in Table 3.



Figure 3. Satellite Image of the 113/A Parcel in Ballıca Village







Figure 4. Area of Influence in the Village of Ballıca

Table 3. Close Settlements to the Project Area in Ballıca Village

Dwelling / Facilities / Features	Air Distance (m)
Dwelling1 (DW1)	150
Dwelling2 (DW2)	34
Dwelling3 (DW3)	75
Dwelling4 (DW4)	104
Irrigation Channel (IR)	405
Hydrophore Building (HB)	80
Mosque (M)	175
Private Irrigation Pond 1 (IP1)	105
Private Irrigation Pond 2 (IP2)	105
Private Irrigation Pond 3 (IP3)	263
Ballıca Village Center (VC)	120
Keban Dam	19.097

4.1.3 Kuyulu Village

The project includes the construction of 18 rural houses, and construction of roads and pavement within the parcel, installation of street lighting, sewerage and drinking water network, and the impermeable septic tank on a new location within parcels of 136/1 parcel (8 houses) and 154/1 parcel (10 houses) in Kuyulu Village, Central District.

The total area of the parcels is $13,914.55 \text{ m}^2$: 136/1 parcel has an area of $5,879.20 \text{ m}^2$, while 154/1 has $18,309.85 \text{ m}^2$. The registration status of both 136/1 and 154/1 is irrigated fields. The allocated parcel areas are shown in Figure 5 and Figure 6.

The AoI of the selected parcels and close dwellings and other facilities and features are shown in the following figure (see Figure 7 and Figure 8), and distances are given in Table 4 and Table 5.







Figure 5. Satellite Image of 136/1 Parcel in Kuyulu Village



Figure 6. Satellite Image of 154/1 Parcel in Kuyulu Village





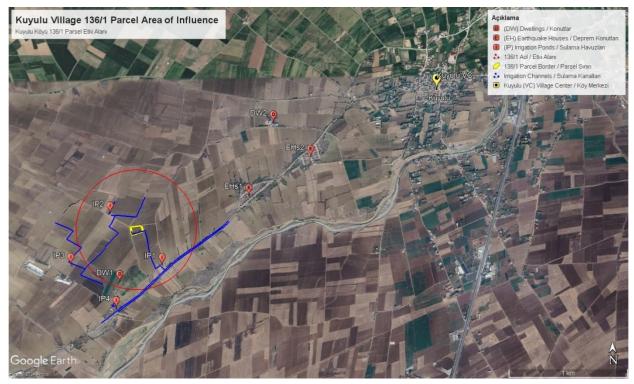


Figure 7. Area of Influence for 136/1 Parcel in the Village of Kuyulu



Figure 8. Area of Influence for 154/1 Parcel in the Village of Kuyulu

 Table 4. Close Settlements to the 136/1 Parcel in Kuyulu Village

Dwelling / Facilities / Features	Air Distance (m)
Dwelling1 (DW1)	400
Dwelling2 (DW2)	1,354
Earthquake Houses-1 (EHs-1)	836
Earthquake Houses-2 (EHs-2)	1,460

DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 2 (62 rural houses)





Dwelling / Facilities / Features	Air Distance (m)
Irrigation Pond 1 (IP1) (idle)	305
Irrigation Pond 2 (IP2) (idle)	190
Irrigation Pond 3 (IP3) (idle)	540
Irrigation Pond 4 (IP4) (idle)	612
Irrigation Channels (idle)	0
Kuyulu Village Center (VC)	2,725
Keban Dam	14,885
Hazar Lake	11,485

Table 5. Close Settlements to the 154/1 Parcel in Kuyulu Village

Dwelling / Facilities / Features	Air Distance (m)
Dwelling1 (DW1)	258
Dwelling2 (DW2)	217
Dwelling3 (DW3)	213
Dwelling4 (DW4)	205
Dwelling5 (DW5)	166
Dwelling6 (DW6)	192
Dwelling7 (DW7)	220
Irrigation Pond (IP) (idle)	70
Poultry Farm (P)	7
Business1 (B1)	292
Business2 (B2)	380
Kuyulu Village Center (VC)	2,380
Keban Dam	10,455
Hazar Lake	12,340

4.1.4 Kavaktepe Village

The project includes the construction of 10 rural houses, and construction of roads and pavement within the parcel, installation of street lighting, sewerage and drinking water network, and the impermeable septic tank on a new location within parcel 149/1 in Kavaktepe Village, Central District.

The parcel is registered as raw soil, and has a total area of $50,100.53 \text{ m}^2$, but approximately 13% of the parcel $(6,000 \text{ m}^2)$ will be used within the scope of the project. No action will be taken regarding the entire parcel. The allocated parcel area is shown in Figure 9.

The AoI of the selected parcel and close dwellings and other facilities and features are shown in the following figure (see Figure 10), and distances are given in Table 6.







Figure 9. Satellite Image of 149/1 Parcel in Kavaktepe Village



Figure 10. Area of Influence in the Village of Kavaktepe

 Table 6. Close Settlements to the Project Area in Kavaktepe Village

Dwelling / Facilities / Features	Air Distance (m)
Dwelling1 (DW1)	10
Dwelling2 (DW2)	36
Dwelling3 (DW3)	250
Dwelling4 (DW4)	185
Inactive Barn (IB)	175
Earthquake Houses-1 (EHs1)	210
Earthquake Houses-2 (EHs2)	370

DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 2 (62 rural houses)





Dwelling / Facilities / Features	Air Distance (m)
Almond Trees (T)	1
DSI Water Structure (WS)	0
Irrigation Channel (IR)	5
Kavaktepe Village Center (VC)	570

4.1.5 Yedigöze (Germili) Village

The project includes the construction of 12 rural houses, and construction of roads and pavement within the parcel, installation of street lighting, sewerage and drinking water network, and the impermeable septic tank on a new location within parcel 2555 in Yedigöze (Germili) Village, Central District.

The parcel is registered as pastureland, and has a total area of $107,406.49 \text{ m}^2$, but approximately 6.7% of the parcel $(7,200 \text{ m}^2)$ will be used within the scope of the project. No action will be taken regarding the entire parcel. The allocated parcel area is shown in Figure 11.

The AoI of the selected parcel and close dwellings and other facilities and features are shown in the following figure (see Figure 12), and distances are given in Table 7.



Figure 11. Satellite Image of 2555 Parcel in Yedigöze (Germili) Village







Figure 12. Area of Influence in the Village of Yedigöze (Germili)

Table 7. Close Settlements to the Project Area in Yedigöze (Germili) Village

Dwelling / Facilities / Features	Air Distance (m)
Dwelling1 (DW1)	214
Dwelling2 (DW2)	114
Dwelling3 (DW3)	216
Earthquake Houses-1 (EHs-1)	10
Earthquake Houses-2 (EHs-2)	10
Earthquake Houses-3 (EHs-3)	10
Beekeeping Hives (BH)	135
Transformer (T)	0
Mosque (M)	350
Yedigöze Primary School (PS)	340
Barn (B)	218
Graveyard (G)	200
Yedigöze Village Center (VC)	420

4.2 Project Characteristics

The features regarding the houses to be constructed and the awarded Contractor are listed as follows:

- The rural houses to be constructed will cover an area of 105.0525 m², and each house will have a 14.04 m² veranda.
- The rural houses will be concrete with 3 bedrooms.
- The number of workers of the Contractor is estimated to be maximum 350-400 for 12 villages (Bağlarca, Bağdere, Çalıca, İşıkyolu, Sarılı, Gölköy, Yukarı Demirtaş, Tadım, Ballıca, Kuyulu, Kavaktepe ve Yedigöze) within the scope of DESSUP-05 Group 3.
- The estimated duration for the completion of the construction is 10 months.
- Settlement plans prepared for each new location have been approved by MoEUCC; however, they might be revised, if deemed necessary.
- There will not be any construction of concrete plant within the scope of the Project. The concrete need for the construction of the rural houses will be procured from the nearest licensed facility. The nearest concrete plant is away from 14.2 km to Tadım Village, 15.6 km to Ballıca Village, 9.9 km to

TERRP

DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 2 (62 rural houses)





- Kuyulu Village, 18.1 km to Kavaktepe Village and 14 km to Yedigöze Village.
- Wastewater will be collected in the impermeable septic tanks in both the work site and resettlement areas. The more detailed information related to the subproject is given in E&S Screening Form in Appendix-2.

4.3 Key Considerations

- The subproject will protect villagers' rights and it will not involve any risks of forced labor, child labor and other exploitative forms of labor. The workforce includes the contracted and primary supply workers. In addition, local recruitment from the close settlements will be prioritized as much as possible. There will be an influx of workers, albeit in small numbers.
- The contractor will provide PPEs (Personal Protective Equipment like hard hat, work shoes, safety glasses, gloves, etc.) to all workers in line with the project-level LMP prepared for the TERRP. Occupational health and safety risks that exist during construction works will be managed considering the hierarchy of controls. All the necessary measures will be specified as in OHS Plan.
- Construction waste, both liquid and solid, will be produced as a result of the subproject activities. Throughout the subproject, all forms of liquid and solid waste that are expected to be produced will be gathered and routinely disposed of in accordance with national laws and WB ESSs.
- There will be an impermeable septic tank used to collect wastewater. The connections to the existing infrastructure will also be provided for the houses to be built on site.
- The Contractor will create a Waste Management Plan in accordance with ESMF Annex-8 to appropriately manage the subject waste while avoiding damage to groundwater, vegetation, soil and surface water.
- It was informed that the ground delivery for the subprojects will take place following the removal of debris and demolition by the Governorship of Elazığ, if any. The Governorship of Elazığ will deliver the land as empty for the construction in the scope of the subprojects. The sub-project parcels currently does not contain debris as given in Appendix-1.
- Due to dust and exhaust emissions, it is anticipated that the activities will pose a risk to the quality of the air. The properties nearby may be negatively impacted by dust and exhaust emissions. E&S Screening Forms (see Appendix-2) and Section 4.1 provides a satellite image displaying the nearest residential areas. Although the distance between the parcels included in the scope of the project and the village center varies, it is anticipated that construction activities will negatively impact the village center's residents in terms of noise and dust generation. Nevertheless, those are foreseeable, transient and readily reducible through the application of control measures. Furthermore, the risk will be reduced to acceptable levels in conjunction with the mitigating measures that will be specified in the ESMP created by the consultant; as a result, the risk is deemed to be not significant.
- Contracted and primary supply workers will be present in the field, which increases the risk of SEA/SH. However, these workers will receive adequate training so that their presence does not have any negative impact on the lives of local people during the construction process.
- All project staff will sign a written commitment to comply with the Code of Conduct.
- The dwellings near the subproject parcels in the villages might be negatively affected by the dust and noise likely to be generated during the construction process. However, these effects are predictable and temporary and can be easily reduced to acceptable levels by implementing control measures. These will be assessed in detail in Section 6.
- As part of the SEP, GRM will be established and implemented during the subproject process. All the grievances will be monitored by the social experts of the project. Grievance boxes will be placed in easily accessible places like village head offices, schools, and mosque in the village to collect the Project Affected Persons' (PAPs) feedbacks, comments, requests and complaints. Additional boxes will be located in the construction area to collect workers' complaints (see Grievance Form in Appendix-3 and Grievance Closure Form in Appendix-4).
- Additional traffic safety measures will be taken for new construction locations. Traffic safety measures both for the local communities and workers will be included in Section 6 and the Community Health, Safety and Traffic Management Plan.





5 Information Activities and Stakeholder Engagement for ESMP

In line with the planned schedule for holding Stakeholder Engagement Meetings (SEM) in the villages of Ballıca, Kavaktepe, Kuyulu, Tadım, and Yedigöze, which are part of Group-3 Cluster-2, communication has been established with the village heads (Mukhtars). The Mukhtars have been asked to use existing communication channels to announce the meetings to all villagers and to especially support the participation of women. Mukhtars have utilized the village's instant messaging channel, other social media accounts, made announcements from the village mosque, and conducted phone calls, when necessary, as well as invited villagers in person when possible. The Supervision Consultant (EMAY) Social Experts ensured that the draft ESMP was posted 10 days in advance, and had periodic calls with the Mukhtars before the meetings to confirm the status of the announcement and the general interest level of stakeholders in attending.

The SEMs were held in two teams on October 1, 2024, at 11:30 AM in the Mukhtar's house in Ballica Village, at 1:30 PM in the village room in Tadim Village, and on October 2, 2024, at 11:30 AM in the Mukhtar's office in Yedigöze Village, and at 12:00 PM in the condolence house in Kuyulu Village. Due to the absence of participants in the village, the SEM for Kavaktepe Village was held in Elaziğ city center on October 1, 2024, at 5:00 PM (see Appendix 6. Photographs of SEMs). The participation of female stakeholders was relatively low in Group 3 Cluster 2, which consists of villages with a more conservative character compared to other clusters. For the face-to-face meetings, each team included a Social Expert and technical staff consisting of at least one Civil Engineer and one Environmental Engineer from the Supervision Consultant (EMAY). Additionally, Civil Engineer, Occupational Health and Safety Expert (OHS), and Social Expert from the Contractor (ABRC) participated. Furthermore, online participation was provided by Social Experts, Environmental Experts and an OHS Expert from the MoEUCC. As the details are provided in the Table 8, a total of 90 participants attended the meetings, including 18 women and 72 men (see Appendix 7. SEM Participant Lists). The relevant table also includes the dates of the SEMs held in the five villages under DESSUP-05 Group 3 Cluster 2, as well as the number of houses to be built in the villages.

Table 8. Stakeholder Engagement Meetings in the Villages Listed Under DESSUP-05 Group 3 Cluster 2

Dessup 05	Province/District/Village	Number of	Date of the	Numbe	ticipants		
		Rural Houses to be Constructed	Meeting	Female	Male	Total	
	Elazığ/Center/Ballıca	7		7	6	13	
C 2	Elazığ/Center/ Kavaktepe	10	01.10.2024	2	7	9	
Group 3 Cluster 2	Elazığ/Center/Tadım	15		3	15	18	
Ciustei 2	Elazığ/Center/ Kuyulu	18	02.10.2024	2	19	21	
	Elazığ/Center/Yedigöze	12		4	25	29	

The presentation content is generally standard, but it varies for each village based on the site plan and impact area specific to that village. To illustrate, the presentation content conducted in Tadım Village is shared in Appendix 8. SEM Presentation. During the meeting, information was provided about the project, as well as its environmental and social requirements, and the grievance redress mechanism. The project brochure was distributed to all participants (see Appendix 9. Project Brochure). It was confirmed that the project poster was hung at the entrance of the Mukhtar's office and the condolence house, and any worn-out posters were replaced with new ones if need be (see Appendix 10. Project Poster). After the presentations, questions directed by the participants were answered. Information regarding the questions posed and the answers given can be found in Table 9.

 Table 9. Questions Posed and Answers in the Stakeholder Engagement Meetings

Querist	Respondent	Question Raised	Answer Given
Village Resident (Ballıca)	Supervision Consultant (EMAY), Civil Engineer	It was reported that there appeared to be 7 entitled beneficiaries in the village, but the number should be 8. It was stated that the Provincial Directorate of the Ministry of Environment, Urbanization, and Climate Change was asked about and they received the response that	Since the authorized institution regarding entitlement is AFAD, guidance was given to consult with AFAD.





Querist	Respondent	Question Raised	Answer Given
		because the surname was the same, they thought they were the same person.	
Village Resident (Ballıca)	Supervision Consultant (EMAY), Civil Engineer	A request was made for landscaping to be carried out.	It was informed that landscaping, including areas with interlocking paving stones, would be done as part of the current project, but the project does not include any planting.
Village Resident (Ballıca)	Contractor (ABRC), Civil Engineer	The participant mentioned that although the houses are nice, the subbasement levels are low.	It was explained that these plans were made based on static calculations."
Village Resident (Ballıca)	Supervision Consultant (EMAY), Civil Engineer	Complaints about the road leading to the TOKİ houses were conveyed, and it was noted that winter conditions are challenging. It was asked whether a road could be constructed by expropriating land for the houses within the project scope.	It was noted that the request was received, but it was communicated that constructing a road through expropriation may not be possible within the scope of the project.
Village Resident (Kavaktepe)	Supervision Consultant (EMAY), Social Expert	The participant asked whether garden walls, a basement, or a barn would be built for the house.	It was communicated that there is no planning for a barn, basement, or woodshed within the current project, and they can have these built themselves after delivery.
Village Resident (Kavaktepe)	Supervision Consultant (EMAY), Social Expert	The participant asked whether it was possible to carry out on-site transformation with his/her own budget by receiving state support.	He was directed to the Provincial Directorate of the Ministry of Environment, Urbanization and Climate Change.
Village Resident (Kavaktepe)	Supervision Consultant (EMAY), Civil Engineer	The participant asked whether the area of the house, along with its plot, could be enlarged and requested that the residential area of the house be increased to 1500 m ² .	It was conveyed that the project has standards approved by the Ministry and the World Bank, and for this reason, it must continue with the current planning.
Village Resident (Kavaktepe)	Contractor (ABRC), Civil Engineer	The participant asked whether the roads would be asphalt or paved.	It was communicated that the road would be constructed with interlocking paving stones, there would be a service road for each house, and a 1-meter sidewalk would be built.
Village Mukhtar (Tadım)	Supervision Consultant (EMAY), Social Expert	The participant requested that an alternative road be constructed to the area where the houses are located and that the road be lightened. He also stated that it is necessary to pave the road with asphalt.	It was communicated that this is a matter within the jurisdiction of the Special Administration and that an application should be made to the responsible public institution.
Village Resident (Tadım)	Supervision Consultant (EMAY), Social Expert	The participant complained about the distance between the village and the houses being too far.	It was explained that the project land was designated and allocated to the project by AFAD or the Provincial Directorate, taking into account ground and disaster risks.
Village Resident (Tadım)	Supervision Consultant (EMAY), Civil Engineer	The participant asked how the water needs would be met.	It was reported that the necessary applications had been made to the Provincial Special Administration and that capacity increases would be made, if necessary, based on the need. It was also mentioned that the Provincial Special Administration is currently working to open a new artesian well.
Village	Supervision	Since construction has not yet	Since the area designated for the

DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 2 (62 rural houses)





Querist	Respondent	Question Raised	Answer Given
Resident (Kuyulu)	Consultant (EMAY), Civil Engineer	started in the village, the participant asked when the construction would begin.	houses to be built is planted with beets, it was stated that construction will start immediately after the beet harvest is completed.
Village Resident (Kuyulu)	Supervision Consultant (EMAY), Social Expert	The participant asked how many houses would be built in the village.	It was stated that the total number of houses to be built in the village is 18.
Village Resident (Kuyulu)	Contractor (ABRC), Civil Engineer	The participant asked how access to the houses would be provided.	It was communicated that access would be ensured through interlocking paving stones as part of the current project.
Village Resident (Kuyulu)	Supervision Consultant (EMAY), Civil Engineer	The participant asked what would be done in the event of road damage caused by heavy machinery.	It was stated that the contractor company would be contacted to ensure the roads are repaired. It was also mentioned that in case of any issues, communication could always be made using grievance reporting mechanisms.
Village Resident (Kuyulu)	Supervision Consultant (EMAY), Social Expert	It was mentioned that natural gas might come to the village within 2-3 years, and the participant asked whether natural gas infrastructure would be installed in the houses	. It was communicated that the current project does not include natural gas infrastructure, but the request has been noted and will be forwarded. Additionally, it was stated that they can also convey this request through grievance and suggestion forms if they wish.
Village Resident (Kuyulu)	Supervision Consultant (EMAY), Social Expert	The participant requested that the road, sewage system, and landscaping for the new TOKİ houses be constructed.	They were directed to the responsible institution, TOKİ.
Village Resident (Kuyulu)	Contractor (ABRC), Civil Engineer	It was requested that the roads can be damaged a lot during the construction, that the roads be improved intermittently during the construction and that the existing transportation roads be asphalted at the end of the construction.	It was stated that the contractor company would be contacted and the roads would be fixed. It was stated that in case of a problem, communication could be made at any time using the grievance mechanisms. In addition, it was conveyed that transportation would be provided with interlocking paving stones within the scope of the current project.
Village Mukhtar (Yedigöze)	Supervision Consultant (EMAY), Social Expert	The participant expressed complaints regarding the TOKI houses.	It was informed that the relevant houses are outside the scope of the project, and the contact information for TOKİ was shared. It was conveyed that all complaints would be forwarded to TOKİ collectively by the Ministry.
Village Resident (Yedigöze)	Contractor (ABRC), Civil Engineer	The participant asked whether the project includes a central heating system.	It was explained that the current project is designed to be suitable for heating with stoves. It was communicated that after the beneficiaries receive their houses, they can install central heating systems in accordance with legal procedures.
Village Resident (Yedigöze)	Supervision Consultant (EMAY), Social Expert	The participant requested the construction of a pantry and storage room.	It was communicated that the project does not include a pantry, storage room, or barn, but that these requests have been forwarded to the Ministry.





Querist	Respondent	Question Raised	Answer Given
Village Resident (Yedigöze)	Supervision Consultant (EMAY), Social Expert	The participant asked whether there would be a problem related to water.	It was informed that the necessary applications had been made to the Provincial Special Administration, and if a capacity issue is identified, the Provincial Special Administration would increase the existing reserve.
Village Resident (Yedigöze)	Supervision Consultant (EMAY), Social Expert	The participant thanked for the organized meeting and stated that if similar informational and stakeholder engagement meetings were held for other earthquake housing projects, the existing problems would not occur.	It has been stated that the current project is an approach that sets an example for future projects.





6 Environmental and Social Management Plan

The Table 10 below outlines the Environmental and Social Management Plan (ESMP), which delineates the requisite measures for the construction Contractor to adhere to during Project activities. This plan also encompasses foreseen environmental-social risks and impacts specific to the sub-project, along with recommended mitigation measures. It provides details on the stages where these risks and impacts are expected, indicators within the monitoring system, monitoring frequency, assigned responsibilities, and estimated costs. The ESMP thoroughly articulates the strategies to address these risks and impacts throughout the project timeline.

EMAY will oversee the implementation of the specified measures, the Contractor's implementation system, organizational structure, site specific Environmental and Social Management Plans (ESMPs), their effectiveness and the monitoring plan to be implemented by the Contractor. The Contractor will be subject to supervision to establish an effective system for managing and monitoring E&S concerns related to sub-project activities. Besides, the Contractor will review the ESMP prepared by the Consultant and commit to implement it or preparing the C-ESMP, if needed. The Contractor will also prepare sub-management plans, e.g. Waste Management Plan, Pollution Prevention Plan, Labor Management Plan, OHS Plan and Community Health, Safety and Traffic Management Plan, etc. and submit them to the consultant for review. The consultant will then send these documents to the PIU for approval.





 Table 10. Environmental and Social Management Plan

			Phase	e		Fr	equei	ncy		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
General for All Constru	iction Works									
Environmental and Social Management: Inadequate management of environmental and social risks and impacts	The Contractor will prepare and submit for approval and subsequently implement its Contractor ESMP (C-ESMP). The C-ESMP will be submitted prior to the commencement of construction works and no construction activities will be carried out under the Project until approval of the C-ESMP. The C-ESMP will include at least the following site-specific management plans where the necessary outlines are given in the ESMF of TERRP: • Occupational Health and Safety (OHS) Plan including Risk Assessment Report and Emergency Response Plan (ERP) • Community Health, Safety (CHS) and Traffic Management Plan (can be prepared separately as CHS Management Plan and Traffic Management Plan (TMP)) • Waste Management Plan (WMP) • Pollution Prevention Plan (PPP) • Chance Find Procedure (CFP) • Water Supply and Wastewater (WSWW) Management Plan • Labor Management Plan to be prepared in accordance with project LMP • Grievance Redress Mechanism (GRM)	X	X		All sub- management plans are approved prior to construction and implemented throughout the construction period. Monthly E&S progress reports are submitted to the MoEUCC.		x		Contractor (implementation) Supervision Consultant (supervision)	Included in the cost of construction
	At least one full-time Class A/B OHS Specialist, one full-time Environmental Specialist and one full-time Social Specialist are employed before starting construction work. The Contractor will submit the resumes of those specialists for approval. These specialists will be present at the site throughout the construction period.	X	X		Relevant E&S staff is mobilized and maintained throughout the construction period		x		Contractor (implementation) Supervision Consultant (supervision)	Included in the cost of construction





]	Phase			Fr	equer	ıcy		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	The Contractor will prepare a Training Program and provide training to all its workers, before the start working on site, on basic environmental, social, health and safety (ESHS) risks associated with the proposed construction works and the workers' responsibility. The Training Program will be repeated on a monthly basis. The Contractor's monthly training program will also cover topics related to Code of Conduct such as sexual harassment particularly towards women and children, violence, including sexual and/or gender-based violence and respectful attitudes while interacting with the local community.	x	X		Training Program approved and all relevant staff are trained. Training records		x		Contractor (implementation) Supervision Consultant (supervision)	Included in the cost of construction
	All necessary permits will be obtained, and the installation of facilities is ensured before the construction. The permits which may be needed for the Project, but not limited to the followings: • Official letters/permits from relevant governmental agencies • Official letters/permits from Türkiye Electricity Distribution Inc. (TEDA\$) for the electric poles within the selected parcels in the villages if the relocation of the poles is essential. • Official view letters from DSI for the water structure in Kavaktepe Village and irrigation channel and irrigation ponds in Tadım, Ballıca, Kuyulu and Kavaktepe Villages. • Land use permits (if necessary) • Waste disposal permits from the Municipality • Environmental permits (if necessary) • Water usage permits from the DSI (if necessary) • Waste disposal protocols with licensed disposal facilities and/or Municipalities	x			Permissions and relevant official letters	the	e befo start (struct	of	Contractor (implementation) Supervision Consultant (supervision)	Included in the cost of construction





]	Phase	e		Fr	equei	ncy		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	Excavation waste disposal protocols with municipalities Electricity connection and vector promits									
Air Quality: Dust generation around the Project site due to construction activities, and emissions from construction equipment and vehicles	• Electricity connection and usage permits Dust from exposed work sites will be minimized by applying water on the ground regularly during the dry season. Construction debris will be kept in a controlled area and sprayed with water to reduce debris dust. Stockpile of aggregate materials will be kept covered to avoid suspension or dispersal of fine soil particles during windy days or disturbance from stray animals. In case of pneumatic drilling during excavation, dust will be suppressed by ongoing water spraying and/or construction dust screen enclosures at the site. The surrounding environment such as roads, etc. will be kept free of debris to minimize dust. The construction/waste materials at the site will not be burned. Construction vehicles will not be run idle on construction sites. The operation hours of generators/machines/equipment/vehicles will be reduced as appropriate. Vehicle speed will be controlled when driving through community areas is unavoidable so that dust dispersion from vehicle transport is minimized. The trucks that transport materials will be covered to decrease dust emissions. Since there are dwellings adjacent or close to the construction site in the villages covered by this ESMP, protective barriers will be installed to protect the close dwellings from dust if necessary. Dust measurements will be conducted by an authorized laboratory accordingly if any grievance regarding dust generation is received		x		Visual inspection of air quality control measures Records of maintenance Records of complaints	X			Contractor (implementation) Supervision Consultant (supervision)	Included in the cost of construction





			Phase	,		Fr	equer	ісу		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	values, mitigation measures will be enhanced in this respect, i.e., increasing wet suppression / watering activities, applying non-toxic chemicals, further reducing speed/traffic.									
Noise: Noise generation due to construction vehicles and equipment	The construction activities will be limited to the restricted times defined in the national legislation and plan activities in consultation with nearby communities so that the noisiest activities are undertaken during periods that will result in the least disturbance. During operation, the engine covers of generators, air compressors, and other powered mechanical equipment will be closed, and equipment placed as far away from residential/community areas as possible. All equipment will be maintained to keep it in good working order by manufacturing maintenance procedures and installing acoustic enclosures around generators to reduce noise levels. When needed and feasible, noise-control methods such as fences, barriers or deflectors (such as muffling devices for combustion engines or planting of fast-growing trees) will be used. Unnecessary use of alarms, horns and sirens will be avoided. Project transportation through community areas will be minimized. A buffer zone (such as open spaces, rows of trees or vegetated areas) between the project site and residential areas will be created to lessen the impact of noise to the living quarters. Noise measurements will be conducted if any grievance regarding noise generation is received from the nearest receptors. If measured levels are above limit values, mitigation measures will be enhanced in this respect, i.e., installing acoustic barriers for mechanical equipment, limiting the hours of operation for specific pieces of equipment or operations, etc.		x		Visual/audial inspection of noise control measures Records of complaints	x			Contractor (implementation) Supervision Consultant (supervision)	Included in the cost of construction
Occupational Health and Safety:	When planning activities, following steps will be considered with OHS specialist to avoid people getting injured:	X			Visual inspection		X		Contractor	Included in the cost of





]	Phase			Fr	equer	ісу		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
OHS-related risks due to unsafe practices and hazards at work sites such as work at height, rotating and moving equipment, electrical safety, working with hazardous materials, etc.	 Construction place: Are there any hazards that could be removed or will warn people about? The people who will be taking part in construction: Do the participants have adequate skill and physical fitness to perform their work safely? The equipment: Are there checks you could do to make sure that the equipment is in good working order? Do people need any particular skills or knowledge to enable them to use it safely? Electricity safety: Do any electricity good practices such as the use of safe extension cords, voltage regulators and circuit breakers, labels on electrical wiring for safety measures, awareness on identifying burning smells from wires, etc. apply at the site? Is the worksite stocked with voltage detectors, clamp meters and receptacle testers? 				Employee records Equipment records				(implementation) Supervision Consultant (supervision)	construction
	Appropriate signposting of the construction sites will inform workers of key rules and regulations to follow. The contractor's OHS specialist will provide a brief daily toolbox talk to the construction workers on OHS risks associated with the construction activity that will be carried out on that particular day that particular day. The Contractor will ensure a safe working environment for the workers and before construction activities will supply appropriate Personal Protective Equipment (PPE) in line with international best practice and Turkish Legislation (hard hats, gloves, dust masks, goggles, harnesses and safety boots, etc.). All activities will be implemented in line with both the Law on Occupational Health and Safety (Official Gazette No:28339, dated June 30, 2012) and its relevant regulations and also with the WBG EHS Guidelines.		X		Visual inspection of control measures OHS records Employee records Incident statistics and records Records of workers' complaints	X			Contractor (implementation) Supervision Consultant (supervision)	Included in the cost of construction





			Phase	;		Fr	equei	ісу		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	The Contractor will immediately notify the MoEUCC PIU (through supervision consultants) about any serious incident which may have significant adverse effects on the environment, the affected communities, the public or workers. Then, MoEUCC will notify the WB about any serious incident in 48 hours and send an incident investigation report together with the root cause analysis and corrective action plan in 30 days to the WB.									
	The worksite will be kept clean and free of debris on a daily basis. First aid kit with bandages, antibiotic cream, etc. will be provided at the construction sites, and controlled regularly (monthly). Following safety guidelines will be ensured for the storage, transport, and distribution of hazardous materials aiming to minimize the potential for misuse, spills, and accidental human exposure. Corrosive fluids and other toxic materials will be kept in properly sealed containers for collection and disposal in properly secured areas. It will be ensured that structural openings are covered/protected adequately. Loose or light material that is stored on roofs or open floors will be secured. It will be ensured keeping hoses, power cords, welding leads, etc. from laying in heavily travelled walkways or areas. During heavy rains or emergencies of any kind, all work will be suspended. The below measures will be followed for construction involving work at height: • Do as much work as possible from the ground. • Do not allow people with the following personal risks to perform work at height tasks: eyesight/balance problem;		x		Visual inspection of control measures OHS records Employee records Incident statistics and records Records of workers' complaints Training records of workers for specific tasks such as working at height, working with electric, etc.	x			Contractor (implementation) Supervision Consultant (supervision)	Included in the cost of construction





			Phase			Fr	equei	ісу		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	certain chronic diseases – such as osteoporosis, diabetes, arthritis or Parkinson's disease; certain medications – sleeping pills, tranquilizers, blood pressure medication or antidepressants; recent history of falls – having had a fall within the last 12 months, etc. • Only allow people with sufficient skills, knowledge and experience to perform the task.									
	 Check that the place (e.g., a roof) where work at height is to be undertaken is safe. Take precautions when working on or near fragile surfaces. Clean up oil, grease, paint, and dirt immediately to prevent slipping; and Provide fall protection measures e.g. safety hardness, and simple scaffolding/guard rail for working at height. The contractor will hire trained operators for the safe operation of specialized vehicles such as forklifts, including safe loading and unloading. 									
	Moving equipment with restricted rear visibility is outfitted with audible backup alarms. A flagman will be provided to each moving equipment operator to guide the movement of equipment. The contractor will mark all energized electrical devices and lines with warning signs. The contractor will check all electrical cords, cables, and hand power tools for frayed or exposed cords and follow manufacturer recommendations for the maximum permitted operating voltage of the portable hand tools. There must be a leakage current relay in electrical panels. Both trainings and incidents (fatalities, lost time incidents, any significant events including spills, fire, etc.) including near-misses will be recorded.		x		Visual inspection of control measures OHS records Employee records Incident statistics and records	X			Contractor (implementation) Supervision Consultant (supervision)	Included in the cost of construction





		Phase				Frequency				
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	There will be fire extinguishing equipment in sufficient numbers and ready for use in the site and camping area.				Records of workers' complaints					
	The construction area will be surrounded by rope or a similar material and material stocks/storage areas will be kept away from the public. Warning signs will be posted, including in unsafe areas. Children will not be allowed to play in construction areas.									
Community Health and Safety: Community health and safety risks associated with construction activities including traffic and road-related risks (such as risks to the population due to inadequate construction and traffic management) from increased traffic volume and movement of heavyduty vehicles	All earth borrow-pits will be filled in once construction is completed to avoid standing water, water-borne diseases and possible drowning. The driving speed of vehicles will be controlled particularly when passing through a community or nearby school (such as primary school in Yedigöze (Germili) Village), children's park, health center or other sensitive areas such as mosques in Ballica Village (175 m) and Yedigöze (Germili) Village (350 m). If school children are in the vicinity traffic safety personnel to direct traffic will be assigned during school entrance and exit hours. A site-specific Traffic Management Plan will be prepared for the		x		Visual inspection of control measures Traffic accident records	X			Contractor (implementation) Supervision Consultant	Included in the cost of construction
	villages. The project site will be illuminated during the night. The surrounding construction area will be kept clean, without waste disposed of there. The broken glass will be cleaned immediately to avoid any fires. Safety guidelines will be followed for transportation of hazardous materials to the site aiming to minimize the potential for spills and accidental human exposure due to traffic accidents. Regular maintenance of vehicles will be carried out to minimize potentially serious accidents caused by equipment malfunction or premature failure.				Records of complaints				(supervision)	





	Proposed Mitigation Measures		Phase			Frequency				
Potential Risks and Impacts		Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	The local people will be informed about the work to be carried out, including the measures taken regarding communicable diseases relating to labor influx and post-disaster context (i.e., COVID-19 virus), using appropriate communication tools and methods (e.g., online/virtual and/or physically) in areas accessible to all stakeholders (including work sites).									
	In case of any epidemic or pandemic / communicable disease, including COVID-19, the guidance, guidelines, and recommendations to be provided by the Ministry of Health, the Ministry of Family and Social Services, the Ministry of Labor and Social Security, and the World Health Organization will be followed, and all relevant measures will be taken for both employees and workplaces in terms of OHS and CHS. In addition, all construction works will follow the WB guidelines to minimize the risk of COVID-19 transmission during the execution of civil works.									
	Any traffic diversions will take into account the needs of disabled persons. The Contractor will ensure the construction site is properly secured and construction-related traffic regulated properly (including proper route planning). This will include but not be limited to:									
	Signposting, warnings, barriers, and traffic diversions: the site will be visible, and the public warned of all potential hazards.									
	 Traffic management system and staff training, especially for site access and near-site heavy traffic. Provision of safe passages and crossings for pedestrians where construction traffic interferes. 									
	Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement. A vice of the control of the contr									
	 Active traffic management by trained and visible staff at 									





]	Phase	9		Fr	equei	1су		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	 the site, if required for a safe and convenient passage for the public. The Consultant will train all Contractor staff on SEA/SH, Gender Equality and GBV and explain the Code of Conduct in detail. All staff employed on the project will sign a written commitment to comply with the Code of Conduct. The sub-project will introduce a Code of Conduct for all staff working in the field and establish a Grievance Redress Mechanism for project staff. 									
Land Acquisition and Resettlement: Involuntary land acquisition and relocation of community members to new resettlement plots (if needed), including livelihood impacts	Since there is no land acquisition or expropriation for the Project's land use, there is no need to prepare a Resettlement Action Plan (RAP). However, the Contractor will conduct its activities in coordination with the supervision consultant. WB ESS5 will be followed in relevance with the Turkish legislation. There is no physical displacement or resettlement envisaged within the scope of the Project. However, if any damage occurs to third-party assets, lands, crops, etc. during construction activities, the Contractor will compensate the damage according to WB ESS5 requirements, based on the "full replacement cost." The subproject on both 154/1 and 136/1 parcel in Kuyulu Village involves economic displacement because the owner of the adjacent field planted barley to utilize the empty land. The informal users have cultivated the selected parcels. Since the parcel areas are limited, it will not be possible to make changes to the site plan. As the entire site is cultivated, the users will be negatively affected under all circumstances. The optimal situation here would be to wait until the crop is harvested by the users, the construction will start after harvest. In addition, if any damage is done by the project activities to the animals (cattle or ovine, chicken, etc.) in barns or poultry farms near the construction sites, especially in Tadım Kuyulu and Yedigöze	x			Records of complaints Records of compensation payments (if any)		x		Contractor (implementation) Supervision Consultants (supervision, support to Contractor, if required)	Included in the cost of construction





	Proposed Mitigation Measures	Phase				Frequency				
Potential Risks and Impacts		Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	(Germili) Villages, it will be compensated by the Contractor. There is unused irrigation channel at the border of the 136/1 parcel. If deemed necessary, this channel will be demolished by Elazığ Governorship and the debris will be removed before construction begins with the permission of DSI. Categories of stakeholders, particularly the vulnerable groups, will be monitored closely, and Stakeholder Engagement Plan (SEP) and Grievance Redress Mechanism (GRM) will be implemented properly.									
Water Quality and Wastewater: Water pollution in nearby surface waters due to wastewater/waste generated at the construction area due to construction activities	The site will establish appropriate erosion and sediment control measures such as e.g. hay bales and/or silt fences to prevent sediment from moving off-site and causing excessive turbidity in nearby surface waters. Storage or disposal of generated wastewater on the site will be minimized. Temporary or final waste disposal and wastewater discharge without treatment near/in surface waters is strictly forbidden to prevent possible adverse impacts on surface waters. No soiled materials, solid wastes, toxic or hazardous materials will be stored in, poured into or thrown into water bodies/dry stream beds or irrigation channels or irrigation ponds in Tadım, Ballıca, Kuyulu and Kavaktepe Villages for dilution or disposal. The training on the waste management/ environmental awareness will definitely include and emphasis those issues. Construction vehicles and machinery will be washed only in areas where runoff will not pollute natural surface waters. The wastewater generated by the personnel will be deposited in an impermeable septic tank in accordance with "Regulation on Pit Opening Where Sewer System Construction is not Applicable" published in Official Gazette No: 13783 dated 19.03.1971. Toilets with temporary septic tanks might be used for this purpose as well.		X		Visual inspection of control measures Septic tank effluent disposal records (if any) Effluent quality measurement records (if any) Records of complaints	x			Contractor (implementation) Supervision Consultant (supervision)	Included in the cost of construction





	Proposed Mitigation Measures		Phase			Frequency		ісу		
Potential Risks and Impacts		Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	Septic tank effluent will be removed periodically by sewage trucks, and disposal will be provided within the scope of the protocol to be made with the relevant municipality that has a licensed wastewater treatment plant (WWTP). The Protocol will be submitted to the PIU. If feasible and applicable, the wastewater collection system of the new rural houses can be connected to the existing sewage system in Tadım, Kavaktepe and Yedigöze (Germili) Villages. It would be appropriate for the contractor to check this issue first. Activities will not affect the availability of water for drinking and hygienic purposes. If feasible and applicable, the drinking water (tap water) system of the new rural houses can be connected to existing system near the construction site in Tadım, Kavaktepe and Yedigöze (Germili) Villages without causing any damage to the existing system. It would be appropriate for the contractor to check this issue first. The flow of natural waters will not be obstructed or diverted in a manner that could lead to drying of riverbeds or inundation of residential areas. Concrete works will be separated from waterways, especially seasonal creeks, and mixing will be kept separate from drainage to waterways.									
Soil and Groundwater Quality: Soil and groundwater pollution due to improper waste management and accidental spills, and soil erosion	The mitigation measures specified in the "Solid and Hazardous Waste" section will be applied for proper waste management. Residual (left out) concrete in concrete mixers will not be allowed to wash out into the construction site, its vicinity, or access roads of construction sites. Related training will be provided to concrete mixer drivers. Hazardous and dangerous chemicals and materials will be secured in a designated storage area to prevent spillage and tip-over. Semi-used chemical-containing containers will have lids and lids		X		Visual inspection of control measures Incident records Training records	X			Contractor (implementation) Supervision Consultant (supervision)	Included in the cost of construction

TERRP DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 2 (62 rural houses)





			Phase			Fr	equer	ісу		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	will be closed while they are not in use. In case of a spill of any hazardous material or hazardous wastes, spill prevention methods will be put in place in order to limit the exposure area. Workers who might intervene in such incidents will have relevant training on emergency response to spills. Proper spill kits will be placed at appropriate locations in the construction area. Construction will be scheduled during the dry season if appropriate. The length and steepness of slopes will be contoured and minimized. Mulch, grass or compacted soil will be used to stabilize exposed areas. Topsoil will be quickly laid on the construction areas once work is completed, and these areas will be revegetated (grass, fast-growing plants/bushes/trees will be planted). Channels and ditches will be designed for post-construction flows and line steep channels/slopes (e.g., with palm frowns, jute mats, etc.).				Records of complaints					
Solid and Hazardous Waste: EHS risks due to inappropriate management of waste generated due to construction activities (such as construction demolition wastes, hazardous waste, biodegradable waste, recyclable waste, non-	Wastes will be managed in accordance with the waste management hierarchy (prevent, reduce, reuse, recycle, recover, dispose) and personnel will be trained to raise awareness on waste management. Waste will be segregated as recyclable, hazardous and non-hazardous waste. Mineral construction wastes will be separated from general refuse, organic, liquid, and chemical wastes by on-site sorting and stored in appropriate containers. Non-hazardous wastes, inert and biodegradable wastes and also recyclables will be collected separately, and special attention will be paid to prevent hazardous wastes from mixing with other types of waste. The collection, storage and transportation of waste to appropriately designated /controlled licensed disposal areas/facilities (such as		x		Visual inspection of control measures Waste generation and disposal records Training records Records of	x			Contractor (implementation) Supervision Consultant (supervision)	Included in the cost of construction





			Phase			Fr	equer	ісу		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
hazardous waste, etc.)	excavation waste storage areas, sanitary landfills, recycling/recovery facilities, etc.) will be ensured. An official letter stating that these wastes will be accepted to licensed sites will be submitted to PIU. Temporary waste storage area (to be established at the construction area) will be on impermeable ground, covered with a roof, and equipped with a suitable drainage system, proper spill kits and appropriate firefighting equipment. Waste will be temporarily stored in this area in separate compartments (labeled with waste codes) according to their types in order not to react with each other. Except for medical wastes, hazardous wastes will be stored in the temporary waste storage area for a maximum of six (6) months and non-hazardous wastes for a maximum of one year. If one thousand kilograms or more per month hazardous waste is produced, a temporary storage permit will be obtained from the PDoEUCC. Excavation waste will be re-used for backfilling purposes as much as possible and recovery and other re-use options will be considered as appropriate. The excess excavation waste will be transported and disposed of separately by licensed transport vehicles to existing licensed excavation waste storage area(s), identified by the relevant governmental authorities, in the district/region. Municipal solid waste will be collected by the relevant municipality within the scope of the protocol to be made. Hazardous waste will be transferred to a licensed disposal facility via licensed waste transportation companies, and recyclable wastes to a relevant licensed recycling/recovery facility. All protocols will be submitted to the PIU. On-site storage of waste prior to final disposal (including earth dug for foundations) will be at least 300 meters from Keban Dam, irrigation channels and irrigation ponds near Tadım, Ballıca, Kuyulu and Kavaktepe Villages and lakes, rivers, streams or wetlands. A secured area will be used for refueling and transfer of other toxic				complaints					





			Phase			Fr	equei	псу		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	fluids distant from the settlement area (and at least 50 meters from drainage structures and 100 meters from important water bodies); ideally on a hard/non-porous surface.									
	Workers will be trained in correct transfer and handling of fuels and other substances and require the use of gloves, boots, aprons, eyewear and other protective equipment for protection in handling highly hazardous materials.									
	Small amounts of maintenance materials such as oily rags, oil filters, used oil, etc. will be collected and properly disposed of. Spent oils will never be disposed of on the ground and in water courses as they can contaminate soil and groundwater (including drinking water aquifers).									
	After each construction site is decommissioned, all debris and waste will be cleared.									
	All records of waste generation and disposal will be kept.									
	Whenever feasible, the Contractor will reuse and recycle appropriate and viable materials.									
	Temporarily storage on site of all hazardous or toxic substances will be in safe containers with labels detailing composition, properties, and usage information. The containers of hazardous substances will be placed in a leak-proof container to prevent spillage and leaching. It is forbidden to use unapproved toxic materials including lead-based paints, un-bonded asbestos, etc.									
Stakeholder Engagement and	The relevant measures suggested in the SEP will be taken and followed.				Records of complaints				PIU (implementation)	
Grievance Mechanism: Construction-related complaints and	Early liaison and effective communication will be carried out with local people (including those with special needs) who may be affected by the work of the contractor and supervision consultant.		X		Stakeholder engagement		X		Supervision Consultant	Included in the cost of construction
temporary disruption to the local	A liaison program will be implemented during the construction process to make sure that the local environment is overseen and the				records				(supervision)	

TERRP
DESSUP-05 Central District of Elazığ Province Rural Housing Project - Group 3 - Cluster 2 (62 rural houses)





			Phase			Fr	equer	ісу		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
community including eligible property	well-being of residences is protected. The supervision consultant will appoint a certain person(s)									
owners	accountable for community liaison. This person(s) will engage with the community to provide the appropriate information and to be the first line of response to resolve issues of concern.									
	Grievance boxes will be located mostly at the separate (female and male) entrances of the mosques, and the entrances of condolence houses. The locations of the boxes will and will be accessible by all, especially by disadvantageous groups like women, children, and disabled people. Moreover, the needs, demands and complaints of									
	local people and right holders will be collected both at the participation meetings and via a designated telephone number (i.e., via WhatsApp, direct massages and direct calls). Accordingly, the Project Grievance Redress Mechanism will be operated by the opening and closing of forms and complaints.									
	The names and contact telephone numbers and e-mail addresses of all site personnel with responsibilities for both supervision and management of the works will be displayed on the site hoarding.									
	The mukhtars in the villages will be informed regarding the construction activities to avoid any social conflict/disturbance.									
	Once planning consent is obtained, those who could potentially be affected by the construction of the rural houses will be informed via the mukhtar of the village. The consultation will be proceeded with the relevant E&S risk management instruments.									
	Outside normal working hours, security personnel will act as the main point of contact via a designated phone number. Security will alert the person(s) accountable for liaison, if necessary (available 24 hours).									
	All workers will sign/commit to and be trained on the Code of Conduct to manage the potential adverse impacts on social cohesion and Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH)									





			Phase			Fr	equei	ісу		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	risks. Received complaints will be logged, fully investigated, and responded to quickly, with some suitable advice about the action to be taken. Complaints will be registered and reported to the Contractor, Supervision Consultant and also PIU (see Grievance Form in Appendix-3 and Grievance Closure Form in Appendix-4). Public notice boards will be set at site entrances providing contact details of the person(s) accountable for liaison. The relevant measures in the Labor Management Plan to be									
Labor and Working Conditions: Risks associated with potential labor influx and presence of worker camps (such as accommodation conditions, child labor risks, gender-based violence and harassment, human rights risks, etc.) and other labor issues	prepared in accordance with project LMP will be followed. Workers will be provided with information and documentation that is clear and understandable regarding their terms and conditions of employment such as their rights under national labor and employment law (which will include any applicable collective agreements). Workers will be paid on a regular basis as required by national law and project LMP. Workers will be provided with adequate periods of rest per week, annual holiday and sick, maternity and family leave, as required by national law and project LMP. Workers will receive written notice of termination of employment and details of severance payments in a timely manner. Workers will be employed on the principle of equal opportunity and fair treatment, and there will be no discrimination with respect to any aspects of the employment relationship. Project workers, including specific groups of workers, such as women, people with disabilities, migrant workers and children of working age, will be provided with appropriate measures of protection and assistance in line with ESS2 of WB ESF. This process will be executed in accordance with the project LMP.		x		Visual inspection of control measures Health records Employee records Training records Records of workers' complaints	x			Contractor (implementation) Supervision Consultant (supervision)	Included in the cost of construction





			Phase	9		Fr	eque	ncy		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	Workers are allowed to participate, or seek to participate, in workers' organizations and collective bargaining or alternative mechanisms.									
	Children under the minimum age of 18 will not be employed or engaged by the Contractor in connection with this sub-project.									
	Forced labor, which consists of any work or service not voluntarily performed that is exacted from an individual under threat of force or penalty, will not be used in connection with this sub-project.									
	A worker's GRM will be established by the Contractor at the construction site for all workers to raise workplace concerns. Contact details of the worker's GRM will be provided.									
	All workers will receive training about their rights under national labor and employment law and regarding the GRM upon recruitment and before the implementation of the work.									
	Code of Conduct will be shared with project workers during employment. All workers are obliged to comply with the Code of Conduct and sign relevant documentation at the time of employment.									
	Movement in and out of the construction site will be controlled, and unauthorized access to the site will be prevented.									
	The Contractor will confirm that workers are fit for work before they start work, paying special attention to workers with underlying health issues or who may be otherwise at risk.									
	The Contractor will provide information and awareness of communicable diseases to workers.									
	The Contractor will arrange for safe drinking water, adequate shower and toilet facilities, accommodation, rest and eating areas for workers. Electric tankless water heaters will not be used in showers. Central heating or storage water heater will be used for									
	showers. If external labor is needed a Camp Management Plan will be prepared to avoid or reduce negative impacts on the community									





			Phase	•		Fr	eque	псу		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	and maintain constructive relationships between local communities and workers' camps and establish standards on worker welfare and living conditions at the camps that provide a healthy, safe and comfortable accommodation and environment. Necessary transportation facilities are provided for the workers. The Contractor will provide a first aid kit with bandages, antibiotic cream, etc. or health care facilities, and will identify and train an adequate number of workers to provide first aid during medical emergencies. The Contractor will comply with the provisions of Workers' Accommodation: Processes and Standards – A Guidance Note by International Finance Corporation (IFC) and European Bank for Reconstruction and Development (EBRD) for the conditions of camp sites/worker accommodation areas.									
Cultural Heritage: Chance find	Cultural or historic sites will not be disturbed. Tangible or intangible values and heritage important to the local people (such as graveyards in the villages (Yedigöze (Germili) Village)) will not be damaged. If encountered with any cultural heritage/assets, chance find, during construction works (especially excavation and earthworks), the chance finds procedure (see Annex-9 of ESMF of the project) will be implemented.		X		Chance finds records		X		Contractor (implementation) Supervision Consultant (supervision)	Included in the cost of construction
Biodiversity: Potential risks to flora and fauna due to construction activities and improper waste management	The site plan will be adjusted in order to prevent cutting of trees, if possible. If trees need to be cut in new resettlement plots, especially in Kavaktepe Village, at least two times more than the trees cut will be planted at the site (preferably a site in the nearby region) identified by the General Directorate of Forestry, as per the commitment of the MoEUCC within the scope of the Project.	X			Tree plantation records			X	PIU	Included in the cost of construction
	There will be no cutting of trees or destruction of vegetation other		X		Visual inspection	X			Contractor	Included in





			Phase)		Fr	equei	ncy		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	than on construction sites. No hunting, capture of wildlife or collection of plants are allowed.				of control measures				(implementation) Supervision Consultant (supervision)	the cost of construction
Specific to Rural Road	Construction Works				1					
	Road construction in unstable soils, steep slopes and nearby stream banks will be avoided. Additional measures (see the section below on slope protection) need to be applied where there are no alternatives for road alignments.	x			Design approval		ce du desig		PIU	
General Considerations	Placement of all construction waste (including earth cuts) to approved disposal sites (at >300 m from streams,) will be controlled. Erosion control measures will be implemented before the rainy season begins, preferably immediately following construction. The measures will be maintained and reapplied until vegetation is successfully established. Sediment control structures will be applied where needed to slow or redirect runoff and trap sediment until vegetation is established.		X		Visual inspection of control measures	x			Contractor (implementation) Supervision Consultant (supervision)	Included in the cost of construction
Slope protection	Protect slopes from erosion and landslides by the following measures: • Indigenous Species, fast-growing grass will be used on slopes prone to erosion. These grasses help stabilize the slope and protect soil from erosion by rain and runoff. Locally available species possessing the properties of good growth, dense ground cover and deep root will be used for stabilization. • Preventive/stopping ditches, which are especially effective in areas of high-intensity rainfall and where		x		Visual inspection of control measures	x			Contractor (implementation) Supervision Consultant (supervision)	Included in the cost of construction





			Phase			Fr	eque	ncy		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	slopes are exposed, will be constructed. This type of ditch intercepts and carries surface run-off away from erodible areas and slopes before reaching the steeper slopes, thus reducing the potential surface erosion.									
	 For steep slopes, a stepped embankment (terracing) is needed for greater stability. A retaining wall will be placed at the bottom of the unstable slope. There will be drainage holes for drainage of the road sub-base, thus reducing pressure on the wall. 									
	 Rocks (riprap) can be used in addition to protect the slope. With sufficiently wide drainage ditches, uncontrolled discharge of water from the road surface will be removed from the slope. 									
Specific to Wastewater	Systems				1					
General Considerations for Septic Tanks (If used by the Contractor during construction)	Septic tanks must have a vent pipe to prevent the build-up of gas inside the chamber and will have a 'manhole' that provides access inside the tank if needed. It will be ensured that the septic tanks have two chambers: the first chamber is for settling sludge, and the second chamber is for aerobic treatment. These chambers will generally treat wastewater better. Partially treated septic tank effluent can pollute groundwater and surface water. If this is not possible, septic tanks will be impervious and designed in accordance with "Regulation on Pit Opening Where Sewer System Construction is not Applicable" published in Official Gazette No: 13783 dated 19.03.1971.	X			Design approval		ce du desig	_	PIU	Included in the cost of construction
	The effluent of septic tank will not be discharged to an open drain or other surface water. The effluents need to be treated before final disposal. This may be achieved through (i) an underground leach field, (ii) a vegetated leach field, or (iii) a pit for soaking away. If this is not possible, septic tank effluent will be removed periodically by			X	Effluent disposal records (if any) Records of		x		Local Authority (Mukhtar, Municipality, or Elazığ Provincial	Included in the cost of construction





]	Phase			Fr	equen	ıcy		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	sewage trucks, and disposal will be provided within the scope of the protocol to be made with the relevant municipality that has a licensed wastewater treatment plant.				community awareness activities				Special Administration)	
	Community awareness will be raised so that the community inspects the septic tanks periodically and ensures that the septic tanks are emptied every few years for the tank to continue to function properly.				Records of complaints					
General Considerations for	If PWWTPs will be used to treat domestic wastewater generated by the workers, design approval of package facilities will be obtained before the construction.				Design approval	Onc	e duri	ing	Contractor (implementation)	
PWWTP (If used by the Contractor during construction for their workers))	PWWTP and discharge permits (Environmental Permits) will be received from the relevant governmental authorities before its operation. It will be ensured that the PWWTP is operating in accordance with	X		x	Environmental Permits Wastewater	desi	ign an e befo ration	d re	Supervision Consultant (supervision)	Included in the cost of construction
	the requirements and that the wastewater quality complies with national discharge standards.				quality analysis				(Super vision)	





Appendices

Appendix-1. List of the Subproject Parcels

Table 11. General Screening Evaluation

#	Village	Lot / Parcel No	Area (m²)	Registration Status	Presence of Debris ¹	Available Facilities ²	Available Infrastructure ³	Public Facilities Near the Parcel	Physical / Economic Displacement	Conversion of non- critical habitats	Clearence of Natural Forests	Clearence of trees/ natural vegetation	Additional Notes	Number of Stories
1	Tadım	162/15	456,689.79	Pastureland	No	EP, IR, WT	ST, WN, WWN, CR, SL due to the earthquake houses within the parcel	Neighboring houses including earthquake houses, Poultry Farms near the Parcel	No	Yes	No	No	15 houses	1-Storey
2	Ballıca	113/A	19,011	Land allocated for earthquake housing	No	EP, IR, hydrophore building	-	Neighboring houses, Mosque, Private Irrigation Ponds	No	Yes	No	Yes	7 houses	1-Storey
		136/1	5,879.20		Yes ⁴	Idle IRs (unused)	-	Idle IRs and IPs (unused)	No	Yes	No	Yes	8 houses	
3	Kuyulu	154/1	18,309.85	Irrigated field	No	Idle IRs, Irrigation Pond near the parcel (unused)	-	Idle IRs, IP (unused), poultry farm and businesses near the parcel	No	Yes	No	Yes	10 houses	1-Storey

¹ It was informed that the ground delivery for the subprojects will take place following the removal of debris and demolition by the Governorship of Elazığ.

 $^{^2 \} Irrigation \ Channel \ (IR) \ / \ Irrigation \ Pond \ (IP) \ / \ Stream \ (S) \ / \ Electric \ poles \ (EP) \ / \ Water \ Well \ (W) \ / Septic \ Tanks \ (ST) \ / \ Water \ Tank \ (WT)$

³ Water Network (WN), Wastewater Network (WWN), Connection Road (CR) and Street Lighting (SL)

⁴ There is unused irrigation channel at the border of the 136/1 parcel. If deemed necessary, this channel will be demolished by Elazığ Governorship and the debris will be removed before construction begins with the permission of DSI.





#	Village	:	Lot / Parcel No	Area (m²)	Registration Status	Presence of Debris ¹	Available Facilities²	Available Infrastructure ³	Public Facilities Near the Parcel	Physical / Economic Displacement	Conversion of non- critical habitats	Clearence of Natural Forests	Clearence of trees/ natural vegetation	Additional Notes	Number of Stories
4	Kavakte	ре	149/1	50,100.53	Raw soil	No	EP, IR, DSI Water Structure	ST, WN, WWN, CR, SL due to the earthquake houses near the parcel (210 m and 370 m)	Neighboring houses, inactive barn, DSI Water Structure, Almond Trees	No	Yes	No	Yes	10 houses	1-Storey
5	Yedigöz (Germil		2555	107,406.49	Pastureland	No	EP, ST	ST, WN, WWN, CR, SL, transformer due to the earthquake houses within the parcel	Neighboring houses including EHs, Yedigöze Primary School, Beekeeping Hives, Mosque	No	Yes	No	No	12 houses	1-Storey





Appendix-2. E&S Screening Forms

(given as a separate document)





Appendix-3. Grievance and Suggestion Form



GRIEVANCE AND SUGGESTION FORM*

(A)
THE WORLD BANK

	IBRD - IDA WORLD BANK GROUP
Reference Number	
Full Name (Although it is not mandatory to share name and contact information, it should be kept in mind that some problems may arise due to lack of information during the feedback process regarding your complaints/opinions/suggestions.)	
Please tick how you would like to be contacted	Email (please specify your email address)
regarding your grievance/suggestion/opinion.	(Fried of Fried)
	@
	Phone (please specify the phone number you want to be contacted)
	Mail (please specify your mailing address where you would like to be contacted)
City/District/Village	
Date	
Grievance Category	
1. About assets/properties affected by the project	
2. Infrastructure outages (electricity, water, internet, natural gas outages)	
3. Upon decrease or complete loss of income sources	
4. Employment-related (Contractor employee)	
5. On environmental issues (garbage, dust, oily ground, water quality, etc.)	
6. Health and Safety hazards (Unsafe construction activity)	
7. About traffic, transportation and other risks	
8. Other (Please specify):	





Description of the Grievance (What happened? When did it happen? Where did it happen? What is the outcome of the problem?)				
What kind of actions do you expect/recommend to be taken to solve the problem?				
Name:	Communication information:			
Signature:	Date:			





Appendix-4. Grievance Closure Form

GRIEVANCE CLOSURE FORM		THE V	VORLD BANK DA WORLD BANKGROUP
Grievance Closure Number:			
Describe the necessary immediate action:			
Describe the necessary long-term action (if applicable):			
Is Compensation Required?	[] YES	[]	NO
QUICK ACTION AND DECISION	CONTROL		
Stages of Improvement Action		Deadline and Responsible In	
1.			
2.			
3.			
4.			
5.			
6.			
7.			
COMPENSATION AND FINAL STE	EPS		
This section will be completed and s	signed by the complainan	after receiving com	pensation fees and
resolving the complaint.			
Notes: [Name / Signature]			
Date:/			
Complainant:			
Responsible Institution / Company Re	presentative		
Title / Name / Surname and Signature	el		





Appendix-5. Site Photographs Site Photographs of Tadım Village









TERRP
DESSUP-05 Central District of Elazığ Province Rural Housing Project - Group 3 - Cluster 2 (62 rural houses)













TERRP
DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 2 (62 rural houses)





Site Photographs of Ballıca Village









TERRP
DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 2 (62 rural houses)









TERRP
DESSUP-05 Central District of Elazığ Province Rural Housing Project - Group 3 - Cluster 2 (62 rural houses)





Site Photographs of Kuyulu Village 136/1 Parcel









TERRP
DESSUP-05 Central District of Elazığ Province Rural Housing Project - Group 3 - Cluster 2 (62 rural houses)











154/1 Parcel







TERRP
DESSUP-05 Central District of Elazığ Province Rural Housing Project - Group 3 - Cluster 2 (62 rural houses)





Site Photographs of Kavaktepe Village









TERRP
DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 2 (62 rural houses)









TERRP
DESSUP-05 Central District of Elazığ Province Rural Housing Project - Group 3 - Cluster 2 (62 rural houses)





Site Photographs of Yedigöze (Germili) Village









TERRP
DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 2 (62 rural houses)













TERRP
DESSUP-05 Central District of Elazığ Province Rural Housing Project - Group 3 - Cluster 2 (62 rural houses)













TERRP
DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 2 (62 rural houses)





Appendix 6. Photographs of SEMs Ballıca Village SEM Photographs





Kavaktepe Village SEM Photographs





Tadım Village SEM Photographs





TERRP

DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 2 (62 rural houses)





Kuyulu Village SEM Photographs





Yedigöze Village SEM Photographs









Appendix 7. SEM Participant Lists

Under Law No. 6698 on the Protection of Personal Data, participants' personal identification information cannot be shared. However, records related to the meetings are stored by PIU.





Appendix 8. SEM Presentation Tadım Village SEM Presentation





KIRSAL ALANLARDA DEPREM İYİLEŞTİRME VE YENİDEN YAPIM PROJESİ (KADİYAP)

Elazığ İli Merkez İlçesi Kırsal Konut Projesi

Tadım Köyü

Aemay

PAYDAŞ KATILIM TOPLANTISI 01.10.2024

PROJE YÖNETİMİ

Proje Yönetim Birimleri:

BANKA: Finansmanı Sağlayan Kuruluş, Dünya Bankası İDARE: Proje Faaliyetlerin Genel Yönetimi ve İdaresi, Çevre, Şehircilik ve İklim Değişikliği Bakanlığı, Yapı İşleri Genel Müdürlüğü (YİGM) MÜTEAHİT: İnşaat İşini Yapan Firma, ABRC İnşaat Taah. San. Ve Tic. Ltd. Şti. MÜŞAVİR: İnşaatı Denetleyen Firma,

EMAY Uluslararası Mühendislik ve Müşavirlik Anonim Şirketi

KADİYAP HAKKINDA

PROJE HAKKINDA

Kırsal Alanlarda Deprem İyileştirme ve Yeniden Yapım Bileşen 5: Kırsal Alanların Yeniden İnşası ve İyileştirmesi

 Bilesen 5 kapsamında depremden etkilenen diğer iller ile birlikte Elazığ ilinde belirlenen yerleşimlerde kırsal konutların yeniden inşası bulunmaktadır.

· Proje'nin finansmanı Dünya Bankası tarafından sağlanmakta olup

Hazine ve Maliye Bakanlığı garantörlüğünde Çevre, Şehircilik ve İklim Değişikliği Bakanlığı Yapı İşleri Genel Müdürlüğü tarafından

Proje'nin İnşaat Müşavirliği'ni EMAY Uluslararası Mühendislik ve

 Proje kapsamında Elazığ ilinde Afet ve Acil Durum Yönetimi Başkanlığı tarafından tespit edilen hak sahipleri için belirlenen yeni alanlarda kırsal konutların inşa edilmesi amaçlanmaktadır.

Müşavirlik Anonim Şirketi (EMAY) üstlenmektedir.

- Bu kapsamda, Tadım Köyü'nde AFAD tarafından belirlenen 162 ada 15 parsel üzerinde 15 adet kırsal konut inşa edilmesi planlanmaktadır.
- İnşa edilen konutlar, hak sahiplerine AFAD tarafından kura ile teslim

KADİYAP BİLEŞEN 5:

Kırsal Konut Yeniden İnşası ve İyileştirmesi

TADIM KÖYÜ KIRSAL KONUTLARI

KADİYAP Bileşen 5: Kırsal Konut Yeniden İnşası ve İyileştirmesi

TADIM KÖYÜ KIRSAL KONUTLARI VAZİYET PLANI

5



ÖRNEK KONUTA AİT FOTOĞRAFLAR

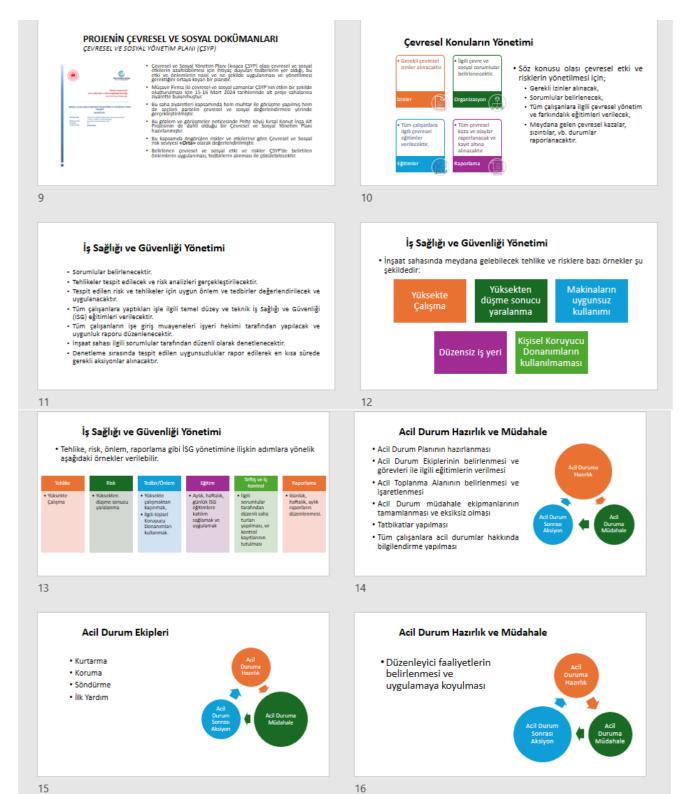




6

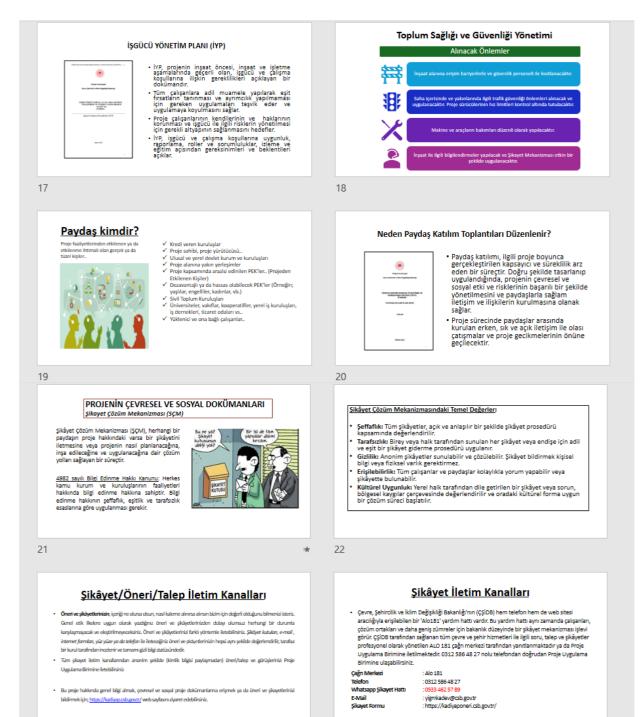






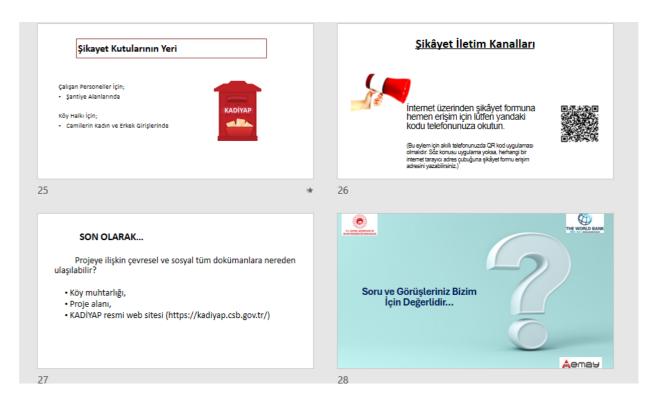
















Appendix 9. Project Brochure





TERRP

DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 2 (62 rural houses)





Appendix 10. Project Poster



TERRP

DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 2 (62 rural houses)