



# Republic of Türkiye Ministry of Environment, Urbanization and Climate Change

General Directorate of Construction Affairs

## TÜRKİYE EARTHQUAKE RECOVERY AND RECONSTRUCTION PROJECT

## (TERRP)

Subproj	ect Name
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Document Name Version Submission Date DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 1 (62 rural houses) Environmental and Social Management Plan 0.0 25/09/2024





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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.





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## **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 Development	
EMAY		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	
ТМР	:	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 earthquakeresilient 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-1, which consists of 62 rural houses to be constructed in the villages of Bağlarca (8), Bağdere (4), Çalıca (14), Işıkyolu (5), Sarılı (11), Gölköy (8) and Yukarı Demirtaş (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 (Bağlarca, Bağdere, Çalıca, Işıkyolu, Sarılı, Gölköy and Yukarı Demirtaş) 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 Projectrelated 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 1), a total of 62 rural houses will be constructed in Bağlarca (8 houses), Bağdere (4 houses), Çalıca (14 houses), Işıkyolu (5 houses), Sarılı (11 houses), Gölköy (8 houses) and Yukarı Demirtaş (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	Bağlarca (Nekerek) Village	8	1-Storey	136/141	1,667,609.12	Pastureland
Central	Bağdere (Ancuz) Village	4	1-Storey	105/1	2,121,194.20	Pastureland
Central	Çalıca (Ekrüz) Village	14	1-Storey	230/92	367,875.05	Pastureland
Central	Işıkyolu Village	5	1-Storey	137/1	237,036.74	Pastureland
Central	Sarılı Village	11	1-Storey	167/44	93,854.18	Pastureland
Central	Gölköy (Göl)	8	1 Storer	114/10	4,475.26	Threshing
Village	Village		1-Storey	110/68	11,575.65	Field
Central	Yukarı Demirtaş Village	· · · · · · · · · · · · · · · · · · ·		101/2	56,087.25	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 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/nonhazardous 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.

#### TERRP





#### 4.1 **Project Settlements**

#### 4.1.1 Bağlarca (Nekerek) Village

The sub-project includes the construction of 8 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 136/141 in Bağlarca (Nekerek) Village, Central District.

The parcel is registered as pastureland and has a total area of  $1,667,609.12 \text{ m}^2$  but approximately 0.3% of the parcel ( $4,800 \text{ m}^2$ ) 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 136/141 Parcel Area in Bağlarca (Nekerek) Village





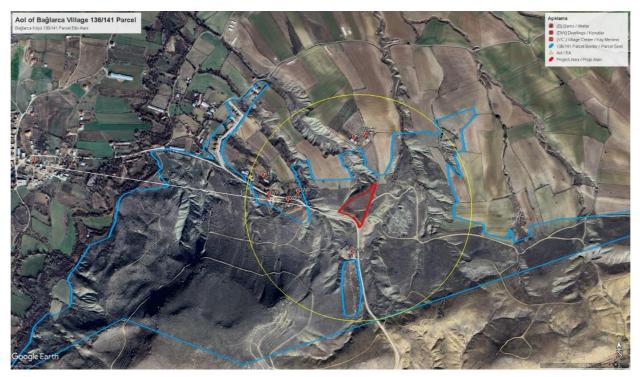


Figure 2. Area of Influence in the Village of Bağlarca (Nekerek)

 Table 2. Close Settlements to the Project Area in Bağlarca (Nekerek) Village

Dwelling / Facilities / Features	Air Distance (m)
Dwelling (DW)1	188
DW2	227
DW3	310
DW4	125
DW5	195
Barn (B)1	352
B2	190
Bağlarca (Nekerek) Village Center	1,350
Cip Dam	2,410

#### 4.1.2 Bağdere (Ancuz) Village

The sub-project includes the construction of 4 rural houses on 105/1 parcel, and construction of roads and pavement within the parcel, installation of street lighting, sewerage and drinking water network, and impermeable septic tank in Bağdere (Ancuz) Village, Central District.

The parcel is registered as pastureland and has a total area of 2,121,194.20 m<sup>2</sup> but approximately 0.1% of the parcel (2,400 m<sup>2</sup>) 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 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.





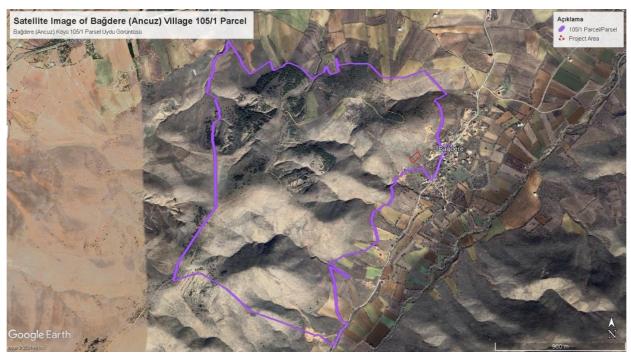


Figure 3. Satellite Image of the 105/1 Parcel in Bağdere (Ancuz) Village

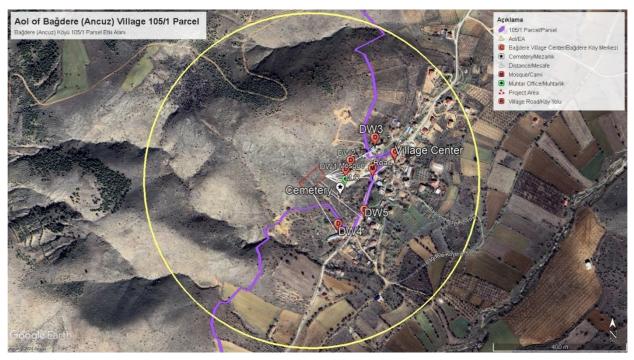


Figure 4. Area of Influence in the Village of Bağdere (Ancuz)

**Table 3.** Close Settlements to the Project Area in Bağdere (Ancuz) Village

Dwelling / Facilities / Features	Air Distance (m)
DW1	57
DW2	67
DW3	154
DW4	136
DW5	174
Cemetery	72 (in parcel boundary)
Village Road	68

#### TERRP





Dwelling / Facilities / Features	Air Distance (m)
Muhtar Office	63
Mosque	133
Bağdere (Ancuz) Village Center	212

#### 4.1.3 Çalıca (Ekrüz) Village

The project includes the construction of 14 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 230/92 in Çalıca (Ekrüz) Village, Central District.

The parcel is registered as pastureland, and has a total area of  $367,875.05 \text{ m}^2$ , but approximately 2.3% of the parcel (8,400 m<sup>2</sup>) 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 5.

The AoI of the selected parcel and close dwellings and other facilities and features are shown in the following figure (see Figure 6), and distances are given in Table 4.

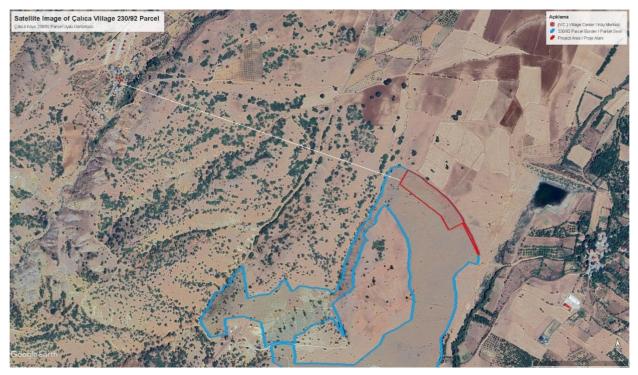


Figure 5. Satellite Image of 230/92 Parcel in Çalıca (Ekrüz) Village







Figure 6. Area of Influence in the Village of Çalıca (Ekrüz)

**Table 4.** Close Settlements to the Project Area in Çalıca (Ekrüz) Village

Dwelling / Facilities / Features	Air Distance (m)
Dwelling (DW)1	615
DW2	650
DW3	600
Mosque (M)	640
Lake	364
Çalıca (Ekrüz) Village Center	1,240

#### 4.1.4 Işıkyolu Village

The project includes the construction of 5 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 137/1 in Işıkyolu Village, Central District.

The parcel is registered as pastureland, and has a total area of 237,036.74 m<sup>2</sup>, but approximately 1.2% of the parcel (3,000 m<sup>2</sup>) 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 7.

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







Figure 7. Satellite Image of 137/1 Parcel in Işıkyolu Village

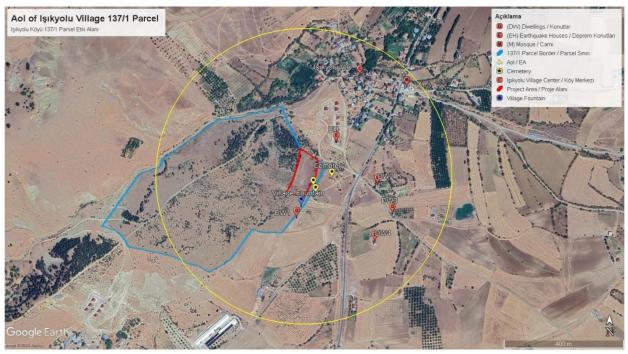


Figure 8. Area of Influence in the Village of Işıkyolu

 Table 5. Close Settlements to the Project Area in Işıkyolu Village

Dwelling / Facilities / Features	Air Distance (m)
DW1	64
DW2	205
DW3	282
DW4	272
Earthquake Houses	85
Lake	1,352
Cemetery	10 (in the parcel boundary)
Village Fountain	28 (in the parcel boundary)

#### TERRP





Dwelling / Facilities / Features	Air Distance (m)
Işıkyolu Village Mosque (inactive)	380
Işıkyolu Village Center	315

#### 4.1.5 Sarılı Village

The project includes the construction of 11 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 167/44 in Sarılı Village, Central District.

The parcel is registered as pastureland, and has a total area of 93,854.18 m<sup>2</sup>, but approximately 7% of the parcel (6,600 m<sup>2</sup>) 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*.

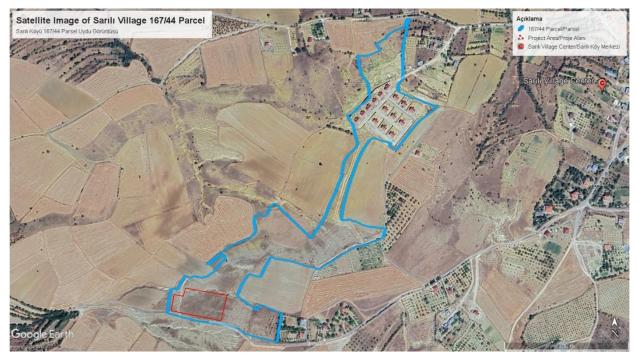


Figure 9. Satellite Image of 167/44 Parcel in Sarılı Village





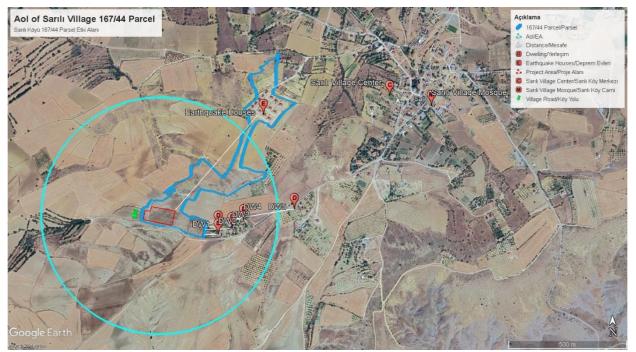


Figure 10. Area of Influence in the Village of Sarılı

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

Dwelling / Facilities / Features	Air Distance (m)
DW1	48
DW2	52
DW3	104
DW4	146
DW5	373
Earthquake Houses	534
Village Road	7
Sarılı Village Center	1,027
Sarılı Village Mosque	1,168

#### 4.1.6 Gölköy (Göl) Village

The project includes the construction of 8 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 114/10 and 110/68 in Gölköy (Göl) Village, Central District.

The total area of the 114/10 parcel is 4,475.26 m<sup>2</sup> and 110/68 parcel is 11,575.65 m<sup>2</sup>. Both parcels are registered as "threshing field". The allocated parcel areas are shown in Figure 11.

The AoI of the selected parcels 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 114/10 and 110/68 Parcels in Gölköy (Göl) Village

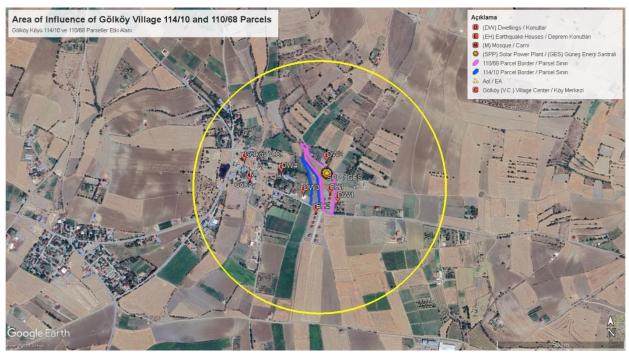


Figure 12. Area of Influence in the Village of Gölköy (Göl)

 Table 7. Close Settlements to the Project Area in Gölköy (Göl) Village

Dwelling / Facilities / Features	Air Distance (m)
Dwelling (DW) 1	70
DW2	25
DW3	20
DW4	110
Solar Power Plant (SPP)	0 (in 110/68 parcel)
Earthquake Houses-1 (EH1)	0 (in 110/68 parcel)
Earthquake Houses-2 (EH2)	20
Gölköy Village Mosque (M)	230





Dwelling / Facilities / Features	Air Distance (m)
Gölköy Village Center	255

#### 4.1.7 Yukarı Demirtaş 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 101/2 in Yukarı Demiştaş Village, Central District.

The parcel is registered as pastureland, and has a total area of  $56,087.25 \text{ m}^2$ , but approximately 12.8% of the parcel (7,200 m<sup>2</sup>) 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 13.

The AoI of the selected parcel and close dwellings and other facilities and features are shown in the following figure (see Figure 14), and distances are given in Table 8.



Figure 13. Satellite Image of 101/2 Parcel in Yukarı Demirtaş Village





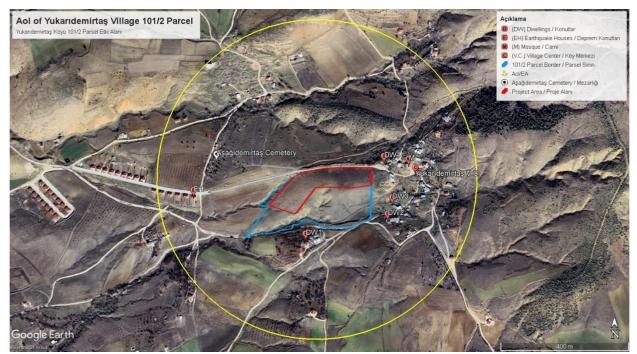


Figure 14. Area of Influence in the Village of Yukarı Demirtaş

 Table 8. Close Settlements to the Project Area in Yukarı Demirtaş Village

Dwelling / Facilities / Features	Air Distance (m)
Dwelling (DW)1	88
DW2	118
DW3	85
DW4	40
(EH) Earthquake Houses	235
(M) Mosque	108
Aşağıdemirtaş Cemetery	200
Yukarıdemirtaş Village Center (V.C.)	125

#### 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  $m^2\!\!$  , and each house will have a 14.04  $m^2$  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, Işıkyolu, 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 25 km to Bağlarca Village, 26.6 km to Bağdere Village, 34 km to Çalıca Village, 31.9 km to Işıkyolu Village, 22.4 km to Sarılı Village, 25 km to Gölköy Village and 20.8 km to Yukarı Demirtaş 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.

TERRP





#### 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 Bağlarca, Bağdere, Çalıca, Işıkyolu, Sarılı, Gölköy and Yukarı Demirtaş, which are part of Group-3 Cluster-1, 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 conducted in two teams on September 30, 2024, at 10:00 AM, in the villages of Çalıca and Isikyolu, at 1:00 PM in the villages of Bağdere and Gölköy, and at 3:00 PM in the villages of Bağlarca and Sarılı (see <u>Appendix 6. Photographs of SEMs</u>). The meetings took place in condolence houses in Çalıca, Gölköy, and Bağlarca villages, in the Mukhtar's house in Bağdere Village, in the mosque tea house in Işıkyolu Village, in the courtyard of the village condolence house in Sarılı Village, and at the village school in Yukarı Demirtaş Village. Since Aşağı Demirtaş Village is within the project impact area of Yukarı Demirtaş Village, the village Mukhtar and residents of Aşağı Demirtaş were invited to the SEM held in Yukarı Demirtaş and participated. Despite all requests and insistence, no female participants could be gathered in Sarılı Village. The Mukhtar stated that the cultural fabric of the region did not allow for female participation in the meeting. Although it was mentioned that a separate meeting could be held for women, the Mukhtar and villagers clearly expressed that they did not want such a meeting. Each team had a Social Expert and technical staff (including at least one Construction Engineer and one Environmental Engineer) from the Supervision Consultant (EMAY), and a Construction Engineer, OHS Expert, and Social Expert from the contractor (ABRC). Additionally, Social Experts, Environmental Experts and an OHS Specialist from the MoEUCC participated online. As detailed in Table 9, a total of 166 people attended the meetings, consisting of 53 women and 113 men (see Appendix 7. SEM Participant Lists). The relevant table also includes the dates of the SEMs held in the seven villages within the scope of DESSUP-05 Group 3 Cluster 1 and the number of housing units to be built in those villages.

Dessup	Province/District/Village	Number of	Date of the	Number of Participants					
05		Rural Houses to be Constructed	be		Male	Total			
	Elazığ/Center/Bağlarca	8		6	15	21			
	Elazığ/ Center /Bağdere	4		4	9	13			
C	Elazığ/ Center /Çalıca	14	30.09.2024	6	14	20			
Group 3 Cluster 1	Elazığ/ Center /Işıkyolu	5		6	12	18			
Cluster 1	Elazığ/ Center /Sarılı	11		2	18	20			
	Elazığ/ Center /Gölköy	4		7	14	21			
	Elazığ/ Center /Yukarı Demirtaş	12	01.10.2024	22	31	53			

 Table 9. Stakeholder Engagement Meetings in the Villages Listed Under DESSUP-05 Group 3 Cluster 1

The meetings began with a presentation of the project by the Social Experts and technical team from EMAY. 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 Bağlarca Village is shared in <u>Appendix 8. SEM Presentation</u>. 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 <u>Appendix 9. Project Brochure</u>). It was confirmed that the project poster was hung at the entrance of the Mukhtars' office and the condolence houses and village meeting rooms, and any worn-out posters were replaced with new ones if need be (see <u>Appendix 10. Project Poster</u>). After the presentations, questions directed by the participants were answered. Information regarding the questions posed and the answers given can be found in Table 10.





#### Table 10. Questions Posed and Answers in the Stakeholder Engagement Meetings

Querist	Respondent	Question Raised	Answer Given
Village Resident (Bağlarca)	Contractor (ABRC), Civil Engineer	Many people have mentioned that there is a water issue in the village, and concerns have been raised about what will happen if it remains insufficient with the new housing units.	It has been reported that discussions are being held with the Provincial Special Administration regarding the issues related to water needs.
Village Resident (Bağlarca)	Supervision Consultant (EMAY), Civil Engineer	Questions were raised about whether there will be storage areas, barns, and woodsheds, and there were requests for their construction if they are not included.	It was communicated that the current project does not allow for planning the construction of storage areas, barns, and woodsheds, and that this request has also been made in other villages and will be conveyed to the Ministry.
Village Resident (Bağlarca)	Supervision Consultant (EMAY), Social Expert	It has been reported that there are insulation issues with the steel structures.	It has been suggested to consult with the institution responsible for the construction.
Village Resident (Bağlarca)	Supervision Consultant (EMAY), Civil Engineer	Complaints have been raised regarding the site plan, and questions have been asked about whether the windows of the houses will overlook each other.	It has been communicated that after the parcels were determined by AFAD, efforts were made to place the houses in the most suitable way according to the number of right owners, and that each house will have an area of $600 \text{ m}^2$ upon completion of construction.
Village Resident (Bağlarca)	Supervision Consultant (EMAY), Civil Engineer	Questions have been raised about whether solar panels will be included, and there have been requests for their installation if they are not.	It has been conveyed that the current project does not allow for planning the construction of solar panels.
Village Resident (Bağlarca)	Supervision Consultant (EMAY), Social Expert	Questions have been raised about whether the natural gas installation will be laid before the houses are completed, and there have been requests for its installation.	It has been communicated that the current project does not allow for planning the installation of natural gas, and that this request has also been made in other villages and will be conveyed to the Ministry.
Village Resident (Bağlarca)	Contractor (ABRC), Civil Engineer	There has been a request to install a fence around the eight houses as a precaution against wild animals.	It has been communicated that the current project does not allow for planning the installation of fences, and that this request has also been made in other villages and will be conveyed to the Ministry.
Village Resident (Bağdere)	Contractor (ABRC), Civil Engineer	There has been a request for the construction process to proceed more quickly.	It has been stated that the necessary procedures will be followed to ensure that the constructions are completed within the promised timeframe.
Village Resident (Bağdere)	Supervision Consultant (EMAY), Social	Questions have been raised about whether barns and wood sheds will be constructed.	It has been communicated that the current project does not allow for planning the construction of storage areas,





Querist	Respondent	Answer Given	
	Expert		barns, and wood sheds, and that this request has also been made in other villages and will be conveyed to the Ministry.
Village Resident (Çalıca)	Contractor (ABRC), Civil Engineer	It has been reported that concrete mixers have poured concrete on the roads, leading to their deterioration.	It has been communicated that the request has been received and that necessary warnings will be made. It was also stated that there is a responsibility to repair the roads damaged due to construction.
Village Resident (Çalıca)	Contractor (ABRC), Civil Engineer	It has been reported that there is excessive dust and that no watering is being done.	It has been communicated that the request has been received and that necessary warnings will be made.
Village Resident (Çalıca)	Supervision Consultant (EMAY), Civil Engineer	It is believed that the project is progressing slowly.	It has been communicated that the project is progressing according to the planned schedule and that the houses will be delivered on the promised date.
Village Resident (Çalıca)	Supervision Consultant (EMAY), Social Expert	Questions have been raised about whether the houses will be provided to citizens free of charge with the financing from the World Bank.	It has been communicated that the housing constructions are financed through a loan from the World Bank, that they will not be provided free of charge, but that they will be given to right owners with a 2-year grace period and an 18-year interest- free payment plan.
Village Resident (Işıkyolu)	Supervision Consultant (EMAY), Civil Engineer	A suggestion has been made to draw a line from the existing reservoir for water supply.	It has been communicated that the reservoir from which water will be drawn has been designated by the Provincial Special Administration and is subject to approval.
Village Resident (Işıkyolu)	Supervision Consultant (EMAY), Social Expert	It has been stated that the village's current water reserve will be sufficient for drinking water, but that it will be inadequate when used for garden irrigation as well.	It has been communicated that the Provincial Special Administration will increase capacity if necessary.
Village Resident (Işıkyolu)	Supervision Consultant (EMAY), Social Expert	Complaints have been made regarding issues such as the inadequacy of septic systems, materials, workmanship, and retaining walls in the TOKİ housing.	It has been stated that the TOKİ housing is outside the scope of the project, and TOKİ's contact information has been provided.
Village Resident (Işıkyolu)	Supervision Consultant (EMAY), Civil Engineer	A request has been made for a larger septic tank. It was also stated that the Provincial Special Administration does not even empty the existing reservoir when necessary.	It has been communicated that the size of the septic tank is determined according to the standard usage requirements defined by regulations and with the approval of the Provincial Special Administration.
Village	Supervision	Various complaints have been	It has been communicated that





Querist	Respondent	Question Raised	Answer Given
Resident (Sarılı)	Consultant (EMAY), Social Expert	made regarding the housing constructed by TOKİ and the Provincial Directorate.	the mentioned houses are not included in the project scope, and contact information for the relevant institutions has been provided.
Village Resident (Sarılı)	Supervision Consultant (EMAY), Social Expert	Questions have been raised about whether there will be storage space in the houses. There have also been complaints that the houses are small due to the large household sizes.	It has been communicated that storage areas are not included in the project, that the request has been forwarded to the Ministry, and that the floor area of the houses was determined by considering the average household size in the region.
Village Resident (Sarılı)	Supervision Consultant (EMAY), Social Expert	It has been stated that there is a grievance regarding right ownership.	It has been communicated that detailed information will be gathered and reported to AFAD through the Ministry.
Village Resident (Sarılı)	Supervision Consultant (EMAY), Civil Engineer	Questions have been raised about how the insulation of the houses will be done.	Technical information about wall and roof insulation, as well as details about the materials used, have been shared.
Village Resident (Gölköy)	Supervision Consultant (EMAY), Social Expert	Questions have been raised about when the construction will begin.	Information has been provided regarding the start and completion dates of the construction.
Village Resident (Gölköy)	Supervision Consultant (EMAY), Social Expert	Questions have been raised about the distance between the two adjacent houses within the project.	Measurements have been shared on the site plan.
Village Resident (Gölköy)	Supervision Consultant (EMAY), Social Expert	Questions have been raised about whom to contact for issues that may arise after the houses are delivered.	It has been explained that all communication channels shared with them under the complaint mechanism will remain open, allowing them to report any potential issues to the authorities through these channels.
Village Resident (Gölköy)	Supervision Consultant (EMAY), Social Expert	Questions have been raised about when the right time is to apply for disability assistance.	It has been communicated that they can apply at any time during the period until the houses are delivered by AFAD, provided they submit the official documents.
Village Resident (Yukarı Demirtaş)	Supervision Consultant (EMAY), Social Expert	Complaints regarding the TOKİ housing have been shared.	It has been stated that the issue is outside the project scope, and TOKI's contact information has been provided.
Village Resident (Yukarı Demirtaş)	Supervision Consultant (EMAY), Social Expert	Questions have been raised about whether there will be storage areas, basements, or barns in the houses.	It has been communicated that these features are not included in the project, but that the request has been forwarded to the Ministry.
Village Resident (Yukarı	Supervision Consultant (EMAY), Social	Questions have been raised about whether there is a stove chimney in each room of the houses.	It has been responded that there are chimneys in all rooms, including the bathroom.





Querist	Respondent	Question Raised	Answer Given
Demirtaş)	Expert		
Village Mukhtar (Aşağı Demirtaş)	Supervision Consultant (EMAY), Social Expert	The participant has expressed the issues he and many villagers are facing regarding right ownership.	It has been explained that the matter falls under AFAD's authority, and AFAD's contact information has been provided. It was also stated that the issues experienced collectively will be forwarded to AFAD by the Ministry through an official letter.
Village Resident (Yukarı Demirtaş)	Supervision Consultant (EMAY), Social Expert	The participant has indicated that the water subscription for her/his demolished house has not been canceled and has asked whether he/she can use the water for irrigation.	It has been communicated that this is a matter under the authority of the Provincial Special Administration and that the necessary permission can be obtained from there.





#### 6 Environmental and Social Management Plan

The Table *11* 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 11. Environmental and Social Management Plan

			Phase	e		Fr	equer	ıcy		
Potential Risks and Impacts	Proposed Mitigation Measures		Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
General for All Constru	ction Works	•				•	1	1		
Environmental and Social Management: Inadequate management of environmental and social risks and impacts	<ul> <li>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:</li> <li>Occupational Health and Safety (OHS) Plan including Risk Assessment Report and Emergency Response Plan (ERP)</li> <li>Community Health, Safety (CHS) and Traffic Management Plan (can be prepared separately as CHS Management Plan and Traffic Management Plan (TMP))</li> <li>Waste Management Plan (WMP)</li> <li>Pollution Prevention Plan (PPP)</li> <li>Chance Find Procedure (CFP)</li> <li>Water Supply and Wastewater (WSWW) Management Plan</li> <li>Labor Management Plan to be prepared in accordance with project LMP</li> <li>Grievance Redress Mechanism (GRM)</li> </ul>	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 ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	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 ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	Included in the cost of construction





			Phase	<u>.</u>		Frequency				
Potential Risks and Impacts	Proposed Mitigation Measures		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 ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	Included in the cost of construction
	<ul> <li>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: <ul> <li>Official letters/permits from relevant governmental agencies</li> <li>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.</li> <li>Land use permits (if necessary)</li> <li>Waste disposal permits from the Municipality</li> <li>Environmental permits (if necessary)</li> <li>Water usage permits from the DSI (if necessary)</li> <li>Waste disposal protocols with licensed disposal facilities and/or Municipalities</li> <li>Excavation waste disposal protocols with municipalities</li> </ul> </li> </ul>	x			Permissions and relevant official letters	the	ce befo start ( struct	of	Contractor ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	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
Air Quality: Dust generation around the Project site due to construction activities, and emissions from construction equipment and vehicles	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 from the nearest receptors. If measured levels are above limit values, mitigation measures will be enhanced in this respect, i.e., increasing wet suppression / watering activities, applying non-toxic chemicals, further reducing speed/traffic.		x		Visual inspection of air quality control measures Records of maintenance Records of complaints	x			Contractor ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	Included in the cost of construction





			Phase	9		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
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 ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	Included in the cost of construction
Occupational Health and Safety: OHS-related risks due to unsafe practices	<ul> <li>When planning activities, following steps will be considered with OHS specialist to avoid people getting injured:</li> <li>Construction place: Are there any hazards that could be removed or will warn people about?</li> </ul>	x			Visual inspection Employee records		x		Contractor ( <i>implementation</i> ) Supervision	Included in the cost of construction





	Proposed Mitigation Measures		Phase	9		Frequency				
Potential Risks and Impacts		Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
and hazards at work sites such as work at height, rotating and moving equipment, electrical safety, working with hazardous materials, etc.	<ul> <li>The people who will be taking part in construction: Do the participants have adequate skill and physical fitness to perform their work safely?</li> <li>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?</li> <li>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?</li> </ul>				Equipment records				Consultant ( <i>supervision</i> )	
	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. 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		x		Visual inspection of control measures OHS records Employee records Incident statistics and records Records of workers' complaints	X			Contractor ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	Included in the cost of construction





	Proposed Mitigation Measures		Phase	9		Frequency				
Potential Risks and Impacts		Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	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.									
	<ul> <li>The worksite will be kept clean and free of debris on a daily basis.</li> <li>First aid kit with bandages, antibiotic cream, etc. will be provided at the construction sites, and controlled regularly (monthly).</li> <li>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.</li> <li>Corrosive fluids and other toxic materials will be kept in properly sealed containers for collection and disposal in properly secured areas.</li> <li>It will be ensured that structural openings are covered/protected adequately.</li> <li>Loose or light material that is stored on roofs or open floors will be secured.</li> <li>It will be ensured keeping hoses, power cords, welding leads, etc. from laying in heavily travelled walkways or areas.</li> <li>During heavy rains or emergencies of any kind, all work will be suspended.</li> <li>The below measures will be followed for construction involving work at height:</li> <li>Do not allow people with the following personal risks to perform work at height tasks: eyesight/balance problem; certain chronic diseases – such as osteoporosis, diabetes, arthritis or Parkinson's disease; certain medications – sleeping pills, tranquilizers, blood pressure medication or</li> </ul>		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 ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	Included in the cost of construction





				9		Frequency				
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	<ul> <li>antidepressants; recent history of falls - having had a fall within the last 12 months, etc.</li> <li>Only allow people with sufficient skills, knowledge and experience to perform the task.</li> <li>Check that the place (e.g., a roof) where work at height is to be undertaken is safe.</li> <li>Take precautions when working on or near fragile surfaces.</li> <li>Clean up oil, grease, paint, and dirt immediately to prevent slipping; and</li> <li>Provide fall protection measures e.g. safety hardness, and simple scaffolding/guard rail for working at height.</li> <li>The contractor will hire trained operators for the safe operation of specialized vehicles such as forklifts, including safe loading and unloading.</li> </ul>									
	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. There will be fire extinguishing equipment in sufficient numbers and ready for use in the site and camping area.		x		Visual inspection of control measures OHS records Employee records Incident statistics and records Records of workers'	x			Contractor ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	Included in the cost of construction





			Phase	9		Fr	equer	ncy		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
					complaints					
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 heavy- duty vehicles	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. 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, children's park, health center or other sensitive areas such as mosques in Bağdere (Ancuz) Village (133 m), Gölköy (Göl) Village (230 m) and Yukarı Demirtaş Village (108 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 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. 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		X		Visual inspection of control measures Traffic accident records Records of complaints	x			Contractor ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	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
	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									
	<ul> <li>proper route planning). This will include but not be limited to:</li> <li>Signposting, warnings, barriers, and traffic diversions: the site will be visible, and the public warned of all potential hazards.</li> </ul>									
	• 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.									
	<ul> <li>Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement.</li> </ul>									
	• Active traffic management by trained and visible staff at the site, if required for a safe and convenient passage for the public.									
	• The Consultant will train all Contractor staff on SEA/SH,									





			Phase			Fr	equei	ıcy		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	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 or economic 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." In addition, if any damage is done by the project activities to the animals (cattle or ovine, chicken, etc.) near the construction sites in the villages, it will be compensated by the Contractor. 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.	x			Records of complaints Records of compensation payments (if any)		x		Contractor ( <i>implementation</i> ) Supervision Consultants ( <i>supervision</i> , <i>support to</i> <i>Contractor</i> , <i>if</i> <i>required</i> )	Included in the cost of construction
Water Quality and Wastewater: Water pollution in nearby surface waters due to wastewater/waste generated at the construction area due	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		x		Visual inspection of control measures Septic tank effluent disposal records (if any)	x			Contractor ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	Included in the cost of construction





			Phase	2		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
to construction activities	<ul> <li>without treatment near/in surface waters (such as Cip Dam near Bağlarca (Nekerek) Village or Lake near Çalıca (Ekrüz) and Işıkyolu Villages) is strictly forbidden to prevent possible adverse impacts on surface waters.</li> <li>Additional mitigation measures will be taken to avoid the pollution in the lake near Çalıca (Ekrüz) Village and Işıkyolu Village. No water will be used from this lake. It will be forbidden to dumping waste or discharging wastewater (treated or untreated) to the lake.</li> <li>Similarly, the water from the fountain in Işıkyolu Village will not be used without official permission.</li> <li>No soiled materials, solid wastes, toxic or hazardous materials will be stored in, poured into or thrown into water bodies/dry stream beds or the lake near Çalıca (Ekrüz) Village and Işıkyolu Village for dilution or disposal. The training on the waste management/ environmental awareness will definitely include and emphasis those issues.</li> <li>Construction vehicles and machinery will be washed only in areas where runoff will not pollute natural surface waters.</li> <li>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.</li> <li>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.</li> <li>If feasible and applicable, the wastewater collection system of the new rural houses can be connected to the existing sewage system in Sarılı, Gölköy (Göl) and Yukarı Demirtaş Villages. It would be appropriate for the contractor to check this issue first.</li> </ul>				Effluent quality measurement records (if any) Records of complaints					





			Phase	e		Fr	equer	ncy		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	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 Sarılı, Gölköy (Göl) and Yukarı Demirtaş 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 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.		x		Visual inspection of control measures Incident records Training records Records of complaints	x			Contractor ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	Included in the cost of construction





			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
	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.). Wastes will be managed in accordance with the waste management									
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- hazardous waste, etc.)	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 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		x		Visual inspection of control measures Waste generation and disposal records Training records Records of complaints	x			Contractor ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	Included in the cost of construction





			Phase			Fr	equer	ncy		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	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 Cip Dam near Bağlarca (Nekerek) Village, the lake near Çalıca (Ekrüz) and Işıkyolu villages and other rivers, streams or wetlands.									
	A secured area will be used for refueling and transfer of other toxic 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									





			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
	<ul> <li>will never be disposed of on the ground and in water courses as they can contaminate soil and groundwater (including drinking water aquifers).</li> <li>After each construction site is decommissioned, all debris and waste will be cleared.</li> <li>All records of waste generation and disposal will be kept.</li> <li>Whenever feasible, the Contractor will reuse and recycle appropriate and viable materials.</li> <li>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.</li> <li>It is forbidden to use unapproved toxic materials including leadbased paints, un-bonded asbestos, etc.</li> </ul>									
Stakeholder Engagement and Grievance Mechanism: Construction-related complaints and temporary disruption to the local community including eligible property owners	The relevant measures suggested in the SEP will be taken and followed. 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. A liaison program will be implemented during the construction process to make sure that the local environment is overseen and the well-being of residences is protected. The supervision consultant will appoint a certain person(s) 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		x		Records of complaints Stakeholder engagement records		x		PIU ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	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
	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) 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.									





			Phase	9		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
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	The relevant measures in the Labor Management Plan to be 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. 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.		x		Visual inspection of control measures Health records Employee records Training records Records of workers' complaints	x			Contractor ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	Included in the cost of construction





			Phase			Fr	equer	ncy		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	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. If external labor is needed a Camp Management Plan will be prepared to avoid or reduce negative impacts on the community 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	P	č	0		J	W	Ø		
	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									





			Phase	•		Fr	equei	ıcy		
Potential Risks and Impacts	Proposed Mitigation Measures	Planning	Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost
	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 cemeteries in Bağdere(Nekerek), Işıkyolu and Yukarı Demirtaş villages) 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 ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	Included in the cost of construction
Biodiversity: Potential risks to flora and fauna due to	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 Bağlarca (Nekerek), Bağdere (Ancuz), Çalıca (Ekrüz) and Işıkyolu Villages, 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
construction activities and improper waste management	There will be no cutting of trees or destruction of vegetation other than on construction sites. No hunting, capture of wildlife or collection of plants are allowed.		x		Visual inspection of control measures	x			Contractor ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	Included in the cost of construction





			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
Specific to Rural Road	Construction Works			1				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	0	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 ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	Included in the cost of construction
Slope protection	<ul> <li>Protect slopes from erosion and landslides by the following measures:</li> <li>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.</li> <li>Preventive/stopping ditches, which are especially effective in areas of high-intensity rainfall and where 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.</li> <li>For steep slopes, a stepped embankment (terracing) is</li> </ul>		x		Visual inspection of control measures	x			Contractor ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	Included in the cost of construction





			Phase	9		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
	<ul> <li>needed for greater stability.</li> <li>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.</li> <li>Rocks (riprap) can be used in addition to protect the slope.</li> <li>With sufficiently wide drainage ditches, uncontrolled discharge of water from the road surface will be removed from the slope.</li> </ul>									
Specific to Wastewate	r Systems								'	1
General Considerations for Septic Tanks (If used	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 dui desigi		PIU	Included in the cost of construction
by the Contractor during 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 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 will be raised so that the community inspects the septic tanks periodically and ensures that the septic			x	Effluent disposal records (if any) Records of community awareness activities Records of		x		Local Authority (Mukhtar, Municipality, or Elazığ Provincial Special Administration)	Included in the cost of construction





						Frequency					
Potential Risks and Impacts	Proposed Mitigation Measures		Construction	Operation	Indicators for monitoring	Continuous	Monthly	Quarterly	Responsibility for Implementation and Monitoring	Estimated Cost	
	tanks are emptied every few years for the tank to continue to function properly.				complaints						
General Considerations for PWWTP (If used by the Contractor during construction for their workers))	If PWWTPs will be used to treat domestic wastewater generated by the workers, design approval of package facilities will be obtained before the construction. 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 the requirements and that the wastewater quality complies with national discharge standards.	X		X	Design approval Environmental Permits Wastewater quality analysis	desi onc	e duri gn an e befo ratior	d re	Contractor ( <i>implementation</i> ) Supervision Consultant ( <i>supervision</i> )	Included in the cost of construction	





## Appendices

#### **Appendix-1. List of the Subproject Parcels**

Table 12. General Screening Evaluation

#	Village	Lot / Parcel No	Area (m²)	Registration Status	Presence of Debris <sup>1</sup>	Available Facilities²	Available Infrastructure <sup>3</sup>	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	Bağlarca (Nekerek)	136/141	1,667,609.12	Pastureland	No	EP	-	Neighboring houses, barns	No	Yes	No	Yes	8 houses	1-Storey
2	Bağdere (Ancuz)	105/1	2,121,194.20	Pastureland	No	EP	-	Neighboring houses, Cemetery, Mosque, Mukhtar's office	No	Yes	No	Yes	4 houses	1-Storey
3	Çalıca (Ekrüz)	230/92	367,875.05	Pastureland	No	-	-	Neighboring houses, Lake	No	Yes	No	Yes	14 houses	1-Storey
4	İşıkyolu	137/1	237,036.74	Pastureland	No	EP	-	Neighboring houses, Cemetery, Mosque (inactive), Village fountain, Beekeeping warehouse, old football poles (not in use)	No	Yes	No	Yes	5 houses	1-Storey

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> Irrigation Channel (IR) / Stream (S) / Electric poles (EP) / Water Well (W)/Septic Tanks (ST)

<sup>&</sup>lt;sup>3</sup> Water Network (WN), Wastewater Network (WWN), Connection Road (CR) and Street Lighting (SL)

DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 1 (62 rural houses)





#	Village	Lot / Parcel No	Area (m²)	Registration Status	Presence of Debris <sup>1</sup>	Available Facilities²	Available Infrastructure <sup>3</sup>	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
5	Sarılı	167/44	93,854.18	Pastureland	No	EP	ST, WN, WWN, CR, SL due to the earthquake houses within the parcel	Neighboring houses	No	Yes	No	Yes	11 houses	1-Storey
		114/10	4,475.26		No	EP	-	Neighboring houses, Mosque	No	Yes	No	Yes	4 houses	
6	Gölköy (Göl)	110/68	11,575.65	Threshing Field	No	EP	ST, WN, WWN, CR, SL due to the earthquake houses within the parcel	Neighboring houses, Mosque, SSP	No	Yes	No	Yes	4 houses	1-Storey
7	Yukarı Demirtaş	101/2	56,087.25	Pastureland	No	EP	ST, WN, WWN, CR, SL due to the earthquake houses near the parcel (235 m)	Neighboring houses, mosque	No	Yes	No	Yes	12 houses	1-Storey





#### Appendix-2. E&S Screening Forms

(given as a separate document)





# Appendix-3. Grievance and Suggestion Form

GRIEVANCE AND SUG	GESTION FORM*
Reference Number	
<b>Full Name</b> (Although <i>it is not mandatory to share</i> <i>name and contact information, it should be kept in</i> <i>mind that some problems may arise due to lack of</i> <i>information during the feedback process regarding</i> <i>your complaints/opinions/suggestions.</i> )	
Please tick how you would like to be contacted regarding your grievance/suggestion/opinion.	Email (please specify your email address)
	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):	





<b>Description of the Grievance (What happened?</b>	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

	VANCE CLOSURE	FORM	THE WORLD BANK BRD - IDA   WORLD BANK GROUP
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 CO	ONTROL		
Stages of Improvement Action		Deadline an	nd Responsible Institutions
1.			
2.			
3.			
4.			
5.			
6.			
7.			

#### COMPENSATION AND FINAL STEPS

This section will be completed and signed by the complainant after receiving compensation fees and resolving the complaint.

Notes: [Name / Signature]

Date: \_\_\_ / \_\_\_ / \_\_\_\_

Complainant:

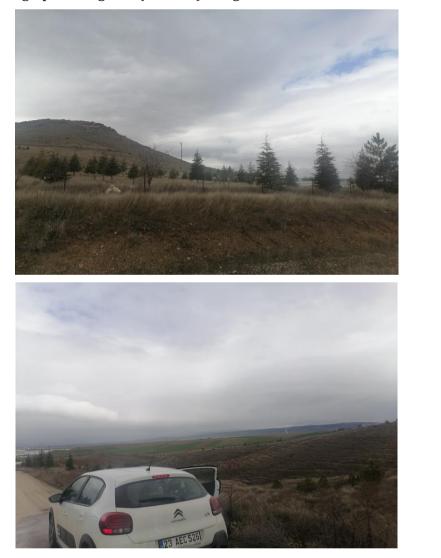
Responsible Institution / Company Representative

[Title / Name / Surname and Signature]





### Appendix-5. Site Photographs Site Photographs of Bağlarca (Nekerek) Village



























### Site Photographs of Bağdere (Ancuz) Village



















### Site Photographs of Çalıca (Ekrüz) Village

















#### Site Photographs of Işıkyolu Village

































#### Site Photographs of Sarılı Village

















### Site Photographs of Gölköy (Göl) Village

















#### Site Photographs of Yukarı Demirtaş Village

































## Appendix 6. Photographs of SEMs

# Bağlarca Village SEM Photographs



Bağdere Village SEM Photographs





Çalıca Village SEM Photographs



TERRP DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 1 (62 rural houses)





# Işıkyolu Village SEM Photographs





Sarılı Village SEM Photographs





Gölköy Village SEM Photographs







# Yukarıdemirtaş Village SEM Photographs









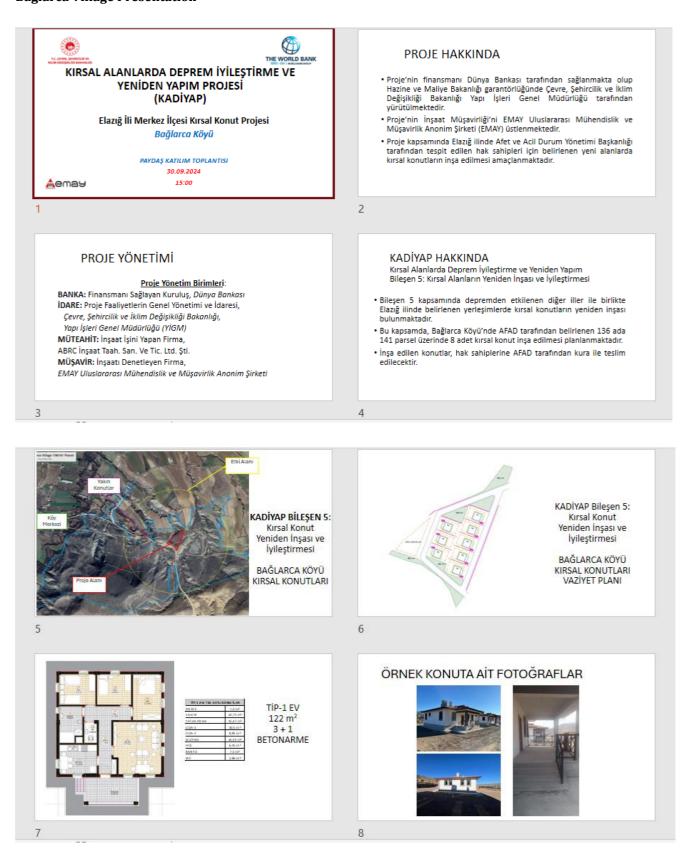
#### Appendix 7. SEM Participant Lists

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.





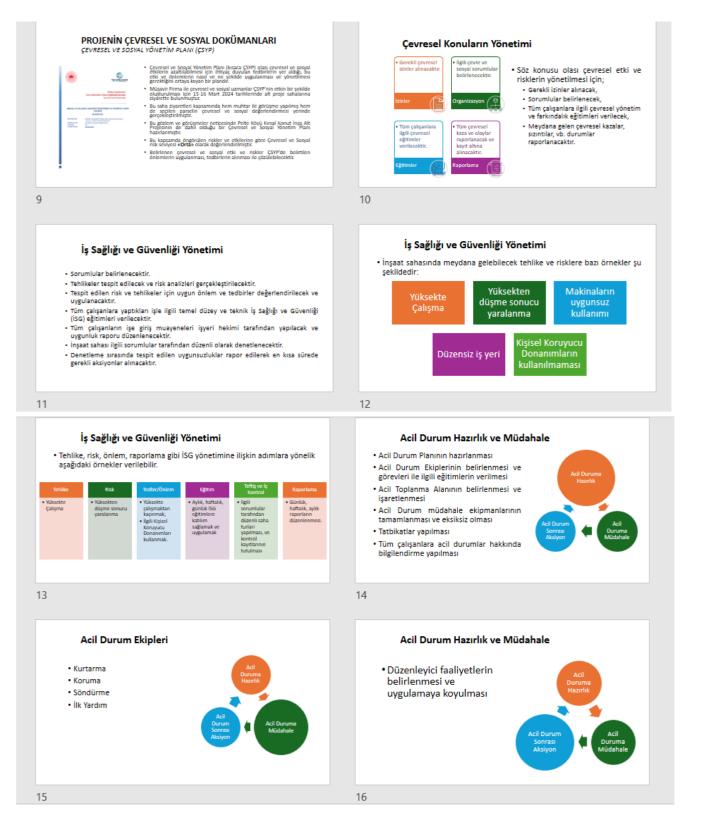
#### Appendix 8. SEM Presentation Bağlarca Village Presentation



#### TERRP DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 1 (62 rural houses)







## TERRP DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 1 (62 rural houses)











Şikayet Kutularının Yeri	<u>Şikâyet İletim Kanalları</u>
Çalışan Personeller için; • Şantiye Alanlarında Köy Halkı için; • Camilerin Kadın ve Erkek Girişlerinde	Internet üzerinden şikâyet formuna hemen erişim için lûtfen yandaki kodu telefonunuza okutun. Bu eylem için akili telefonunuzda QR kod uygulamaşı olmaldır. Söc konusu uygulama yoksa, herbangi bir internet tarayın adıreş çubuğuna şikâyet formu erişim adresini yazabilirsiniz.)
	* 26
SON OLARAK	
Projeye ilişkin çevresel ve sosyal tüm dokümanlara nerede ulaşılabilir?	
• Köy muhtarlığı, • Proje alanı, • KADİYAP resmi web sitesi (https://kadiyap.csb.gov.tr/)	Soru ve Görüşleriniz Bizim İçin Değerlidir
	Aemay





# Appendix 9. Project Brochure

Yerleşim Planları	<b>ŞİKAYET İLETİ</b> M KANALLARI	
Bağdere Köyü Ballıca Köyü	Bize Ulaşın Bize Ulaşın Bize Ulaşın 1 Müteahhit: ABRC İnşaat Taah. San. ve Tic. A.Ş.	KIRSAL ALANLARDA DEPREM İYİLEŞTİRME VE YENİDEN YAPIM PROJESİ
Callica Köyü Bağlarca Köyü	Sorumlu Kişi: Recep UÇAR (Proje Müdürü) Telefon: +90 553 202 19 90 E-Posta: recep.ucar@abrcinsaat.com	(KADİYAP) Elazığ İli Merkez İlçesi 124 Adet Kırsal Konut Yapımı
Kavaktepe Köyü	Müşavir: EMAY Ulus. Müh. ve Müş. A.Ş. Sorumlu Kişi: : Ömer AKDENİZ Telefon: +90 507 118 28 33 E-Posta: omer.akdeniz@emay.com     I Idare: Çevre, Şehircilik ve İklim Değişikliği Bakanlığı Yapı İşleri Genel Müdürlüğü Telefon: ALO 181, 0312 586 48 27 E-Posta: yigmkadev@csb.gov.tr Web: kadiyaponeri.csb.gov.tr	
Sanii Koyu Sanii Koyu Kuyulu Koyu	Karekodu telefon/tablet vb okutarak Şikâyet Formuna	KADIYAP Projesi; Türkiye'de 6 Şubat depreminde etkilenen seçilmiş illerde halkın depreme dayanı konutlara yeniden erişimini amaçlamaktadır. Elazığ, Kahramanmaraş, Malatya, ve Adıyaman illerinde yıkılan kırsal konutlar altyapıları ile birlikte yeniden inşa edilecektir. Elazığ ili, Merkı ilçesine bağlı Bağdere, Bağlarca, Ballıca, Çalıca, Gölköy, İşikyolu, Kavaktepe, Kuyulu, Sarılı, Tadım, Yedigöze, Yukarıdemirtaş köyleri KADIYAP kapsamında alt Proje olarak seçilmiştir.
Yedigöze Köyü	anında ulaşabilirsiniz! Whatsapp Şikayet Hattı 0533 462 57 89	Aemay
	: [	
Sikayetin ALIMMAS         Sikayetin ALIMMAS         Sikayetin ALIMMAS         Sikayetin ALIMMAS         Sikayetin ALIMMAS         Sikayetin ALIMMAS         Sikayetin ALIMMAS         Sikayetin ALIMMAS         Sikayetin ALIMMAS         Sikayetin ALIMMAS         Sikayetin ALIMMAS         Sikayetin ALIMMAS         Sikayetin ALIMMAS         Sikayetin ALIMMAS         Sikayetin KAPATULMASS         Sikayetin KAPATULMASS         Sikayetin KAPATULMASS         Sikayetin KAPATULMASS         Sikayetin KAPATULMASS         Sikayetin KAPATULMASS         Sikayetin KAPATULMASS         Sikayetin KAPATULMASS         Sikayetin Kapatularin kullannaras         Veya sikäyeti kutularin payazarak bizlerer         Austrabiliterin BLI, Sikäyeti kutularin; paydaslardan         Sikäyeti kutularin; paydaslardan         Sikäyeti kutularin; paydaslardan         Sikäyeti kutularin; paydaslardan         Sikäyeti kutularin; paydaslardan         Sikäyeti kutularin; paydaslardan         Sikäyeti kutularin; paydaslardan         Sikäyeti kutularin; paydaslardan         Sikäyeti kutularin; paydaslardan         Sikäyeti kutularin         Sikäyeti kutulari	Toplam planlanan konut sayısı 124 olarak belirlenmiştir. AFAD tarafından seçilen yerleşim yeri; Çevre, Şehircilik ve İklim Değişikliği Bakanlığı tarafından onaylanmıştır. Yerleşim Planı EMAY Müşavirlik tarafından hazırlanmıştır. ALT PROJE YERLEŞKESİNDE DEPREME DAYANIKLI 124 KONUT YAPILMASİ PLANLANMAKTADIR. Taslak yerleşim planına göre, her konut 500 m² alan üzerinde 100 m² olarak planlanmış olup, her konuta belirlenmiş bir yeşil alan bulunmaktadır; dolayısıyla her konut biriminin yeşil alanı dähil toplam alanı 600 m² olarak planlanmıştır.	<image/>

# TERRP

DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 1 (62 rural houses)





#### Appendix 10. Project Poster



## TERRP

DESSUP-05 Central District of Elazığ Province Rural Housing Project – Group 3 - Cluster 1 (62 rural houses)