

USAID/BHA 2023 Turkey Earthquake Response:

Rapid and Sustainable Emergency Shelter Solutions that Accelerate the Safe Return Home of Internally Displaced Persons (IDPs)

BASELINE REPORT

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USAID/BHA 2023 Turkey Earthquake Response

The goal of the USAID/BHA 2023 Turkey Earthquake Response program is to accelerate the safe return of those Internally Displaced Persons (IDPs) so that affected communities can be fast-tracked to early recovery.

The U.S. Agency for International Development (USAID)

The U.S. Agency for International Development is an independent U.S. federal agency responsible for planning and administering economic and humanitarian assistance around the world.

The Bureau for Humanitarian Assistance (BHA)

The Bureau for Humanitarian Assistance provides humanitarian assistance that saves lives, including food, water, refuge, emergency medical attention, sanitation and hygiene and critical nutrition services to the world's most vulnerable and hardest-to-reach people.

Miyamoto International, Inc.

Miyamoto International is a global firm providing structural engineering and disaster risk management expertise, with experience in resilience that sustains industries and safeguards communities around the world.

Acknowledgment

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Disclaimer

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I. INTRODUCTION

The USAID/BHA 2023 Turkey Earthquake Response: Rapid and sustainable emergency shelter solutions that accelerate the safe return home of Internally Displaced Persons (IDP) and early recovery of affected communities began implementation on March 1, 2023, based on Award # 720BHAGR00082 between USAID/BHA and Miyamoto International.

The 2023 Turkey Earthquake response plan is **to provide rapid and sustainable emergency** shelter solutions that accelerate the safe return home of Internally Displaced Persons (IDPs) and the early recovery of affected communities.

In the early morning hours of February 6 (4:17 a.m.), a devastating earthquake registering a magnitude of 7.8 on the Richter Scale struck Turkey. The epicenter hit the Pazarcik district of the Kahramanmaras Province, and shocks spread to affect the neighboring provinces of Adiyaman, Kilis, Osmaniye, Gaziantep, Malatya, Sanliurfa, Diyabakir, Adannaa, and Hatay. These provinces are home to 13.5 -15 million people, 2 million of whom are Syrian refugees and 4.6 million of whom are children. As of February 16, Elazig joined the ten other provinces classified as disaster affected. As of February 18, the total death toll was 40,642 people, and the number of people injured had reached upwards of 108,068. Approximately 9.1 million people have been affected across these 11 provinces. According to reports by the Ministry of Infrastructure and Transport on February 17th, 237,000 people had been evacuated from disaster areas. Just two days later, the Disaster and Emergency Management Presidency (AFAD) reported that this number had increased to over 430,000 people relocated. At least 1.5 million citizens have left the southern cities of Hatay, Adiyaman, and Malatya as of February 18.5

While the need for intervention was exceedingly high throughout the region, Miyamoto's local partner has a long-standing relationship with the municipal governments of Osmaniye, deemed the most effective and efficient starting location for implementation. The area of operation was later expanded to include Gaziantep.

Miyamoto's implementation has the following purposes to address the Emergency:

- 1. Provide green tags for undamaged buildings in Osmaniye and Gaziantep, identified by municipal governments, and a corresponding communication campaign to increase the communities' sense of safety and encourage a return to homes.
- 2. Conduct rapid repairability assessment of lightly damaged buildings identified by the municipal governments.
- 3. Conduct a corresponding training and communication campaign to disseminate information on cost-effective, safe repair methodologies targeting occupants, home and building owners, and the local construction industry.
- 4. Rapid repair demonstrations of two lightly damaged units in select districts to

¹ OCHA. (2023). Türkiye: 2023 Earthquakes, Situation Report No. 2.

² OCHA. (2023). Türkiye: 2023 Earthquakes, Situation Report No. 2.

³ OCHA. (2023). Türkiye: 2023 Earthquakes, Situation Report No. 2.

⁴ OCHA. (2023). Türkiye: 2023 Earthquakes, Situation Report No. 2.

⁵ Shelter Cluster. (2023). Shelter Sector Türkiye: Earthquake Response

- demonstrate safe repair strategies, aimed at building awareness about their safety for reoccupation and the availability of cost-effective and safe methods to convert yellow-tagged (repairable structures) to safe, habitable buildings.
- 5. Through the city leadership of Osmaniye and Gaziantep, the results of this program will be communicated to other communities and the central government.

This report is the culmination of baseline information collected and analyzed by Miyamoto and partner personnel in June 2023.

2. METHODOLOGY

The baseline quantitative assessment was developed with Miyamoto's M&E team to gather community data on social behaviors and attitudes towards building safety and return hesitancy following the earthquake. Training of enumerators occurred on June 6, 2023; feedback was incorporated, and the tool was deployed on June 7, 2023. The tool was uploaded to ArcGIS Survey 123 platform through Tablets, with data only accessible to the Miyamoto staff.

Data collection used a two-stage cluster random sample methodology. The trained enumerators were deployed to the agreed-upon locations within Osmaniye and Gaziantep. The margin of error was calculated at 10 percent to account for the difficulties the enumerators may face when collecting data and the survey fatigue beneficiaries are likely experiencing. The sample size was calculated at 383 surveys. A total of 656 total surveys were deployed with 520 positive respondents.

The surveys were directly linked to the technical assessments of the affected structures using a barcode generated by Survey 123.



Figure 1: Map of Osmaniye and Gaziantep within greater Turkey

2.1 Surveys

Surveys were conducted with 520 individuals who represented the household, tenant, landlord, or manager buildings in the target areas. The purpose of the baseline was twofold: collect data relating to the social behaviors and understanding of those affected populations experiencing return barriers along with baseline data for programmatic decision-making. The survey did not collect any Personal Identifiers Information (PIIs) to keep the survey random, with safe data collection and storage.

The enumerators began each survey with an introductory statement indicating who they were and the purpose of the survey, a data protection clause, and finally, an agreement of consent:

My name is _______, I am conducting a survey on behalf of Miyamoto International and Protek, we are not affiliated with any government or political party. To improve community understanding of building safety and support households in their decision to return home, we are first speaking to households affected by the earthquake to learn more about community understanding and behaviors around structural damage from the earthquake. I understand this is a sensitive topic. Would you be interested in answering some questions?

The enumerator then read the surveys in Turkish or Arabic to accommodate the Syrian refugee population in the area.

Please refer to Annex A for the complete survey instrument.

2.2 Limitations

Due to the nature of the emergency, Miyamoto was unsure of the availability of household members as the primary survey respondents since many are internally displaced and relocated elsewhere. As such, the tool was developed to incorporate other community members who were still affected but may not be residents of the housing structure being assessed. (Please refer to question 1 of Annex A)

Moreover, potential survey fatigue posed an additional limitation to data collection. As the Government of Turkey and the international community, including NGOs, UN Agencies, and other aid organizations, have stepped in to provide assistance, many of which also deployed their own surveys or assessments, beneficiaries are experiencing survey overload. Survey fatigue is likely in situations where individuals have experienced trauma and can lead to:

- 1. Further emotional or physical exhaustion or stress of reliving the experience.
- 2. Reduced motivation in participation with lack of interest in participating in another survey is understandable, given the circumstances.
- 3. Repetitive questions, which can lead to frustration.
- 4. Time constraints due to the nature of the event.
- 5. Lack of trust in international organizations; despite data collection, beneficiaries may not be seeing the result of the survey, nor has the survey yielded anything beneficial for themselves and family.

Using the above considerations, the survey provided the respondent with information on the purpose of the survey, along with the opportunity to participate. Further, the survey was concise and only requested necessary information for programming.

3. DETAILED FINDINGS

3.1 Survey results

The following table summarizes the resulting baseline value and the target indicators.

Sector: Shelter and Settlements					
Indicator	Baseline	Target	Notes		
Custom 1: Percent of beneficiaries reporting increased awareness of the safety of undamaged and repairable structures	0	383	While 383 was the calculated sample size, the enumerators collected 520 total, with 135% completion.		

In addition to the above indicator, the survey collected further information regarding the demographics of the respondents, understanding of undamaged or lightly damaged buildings, along with data relating to return hesitancy. Information is detailed below by sub-category:

Demographics

The survey collected basic demographic information relating to the household, which included the following:

Are you a resident of the building?

• Of the 520 respondents, 414 were residents of the building the enumerator was visiting. Therefore 79.6% of respondents were tenants.

Gender of the head of household displays an 84.4% male-headed household as opposed to the 14% woman-headed household.

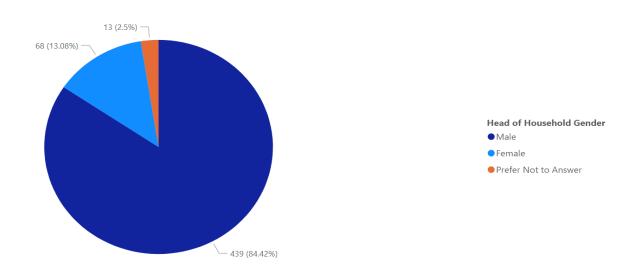


Figure 2: Head of Household Gender Disaggregate

Total number residing in the household yields approximately 4.2 members.

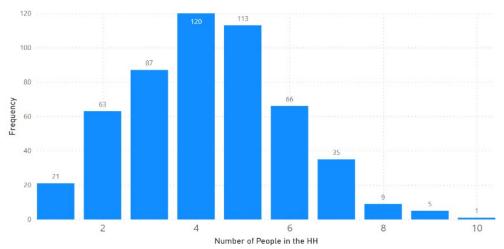


Figure 3: Before the earthquake, how many total people (can include family, friends, and extended family) resided in your household?

Nationality: 2.69% other include Kurdish, Turkmen, and Zaza

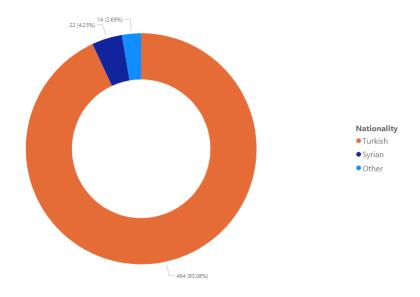


Figure 4: Nationality Breakdown

Understanding of undamaged or lightly damaged buildings

The survey explored beneficiary's understanding of undamaged and lightly damaged buildings. This information indicates the necessity of knowledge transfer, which will enable the community to feel safer in returning and advising others on the tagging system. The questions have been summarized below:

How safe do you consider undamaged buildings after the earthquake, shows nearly 54% consider undamaged structures as "unsafe," with an additional 17% "somewhat unsafe."

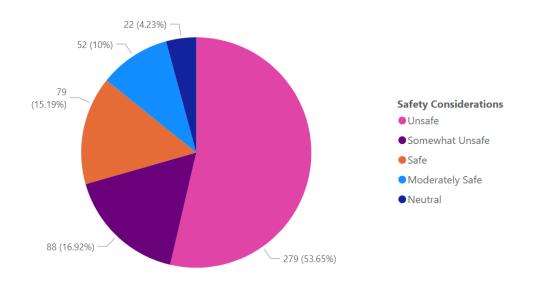


Figure 5: How safe do you consider undamaged buildings after an earthquake?

Familiarity with safety considerations after an earthquake shows an opportunity for knowledge exchange, as the "no" and "somewhat" options are split within a few percentage points (43% and 38%, respectively).

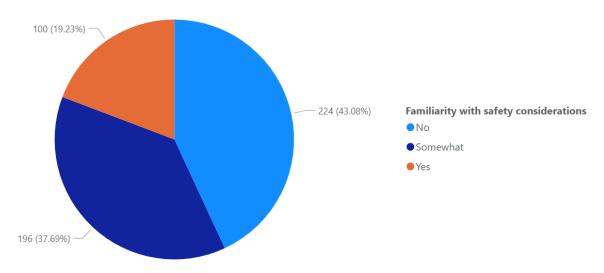


Figure 6: Are you familiar with the safety considerations associated with undamaged and repairable structures after an earthquake?

Return Hesitancy

The survey collected specific questions relating to return hesitancy. The purpose was to better understand the logistical, physical, economic, social, or perceived constraints prohibiting beneficiaries from a safe return home.

Main Concerns preventing return include a wide variety of answers. Most of the share includes "structure uncertainty" 23%, "lack of information" 16.5%, and "doubt building safe" 20.4%, all of which will encourage intervention through knowledge exchange community-based events.

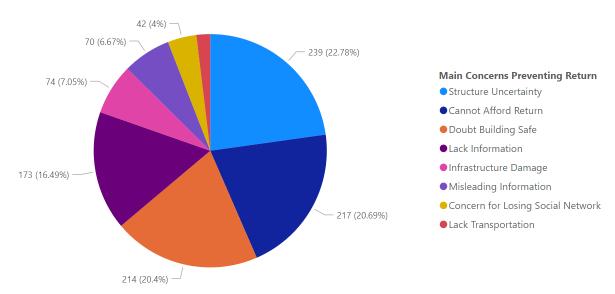


Figure 7: What are your main concerns or issues that discourage you or others from returning to undamaged or lightly damaged structures? (Check all that apply)

Sentiment regarding availability of assistance in facilitating the return home shows the majority (61.4%) feel they are not receiving enough assistance to aid the return.

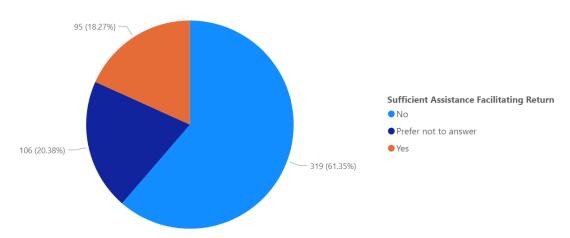


Figure 8: Have you received sufficient support or assistance from government agencies or organizations to facilitate your return to a habitable structure?

4. PROGRAMMATIC IMPLICATIONS

Communications Opportunities

The results of the baseline survey have yielded extensive programmatic insights that will be used to best deploy targeted messaging regarding undamaged and lightly damaged buildings in Osmaniye and Gaziantep. The survey collected beneficiaries' preferences for social media outlets, in addition to their preference for receiving information, which will be used to advertise the community events and encourage attendance and involvement in collaboration with the Mokhtars.

The baseline also yielded a great understanding of why beneficiaries have not returned home and their general sentiment and understanding toward undamaged or lightly damaged buildings after the earthquake. The data collected will be used to better shape the types of messages and information relayed at community events.

ANNEX A

Survey Tool

Social survey

Submitted By: \${Creator}
Submitted Time: \${CreationDate}

Welcome

The survey below is aimed at collecting data on social and behavioral trends. Your data will not be shared with anyone and will only be used for internal reporting purposes. Do you consent to participate in the survey?

\${Participation}

SECTION I

Assessment Date

\${DateTime}

GPS Coordinate

\${Location}

accuracy

\${accuracy}

Scan the building code

\${QR}

I.1) Are you a resident of the building?

\${Resident}

I.2) Resident Type

\${ResidentType}

I.2.1) Provide other actual resident type for other

\${ResidentTypeText}

I.3) what is the gender of the head of household?

\${Gender}

I.4) Were you displaced by the earthquake?

\${Displaced}

I.5) How would you describe your current living situation?

\${LivingSituation}

I.5.1) Provide details

\${LivingSituationText}

I.6) Before the earthquake, how many total people (can include family, friends, and extended family) resided in your household?
\${TotalPeople}
I.7) Of the total individuals residing in the household, how many are under the age of 18? \${TotalUnderage}
I.8) What is your nationality? \${Nationality}
I.8.1) Provide details for Other \${NationalityText}
I.9) Which social media platform do you primarily use for information? \${SocialMediaPlartform}
I.9.1) Provide details for Other \${SocialMediaPlartformText}
I.10) What social media platforms do you most commonly use? (Check all that apply) \${CommonlyUseSocialMedia}
I.10.1) Provide details for Other \${CommonlyUseText}
Instagram \${Instagram}
Facebook \${Facebook}
TikTok \${TikTok}
BeReal \${BeReal}
NoneData
\${NoneData}
OtherData
\${OtherData}
I.11) How safe do you consider undamaged buildings after an earthquake? \${SafeConsideration}

I.12) Are you familiar with the safety considerations associated with undamaged and repairable structures after an earthquake?

\${SafetyFamiliarity}

I.13) What factors do you think contribute to the safety of undamaged buildings following an earthquake? (Check all that apply)

\${SafetyFactors}

BuildingAppearance

\${BuildingAppearance}

VisibleCracks

\${VisibleCracks}

CommunityOpinions

\${CommunityOpinions}

OfficialReports

\${OfficialReports}

OtherSafetyFactors

\${OtherSafetyFactors}

I.13.1) Provide details for Other

\${SafetyFactorsText}

I.14) Do you think undamaged buildings require any specific post-earthquake safety inspections or assessments?

\${SafetyInspectionRequired}

I.15) Are you aware of any specific guidelines or regulations in place to ensure the safety of undamaged buildings after an earthquake?

\${SafetyGuidelinesAwareness}

I.16) Provide Details (Check all that apply)

\${GuidelinesDetails}

I.16.1) Provide details for Other

\${GuidelinesDetailsText}

I.17) Do you believe that the necessary repairs and rebuilding efforts are taking place to make undamaged and lightly damaged structures safe for reoccupation?

\${RepairsTakingPlace}

I.18) What sources of information do you rely on/trust to understand the safety of undamaged and repairable structures before the project? (Check all that apply)

\${TrustSource}
Govt \${Govt}
CommunityOrganizations \${CommunityOrganizations}
Media \${Media}
PersonalExperience \${PersonalExperience}
OtherTrustSource \${OtherTrustSource}
I.18.1) Provide details of Other Information \${TrustSourceText}
I.19) Do you feel adequately informed about the current condition of your building and the progress of rebuilding efforts in your area? \${Information}
I.20) Do you believe community awareness campaigns and educational programs are effective in promoting the understanding of post-earthquake safety in undamaged buildings? \${CommunityAwareness}
I.21) What measures or strategies could be employed to increase awareness and understanding of the safety of undamaged and repairable structures within the community? (check all that applies) \${AwarnessSuggestion}
SMS \${SMS}
Radio \${Radio}
Newspaper \${Newspaper}
OnlineAds \${OnlineAds}
SocialMedia \${SocialMedia}

Billboards

\${Billboards}

SECTION II

II.1) Are you aware of any undamaged or lightly damaged structures in your community that are currently vacant or unused?

\${UnusedStructure}

Why do you think this is? (check all that apply)

\${UnusedStructureReason}

BuildingSafetyUnclearity

\${BuildingSafetyUnclearity}

NoGuide

\${NoGuide}

ResidentHouseOther

\${ResidentHouseOther}

MovedAway

\${MovedAway}

PsychosocialHesitancy

\${PsychosocialHesitancy}

OtherUnusedStructureReason

\${OtherUnusedStructureReason}

Provide reason for other

\${UnusedStructureReasonText}

II.2) How would you rate the accessibility of undamaged or lightly damaged structures for individuals with disabilities or special needs?

\${UnusedStructureRating}

II.3) Are there challenges for individuals with disabilities or special needs to return home?

\${ReturnHome}

What do you think these challenges are? (check all that apply)

\${ReturnHomeChallenges}

BuildingSafety

\${BuildingSafety}

Equipment

\${Equipment}

DisruptedRehabilition

\${DisruptedRehabilition}

DisruptedNetwork

\${DisruptedNetwork}

Psychosocial

\${Psychosocial}

OtherChallanges

\${OtherChallanges}

Provide for other challenges

\${ReturnHomeChallengesText}

II.4) What are your main concerns or issues that discourage you or others from returning to undamaged or lightly damaged structures? (Check all that apply)

\${DiscourageCause}

StructureUncertainty

\${StructureUncertainty}

DoubtBuildingSafe

\${DoubtBuildingSafe}

InformationLack

\${InformationLack}

MisleadingInformation

\${MisleadingInformation}

TransportationLack

\${TransportationLack}

InfrastructureDamage

\${InfrastructureDamage}

CannotAfford

\${CannotAfford}

ConcernsSocialSupport

\${ConcernsSocialSupport}

CashRequired

\${CashRequired}

OtherDiscourageCause

\${OtherDiscourageCause}

Please provide the other cause

\${DiscourageCauseText}

II.5) Have you received any official communication or guidance regarding the safety and suitability of returning to undamaged or lightly damaged structures?

\${OfficialGuide}

Guideline Details

\${OfficialGuideDetails}

Please note for other guide

\${OfficialGuideText}

II.6) Have you received sufficient support or assistance from government agencies or organizations to facilitate your return to a habitable structure?

\${OfficialSupport}

II.7) What measures or support would help alleviate the obstacles and hesitations preventing displaced populations from returning to undamaged or lightly damaged structures? (check all that applies)

\${SupportSuggestion}

MoreInformation

\${MoreInformation}

IncentivizingReturns

\${IncentivizingReturns}

SupportInMovingItemsBackHome

\${SupportInMovingItemsBackHome}

OtherSupportSuggestion

\${OtherSupportSuggestion}

Provide for other

\${SupportSuggestionText}

II.8) Are you feeling pressured to not return home?

\${NoReturnCause}

UUID

\${unique}

User

\${User}

DeviceID

\${DeviceID}