#### **DERLEME / REVIEW**

# İKÇÜSBFD

# Disasters and Migration: Kahramanmaras Earthquakes

Afetler ve Göç: Kahramanmaraş Depremleri

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Geliş tarihi/Received: 16.03.2023 Kabul tarihi/Accepted: 09.06.2023	Abstract		
	On 6th February 2023, two consecutive earthquakes occurred in our country with a magnitude		
Sorumlu Yazar/Corresponding Author:	of 7.8 Mw in Kahramanmaras (Pazarcik) and 7.6 Mw in Kahramanmaras (Elbistan). Due to t earthquakes and aftershocks, 48,448 people have lost their lives in Türkiye. A bi-directional		
Alp ASLAN, Dr. İller Cd. No: 33 Mebusevleri Çankaya ANKARA E-posta: 06ileri@gmail.com ORCID: 0000-0002-0234-5964	very intense population movement from/to the earthquake area after these earthquakes was observed. Knowing the residence decisions of the disaster victims is important. In the face of the "disaster of the century", "potential or actual" disaster victims or "pseudo disaster victims", who exhibit the behavior of disaster victims, may experience situations similar to the danger of irregular migration, which causes great problems for states in terms of international migration. Therefore, it is useful to introduce and discuss the concept of "irregular internal migration" for the first time in the literature.		

Keywords: Disaster, earthquake, irregular internal migration, pseudo disaster victim.

#### Öz

Ülkemizde 6 Şubat 2023 tarihinde Kahramanmaraş (Pazarcık) 7,8 Mw ve Kahramanmaraş (Elbistan) 7,6 Mw büyüklüklerinde arda arda iki deprem yaşanmış bulunmaktadır. Bu depremlerde ve artçı sarsıntılarında Türkiye'de 48.448 kişi hayatını kaybetmiştir. Bu depremler sonrasında deprem bölgesinden hem içeriye hem de dışarıya doğru çift yönlü ve çok yoğun bir nüfus hareketi olduğu gözlenmiştir. Bu süreçte afetzedelerin ikamet kararlarını bilmenin büyük önemi bulunmaktadır. Yaşadığımız "asrın felaketi" karşısında, "muhtemel veya mevcut" afetzedeler veya afetzede davranışı sergileyen "psödo afetzedeler", ülkeler arası göç açısından devletlere büyük sorunlar yaşatan düzensiz göç tehlikesine benzer durumlar yaşamaktadırlar. Bu nedenle literatürde ilk defa "düzensiz iç göç" kavramının ortaya atılıp tartışılmasında yarar bulunmaktadır.

Anahtar Kelimeler: Afet, deprem, düzensiz iç göç, psödo afetzede.

# 1. Introduction

# 1.1. Disaster of the Century

On 6th February 2023, two consecutive earthquakes occurred in our country with a magnitude of 7.8 Mw in Kahramanmaras (Pazarcik) and 7.6 Mw in Kahramanmaras (Elbistan). Due to these earthquakes and aftershocks, 48,448 people have lost their lives in Türkiye and 8,476 people in Syria, and more than 129,000 people have been injured in various forms according to official data (March 14, 2023). Following these main earthquakes, approximately 17,000 aftershocks with a magnitude of up to 6.7 Mw occurred (1). It was announced that 13.5 million people were directly affected by these earthquakes in Türkiye, and it was determined that 227,027 buildings, consisting of 507,000 independent sections in 11 provinces, were demolished or will be demolished urgently or were severely damaged (Figure 1).

The most important problem encountered during and after the search and rescue works in the earthquake area was the need for shelter since all residents in the region have become disaster victims in the face of such a widespread and long-term disaster. In the face of the magnitude of the disaster, it has been obvious that the tent cities and container cities established in the region will not be enough to provide socially and physically sufficient food, accommodation and sheltering facilities for the earthquake victims. For this reason, citizens, who are faced with the difficulty of living conditions in the earthquake area, have naturally begun to want to leave the region.

# 1.2. Observations

#### 1.2.1. Population Movements

It was observed that there was a bi-directional and very intense population movement from/to the earthquake area after the February 6 earthquakes. Aid workers and the citizens came to the aid of their relatives who were affected by the disaster, on the other hand many citizens decided to leave the disaster area as part of the effort to survive, which is the most basic instinct, and return to the natural flow of life. It has been observed that, as part of both rescue and evacuation efforts, all kinds of air, land, sea and other means of transportation have been used, either for a fee or free of charge, since the first day. It is estimated that nearly three million disaster victims (according to GSM signal data) left the earthquake are using this transportation bridge (2). Similarly, according to the increases in waste management amounts in some large cities, it is estimated that there are 600 thousand new residents in Ankara (3), for example (Figure 1).

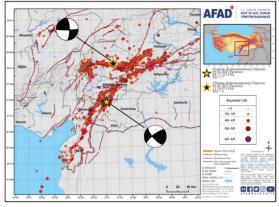


Figure 1. 06.02.2023 Pazarcik (Kahramanmaras) Mw 7.7 And Elbistan (Kahramanmaras) Mw 7.6 Earthquakes And Aftershock Activities, AFAD (Disaster And Emergency Management Presidency).

For these population movements following the earthquake, terms such as evacuation, relocation, and migration are used in the press and in the literature. It is seen in the AFAD brochures that the earthquake victims are evacuated from the region (4), (Figure 2).



Figure 2. AFAD Evacuation Brochure (Translated), AFAD Ankara

# 1.2.2. Trends

Migration is conceptually the denomination of population movements in which people change location by crossing an international border or relocating within a state, regardless of the duration, nature or reason thereof. Although there is no clear definition of migrant, this concept includes refugees, asylum seekers, relocated persons, displaced persons, dislocated persons, economic migrants, and disaster victims. Movements of migration refer to a phenomenon based on social, economic, political, cultural and geographical reasons identified with the history of humanity. Migration involves the journey movements of individuals or groups to reach new settlements and join new communities beyond physical and political boundaries. Movements of migration are mainly examined under the headings of internal migrationexternal migration, forced migration-voluntary migration, etc. according to the migration patterns.

Three main trends are observed in the population movements after this disaster:

1. Temporary population movement towards the countryside, which is thought to be safer than urban centers exposed to destruction,

2. Population movement towards neighboring provinces not damaged by the earthquake. Mersin, Diyarbakir, and Antalya can be considered in this context in terms of offering both kinship and employment opportunities.

3. Long-distance population movements. Population movements that seem more permanent and can be referred to as migration to big cities such as Istanbul, Ankara, and Izmir. In such relocations, it can be said that those who are financially and morally more privileged are less likely to return to disaster areas over time.

# 1.2.3. Internal migration

According to the research by the International Centre for Migration Research (5), approximately 25.4 million people have been displaced each year since 2008 due to climate change or climatic events. In 2018, the number of people displaced due to conflicts or disasters reached 28 million (Figure 3).



Figure 3. Populations displaced due to disasters and conflicts in 2018, IDIC.

In the light of the recent migration and disaster events in Türkiye, which is a country of migration and disaster, it is obvious that similar situations will be encountered in the future too as in the past and today. In the report of a risk reduction study on migration and disaster conducted under the leadership of the Council of Europe in 2017 (6), the areas of this disaster of the century in our country and the casualties in the disaster were estimated with great certainty in 2017 (Figure 4, 5).

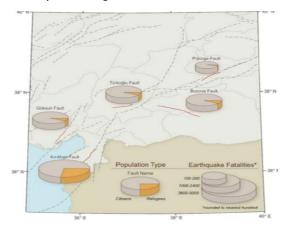


Figure 4. Estimated Number Of Earthquake Fatalities In The Study Area, Council Of Europe, 2017.

Scenario	Affected provinces	Earthquake magnitude	Total estimated casualties	Estimated refugee casualties
Pütürge fault	Malatya, Elaziğ,	5.8	28-63	1
	Adıyaman,	6.4	92-181	1-3
	Dıyarbakır	7.0	205-377	3-5
Türkoğlu fault	Kahramanmaraş,	5.8	466-711	36-54
	Gaziantep,	6.4	1,022-1,492	77-112
	Adıyaman	7.0	1,637-2,363	123-170
Kırıkhan fault		5.8	1,594-2,371	326-485
	Hatay	6.4	3,560-5,017	728-1,020
		7.0	5,607-7,723	1,146-1,579
Göksun fault	Adana, Osmaniye	5.8	773-1,119	55-80
		6.4	1,712-2,402	123-175
		7.0	2,944-4,099	216-30
Bozova fault	Adıyaman, Şanlıurfa, Gaziantep	5.8	694-1,056	48-76
		6.4	1,437-2,099	102-15
		7.0	2,285-3,321	174-266

Figure 5. Provinces affected by the possible earthquake and casualties, Council of Europe, 2017

It is observed that the migration is preferred as a way of economic, social and psychological struggle and the most effective way to deal with the wounds of the earthquake disaster that occurred in our country. Regardless of the way and method used, whether evacuation, relocation, asylum, migration, or under any other names, this largescale population movement brings a wide range of risks and uncertainties. It is of vital importance to investigate and determine the reasons for the large population movements following the Kahramanmaras earthquakes, called the disaster of the century, as well as the results these movements may cause in the future. In the studies to be carried out with respect to those who are exposed to the disaster during this process, it is of great importance to firstly know the decision to be made by the disaster victims themselves regarding their own future. Although some of the population movements are thought to be temporary, this relocation will spread over a long period of time and will be permanent for a large majority of the population. For researchers and decision-makers, it would be decisive to know the final residence decisions of the individuals who constitute the displaced population so that this large population movement can be accurately identified. In this process, depending on the residence decision to be made for each displaced individual regarding their own future, the correct definition of terms such as disaster victim or immigrant, classification of these decisions on the basis of place, time, person and authorization, and attribution of these decisions to legal, political, social and economic consequences can provide beneficial results for the whole society. The most important consequences of this will be seen in the revitalization of the cities and rural life in the earthquake region, and the consideration of the disaster victims permanently settled in neighboring and remote provinces within the scope of "internal migration" and ensuring their social adaptation.

# 1.2.4. "Pseudo" Disaster Victimisation

In addition to all these aspects mentioned above, one of the side effects of this major disaster was observed as a population movement from high-risk regions such as Istanbul, which have not yet experienced a disaster, to lowrisk regions (7). Such population mobility, which exhibits the behavior of disaster victims without experiencing one yet, needs a separate definition such as "pseudo disaster victim". "Cohort pseudo disaster effects" such as drops falling into the water, for "potential" disaster victims or those who exhibit the behavior of disaster victims, and who have decided to migrate with different motives in the face of the "disaster of the century" that occurred in our country, it is useful to put forward and discuss the concept of "irregular internal migration" for the first time in the literature similar to the danger of irregular migration that causes great problems to the states in cross-country migration.

# 2. Conclusions

In order to avoid "irregular internal migration" as metioned above, it is of vital importance to follow up the individuals' processes to take migration decisions in the context of disasters and take all kinds of measures to link these pre/ post disaster decisions to proper and legal consequences.

#### 3. Contribution to the field

Concepts and terms of "irregular internal migration" and "pseudo disaster victim" are presented for the first time to the field and literature.

# 4. Conflict of Interest

The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

#### **Authorship Contribution**

Concept: AA; Design: AA; Supervision: AA; Funding: AA; Materials: No; Data Collection/ Processing: AA; Analysis/ Interpretation: AA; Literature Review: AA; Manuscript Writing: AA; Critical Review: AA.

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