Environmental migration in the Balkans: Contemporary trends

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Abstract: Environmental changes and disasters in the Balkan Peninsula affect society in different ways, including population mobility. This paper analyses statistical data on internal displacement according to different hazard categories and hazard types in the Balkans. The results show that population mobility in the Balkans is influenced by various environmental changes related to weather and geophysical hazards. Weatherrelated hazards such as floods and wildfires were found to have the greatest impact on population mobility in this area. Research has shown that the intensity of population mobility changes over time. The paper provides a starting point for a more detailed investigation of the relationship between population mobility and environmental changes in the Balkans in the future.

Keywords: population mobility, environmental changes, Balkan

Introduction

Migration is a form of geographical or spatial mobility of population that refers to a change of residence between certain geographical areas. Changes in the environment have an extraordinary impact on spatial mobility. Throughout history, people have left places with unfavorable environmental conditions and settled in areas with an optimal natural environment. In modern times, environmental characteristics are considered an important factor in the distribution of population on our planet (IOM, 2009; Šantić, Langović, 2023). Most environmentally driven migration is likely to take place within the country, and in the case of sudden extreme events (such as floods, storms, etc.), people usually migrate to a safe place nearby for a short period of time (ABD, 2011; SVR, 2023).

Global human mobility associated with weather-related and geophysical hazards has become a topic of scientific and political interest in recent decades (Beyer, Milan, 2023). Millions of people around the world are forced to leave their homes because of earthquakes, floods, desertification, droughts etc. Geophysical and weather-related hazards triggered 26.4 million new internal displacements, or movements, across the world during 2023. Floods and storms cause the most displacements on our planet. Projections suggest that by 2050, more than 200 million people worldwide could be forced to relocate within their country due to the effects of only climate change (EC, 2022; IDCM, 2024a).

The aim of this paper is to analyses the links between population mobility and environmental change in the Balkans. As the Balkan region is exposed to various geophysical and weather-related hazards, the focus is on determining the impact of different types of hazards on population mobility and analyzing the intensity of environmentally induced migration.

Methods and data

This paper obtain data from the Internal DisplacementMonitoringCentreIDMC(<u>https://www.internal-</u>

displacement.org/) on the number of internal displacements in the Balkans by hazard category (geophysical and weatherrelated) and hazard type (earthquake, flood, wildfire, storm, landslide/mass movement, extreme temperatures) for the period 2008-2023. Since the data refer to the national level, the calculation includes data for countries of the Balkan Peninsula -Serbia, Montenegro, North Macedonia, Bosnia and Herzegovina, Croatia, Slovenia, Romania, Bulgaria, Greece, Albania. The data are summarized in a Balkan database organized by the author of the paper. Data were processed in the SPSS software package.

Results and discussion

The data analysis shows that the total number of internal displacements in the Balkan in the period 2008-2023 was 472,181 (Table 1).

Table 1. Internal displacement in the Balkans by hazard category andhazard type, 2008-2023.

Hazard Category	Internal Displacements	Hazard Type	Internal Displacements n %	
Geophysical	93.662	Earthquake	93.662	19.8
Weather- related	378.519	Flood	193.966	41.1
		Wildfire	156.880	33.2
		Storm	26.858	5.7
		Landslide/Wet		0.2
		Mass	795	
		Movement		
		Extreme	20	<0.1
		Temperature		
In total			472.181	100

Source: Own work based on data from IDCM, 2024b.

It turns out that weather-related hazards have a particular influence on population mobility in the Balkans. Namely, weather-related hazards caused 378,519 internal displacements, while geophysical hazards caused 93,662 internal displacements. By type of hazard, the largest number of internal displacements was caused by floods. In the period 2008-2023, 193,996 internal displacements (41.1%) were caused by floods in the Balkan countries. This is followed by wildfires with 156,880 internal displacements (33.2%). Earthquakes as geophysical hazards caused 93,662 internal displacements (Table 1).

The results show that in the observed period of sixteen years, the year 2014 stands out, in which a total of 154,790 internal displacements were registered (Figure 1).

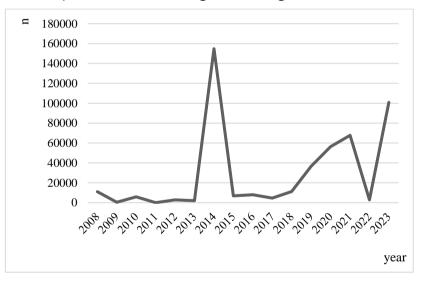


Figure 1. Total internal geophysical and weather-related displacement in the Balkans by years, 2008-2023. Source: Source: Own work based on data from IDCM, 2024b.

In this year (2014), 8,226 (5.3%) internal displacements due to geophysical hazards and 146,564 (94.7%) internal displacements due to weather-related hazards were registered.

In addition to the year 2014, the year 2023 can also be highlighted, in which 100,948 internal displacements (weatherrelated only) were registered. The only year in which no internal geophysical and weather-related displacements were registered in the Balkans is 2011 (Figure 1).

Conclusions

Environmental mobility in the Balkans is a reality. Therefore, it is necessary to investigate the relationship between population mobility and environmental change from different aspects. It is very important to focus, among other things, on the social dimension of the process - the living conditions after mobility and the possibilities and limitations of returning to the place of origin. This is particularly important for those who had to leave their homes due to floods, wildfires or earthquakes, which stood out to be the hazards that caused the greatest environmental mobility in the Balkans. Although such migration in the Balkans is usually temporary, there are also examples of people who were forced to leave their place of origin permanently due to damage to their property caused by one of the hazards. In future research, it is also important to consider the differences between these two categories of population those who had to leave their place of origin temporarily and those who had to leave it permanently.

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