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Disaster Risk Perception and Communication in Flood-prone Areas in Albania: A Comparison of Urban and Rural Settings

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Abstract

This study examines disaster risk perception and communication in Albania, focusing on two districts in the cities of Tirana and Fier and the villages of Novosela and Dajç, all affected by severe flooding in recent years. The research highlights how dimensions of national culture - particularly fatalism and attachment to home and hearth - interact with contextual, psychological, and demographic characteristics to shape flood risk perceptions. Quantitative analysis using surveys (N=104) and ORL regression models shows that disaster risk tolerance is influenced by location, household income, and prior exposure to natural disasters. Urban residents are less tolerant of risk, while higher-income individuals and those with previous disaster experience show greater tolerance. Qualitative interviews reveal that city dwellers often perceive floods as inevitable, while rural participants emphasize communal coping and local knowledge.

Keywords: disaster risk perception; disaster risk communication; floods; Albania; rural areas; urban areas

JEL classification codes

Q54	Climate • Natural Disasters and Their Management • Global Warming
R14	Land Use Patterns
I31	General Welfare, Well-Being
D81	Criteria for Decision-Making under Risk and Uncertainty

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Introduction

Natural hazards, including floods, earthquakes, volcanic eruptions, wildfires, droughts, landslides, and various types of storms, are globally becoming more frequent, intense, and diverse (Xu & Lin, 2025). With greater human exposure and social vulnerabilities, disasters risk - "the potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time" (UNDRR, 2017:10) - is increasing.

Flood risk is rising across the Global South and the Global North, driven by anthropogenic climate change and human activities (Shamsudduha, 2025; Vojtek & Vojteková, 2016; Halecki & Młyński, 2025). In Central Europe, the 2021 floods caused more than 200 fatalities and over USD 54 billion in economic losses (Fang et al., 2025). Regional characteristics strongly shape expected impacts (Fang et al., 2025), and the Balkan region is no exception (Sabljić et al., 2023).

On a global scale, Albania faces some of the most severe economic consequences from natural disasters. By the late 2000s, the country experienced average annual losses amounting to about 2.5% of its GDP (World Bank, 2009). Between 1995 and 2015, an average of 30,000 people were affected by natural disasters each year, with over 95% of Albanian municipalities experiencing at least one disaster during this period (World Bank, 2020). These figures are substantial, considering the country's small population of less than 3 million.

Floods have become a major problem in built areas near rivers and along the coast (Zaimi & Jaupaj, 2020; Lushaj, 2016). Yet, Albania lacks a comprehensive system for long-term disaster monitoring. Risk assessment often boils down to mere risk tabulation, lacking a thorough analysis of different disaster scenarios and levels of exposure for local populations and assets (Duro, 2015). Few individuals have disaster insurance, and public compensation is limited to covering only 40% of losses (Grabova & Mesiti, 2018; Sharku & Koçi, 2017).

Disaster risk perception, defined as the psychological processes of "collecting, selecting, and interpreting signals about uncertain impacts of events, activities, or technologies" (Wachinger et al., 2013:1049), plays a key role in society´s response to disaster risks. People's risk attitudes, perceptions, information, and preparedness have previously been studied in the context of floods (Heitz et al., 2009; Plapp & Werner, 2006; Plattner et al., 2006; Terpstra, 2009), whereas research concerning other types of natural disasters is limited. The existing literature suggests that risk perceptions depend on the (1) *type of risk*, (2) *socio-demographic characteristics*, (3) *personality and cognition*, and (4) *access to risk-related information* (Renn, 2008; Heitz et al., 2009; Wachinger et al. 2013). We add another factor to this list: *(5) national culture*. Some studies have hinted at this aspect by highlighting the role of trust in authorities and people's voluntary involvement in post-disaster recovery efforts (Miceli et al., 2008; Armaş, 2007; Baan & Klijn, 2004). However, national culture is yet to be unpacked in the disaster risk literature.

Public authorities can and should make an effort to manage risks effectively – cultural and demographic barriers notwithstanding. It is the task of authorities to devise disaster response strategies and share those with individuals, workplaces, and communities (Miceli et al., 2008). To be successful, these strategies must account for the risk perception in the population, which can be measured through surveys, interviews, and/or public forums (Morgan et al., 2001). Where disaster response strategies undermine the interests of particular stakeholders, conflict resolution sessions may be necessary (Renn, 2008). In combination, these iterative processes are known as 'risk communication' (Rohrmann, 2000). Indirectly, the success of risk communication strategies also depends on the national culture.

This study examines disaster risk perception and communication in Albania, focusing on two cities (Tirana and Fier) and two villages (Dajç and Novosela) that have been severely affected by floods in recent years. Based on primary survey data and field observations, we provide insights that will assist local risk management agencies in developing effective strategies to prepare for, and respond to, flood events. This research is crucial because risk perceptions and the effectiveness of risk communication are known to vary based on time and context (Marshall, 2020), making it unlikely that findings from other regions will fully apply to Albania.

Beyond its local relevance, this study contributes to the broader theory by:

(a) Highlighting the role of national culture in disaster risk perception and communication, alongside contextual, psychological, and demographic factors. Albanian culture is often described as having a fatalistic streak, with people more inclined to trust in fate than to plan for the long term. This may be linked to Islamic concepts of predestination and acceptance in the face of adversity, as well as to patterns of learned helplessness developed during decades of communist dictatorship and the turbulent post-communist period. While fatalism has not yet been systematically examined in the context of natural hazards in Albania, a study in neighbouring North Macedonia suggests its presence in the broader region (Sickmiller, 2007). Another relevant cultural trait is the strong attachment

to home and hearth. This stems from the country's deeply rooted rural traditions and agrarian past. A culture centred on family ties and close-knit communities has persisted even as Albania has urbanized in recent decades, and homeownership rates are among the highest in Europe (Instat, 2021).

(b) Distinguishing between urban and rural areas. While rural areas have been the focus of extensive research, there is a notable gap in the literature on natural disaster risk management in urban areas; in the Western Balkans, studies are virtually nil. In this region, urban living has been the aspiration whereas rural areas were traditionally considered as the epicentre of backwardness. But is this true when it comes to coping with disasters?

The rest of the article presents the case study settings, the methodological approach, and the empirical findings.

Case studies

We have studied four flood prone areas along Albania's western lowlands, which border the Adriatic and Ionian Seas (Figure 1). Two areas, Tirana and Fier, are urban, and two others, Dajç and Novosela, are rural. Housing in all four areas is mostly single-family. Tirana and Fier are large cities; therefore, two districts near their rivers (Tirana River and Gjanica River respectively) were selected as case studies. Those districts have about 1000 – 1500 people. The Tirana case study houses impoverished people, including many Romani minorities, living in informally built housing whereas the Fier case study comprises more middle-class residents. Dajçi is a scenic village of about 2,000 inhabitants, located on the banks of Buna River, near the city of Shkodra. Novosela is an agricultural village of about 8,200 people along the Vjosa River (for Census data, see Instat, 2021).

All four cases have experienced flooding at different times. Flood events have been increasing, partly due to climate change and partly owing to the poor management of river flows (Deda et al., 2025). For example, Novosela has been struggling with floods since the construction of the Fier-Vlora highway, which has hindered the normal flow of the Vjosa River (*OraNews*, 1 February 2015). Gjanica's riverbed has deteriorated due to construction waste being illegally tossed in the water (*Top Channel*, 12 October 2015).

Figure 1. Location of case studies
Map source: d-maps (https://d-maps.com/m/europa/albanie/albanie13.gif), modified by authors

Data and Methods

This study was based on a face-to-face survey of people affected by floods in the four areas. The sample size was 104 (Tirana: 30; Fier: 20; Dajç: 32; Novosela: 22). Participants were recruited via convenience sampling. While this sample is not large and convenience sampling has its drawbacks, it must be noted that it was excessively difficult to recruit participants, considering the anxiety and even trauma caused by flooding or the prospect of flooding. Individuals who have experienced natural disasters are understandably reluctant to participate in research studies due to the emotional burden of revisiting distressing events (Patton, 2014).

Furthermore, the nature of our research population (a 'specialised' group scattered around Albania) necessitated a smaller sample size. While their frequency is increasing, disaster-related experiences are not an everyday occurrence, making large-scale recruitment impractical (see Patton, 2014). However, our sample yielded valuable insights that can enhance both academic knowledge and policy development. To address the limitations of a smaller sample, we triangulated the survey data with qualitative interviews and site observations.

The survey sample was balanced in terms of gender, and most respondents were married and middle aged. Households were relatively large, suggesting that many respondents lived in extended families. Urban residents were generally poorer and less educated than those in rural areas, which suggests that in larger cities the most impoverished and socially disadvantaged individuals are often the ones who end up living in less desirable, disaster-prone areas along riverbanks. (This contrasts with wealthier cities in Europe, where the prime residential areas are often located near water.) Although many rural respondents reported lacking formal employment, the reality is that they are usually engaged in family farming (Table 1).

The survey questionnaire was in five parts. The first part collected demographic data at the individual or household level while the second part focused on the amenities of the participant's home. (Note that our research populations are traditional and conservative, understanding gender in binary terms; our research questions reflect local norms.) The third and fourth parts consisted of a series of Likert scale questions related to disaster risk perceptions and attitudes and the level of risk communication and preparedness. The fifth part included a series of open-ended questions related to risk perception and communication, the answers to which were treated as qualitative data and were subjected to content analysis. This helped provide nuance and depth to the findings. In addition, researchers took field notes - for example, on the type and quality of local housing and the level of community interactions.

The quantitative data were used to compute descriptive statistics (see later) and to fit two ordinary least squares (OLS) regression models. In both models, the dependent variable was a construct called 'disaster risk tolerance' which was calculated as the average of the responses to a series of Likert scale questions listed in Table 2. This variable was logarithmically transformed so that the model computed relative changes rather than absolute changes in disaster risk tolerance. In a simpler model, we looked at urban and rural differences in 'disaster risk tolerance' while controlling for other socio-demographic factors.

Table 1. Sample characteristics (N=104)

Location		Rural	Urban	Total
Respondents		54	50	104
Gender (%)	F	19	33	52
	M	19	33	52
Age	Mean	47	47	94
Education (%)	Primary	48	61	109
	Secondary	46	24	70
	Tertiary	6	14	20
Monthly household income* (%)	≤300	35	68	103
	301-500	37	16	53
	501-900	26	16	42
Household size	Mean	4.9	4.7	9.6
Marital status (%)	Not married	16	12	28
	Married	84	88	172
Employment (%)	Employed	100	84	184
	Unemployed	84	16	100

**Reported in Euro. 1 Euro = 100 Albanian Lek*

Table 2. The 'disaster risk tolerance' construct (dependent variable)

Question	Mean*	SD
1-4 Likert scale (government responsibility)		
The government must keep financially assisting families affected by floods	3.88	0.34
People who choose to live in flood-prone areas should have to pay for damages	1.53	1.18
The government should ban construction in flood-prone areas	2.5	1.96
The government should strengthen building codes in flood-prone areas	2.61	2.01
The government should require homeowners to purchase flood insurance	2.05	1.92
The government should levy an earmarked flood tax	1.90	1.86
Residents in flood-prone area are responsible for maintaining drainage canals	2.01	1.85
1-5 Likert scale (individual responsibility)		
One must accept that everything in life carries some risk	4.01	1.17
My/my family's life is in God's hands	4.08	1.19
Government measures to mitigate flood damage are adequate	4.25	1.22
Flood damage can be minimized if everyone takes prevention measures	3.5	1.39
Individual measures to reduce flood damage make no difference	2.95	1.57
I want to learn more about how to prepare for natural disasters	3.14	1.81

**Lower figures indicate disagreement and higher figures indicate agreement*
A 1-4 Likert scale was used in one section of the questionnaire and a 1-5 scale in another, reflecting the fact that different sections were adapted from previous studies (Ogston, 2006; Miceli et al., 2008).

In a more complex model, the independent variables sought to capture five the facets listed at the outset:

1) *Type of risk*. People who live on the seafront or in proximity to rivers may fear floods whereas those who live in arid and isolated towns may be apprehensive about fires (Heitz et al., 2009). We only considered floods in this study, upon confirming with the survey respondents that this was indeed the most serious concern in their area (Figure 2). Therefore, no variable was included.

2) *Socio-demographic profile*. Characteristics such as age, education, income, homeownership status, employment status, and family size are known to affect risk perception (Heitz et al., 2009). We considered these in addition to marital status, family size, and, importantly, location (binary: urban vs rural).

3) *Personality and cognition*. We considered exposure to natural disasters, measured as the number of times people have experienced natural disasters, including floods, in their areas. More than half of the respondents reported regular occurrences of heavy snow, windstorms, landslides, hail, and earthquakes, and more than two thirds have dealt with the aftermath of floods.

4) *Information about risk*. This was measured through a binary question asking if participants had ever been aware of any flood warning (from the government or other sources).

5) *National culture*. Given the broad scope of this construct, we limited the analysis to two aspects: (a) 'fatalistic mindset', with people regarding floods as god's will (0=otherwise); and (b) 'attachment to home and hearth', with people stating that they would never leave their area, despite it being prone to flooding (0=otherwise).

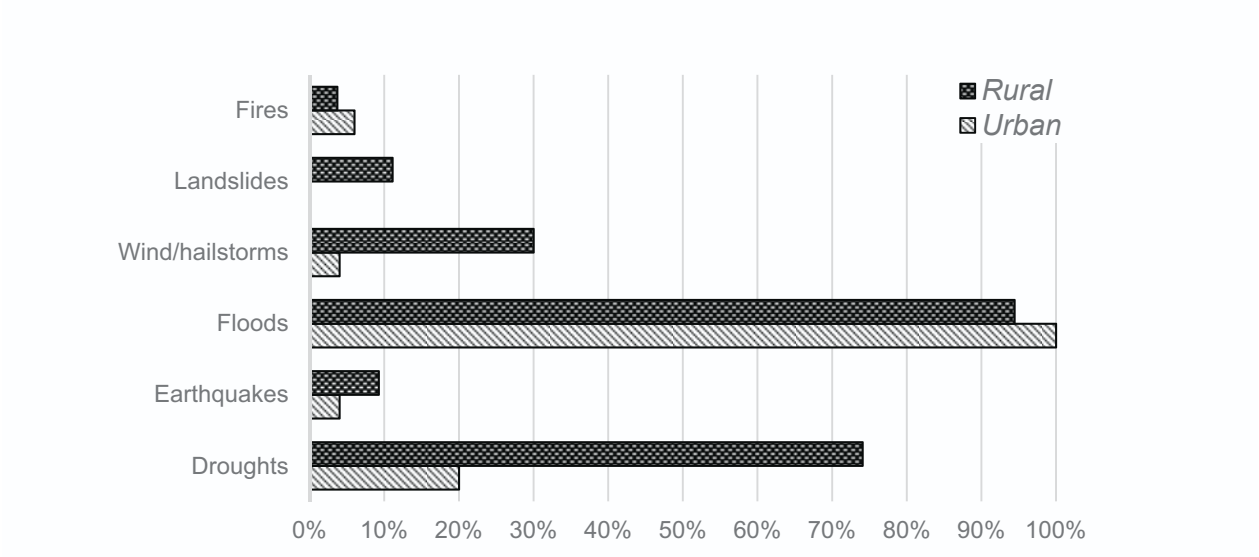

Figure 2. Responses to question: 'What is the most serious natural disaster affecting your area'?

Results and Discussion

Disaster risk perception

Descriptive statistics

We considered two aspects, contrasting urban and rural settings: (1) attitudes towards government responsibility; (2) attitudes towards individual responsibility. Figures 3 and 4 show that people had high expectations of the government, particularly around financial support in case of floods.

More than half of all respondents in both urban and rural areas agreed that the planning sector has a large role to play in strengthening building codes, and even banning new construction in flood-prone zones. However, urbanites were more passive and fatalistic whereas rural dwellers were more willing to contribute to mitigating flood damage by paying earmarked taxes and insurance premiums. This suggested a longer-term orientation in rural areas, where communities are more consolidated, homeownership is virtually universal, and people are less likely to move.

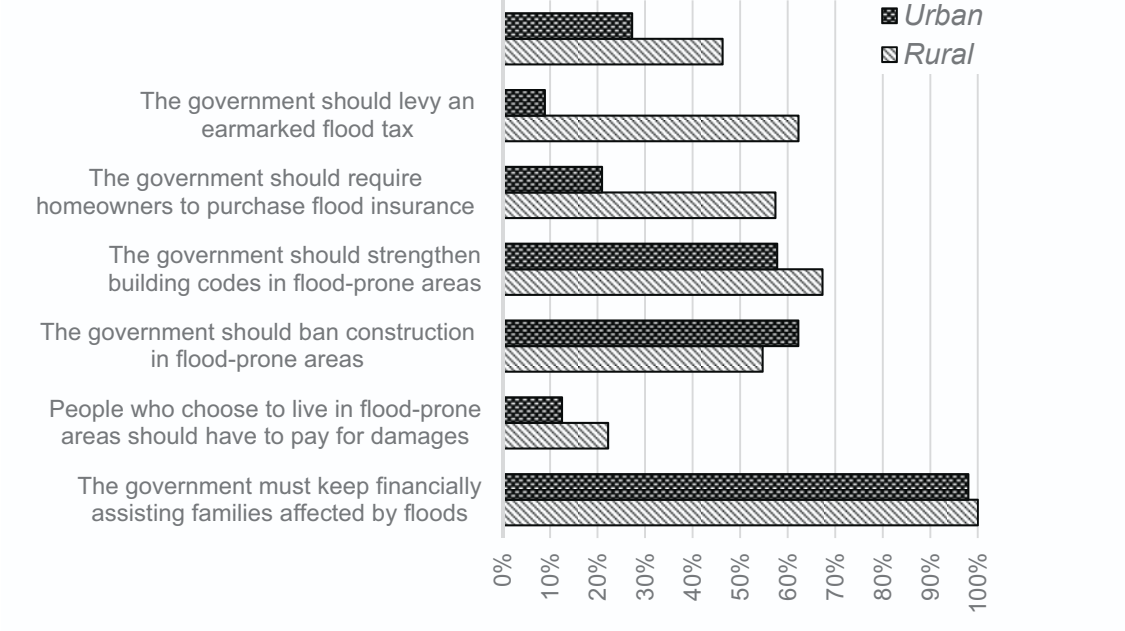

Figure 3. Attitudes toward government responsibility

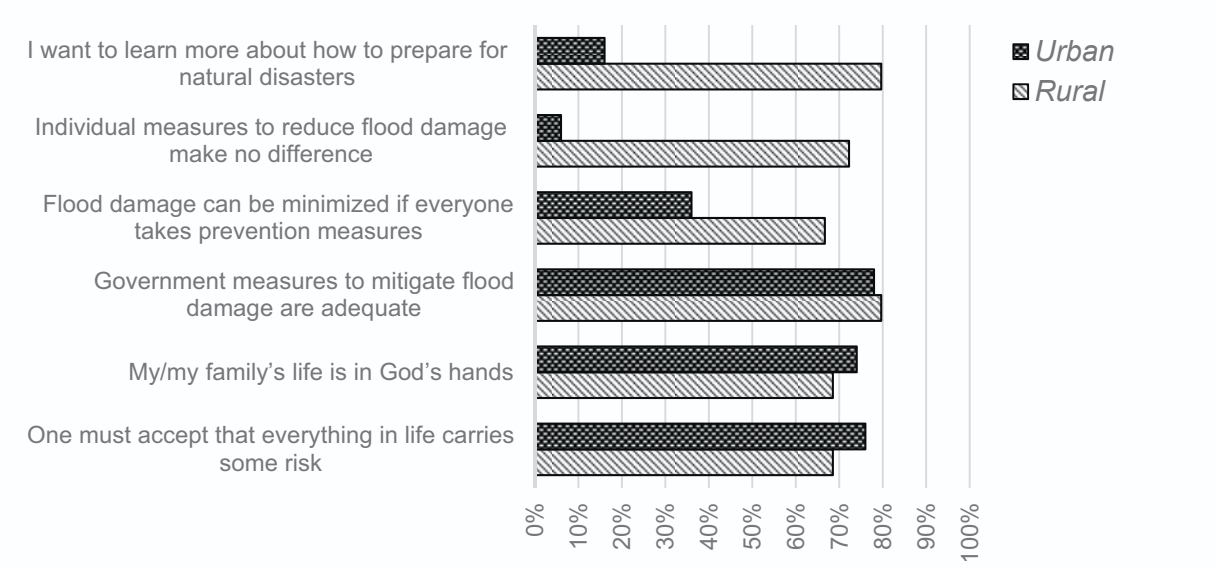

Figure 4. Attitudes toward individual responsibility

Regression analysis

The results of the first model are shown in Table 3. This model explained approximately 48% of the variability in disaster risk tolerance. Three independent variables were statistically significant: location, monthly household income, and exposure to natural disasters. Individuals residing in urban areas were less tolerant of disaster risks, likely due to lower incomes and greater perceived vulnerability. In line with the literature (Wang et al., 2022; Yildiz et al., 2024), higher income people had a higher disaster risk tolerance, probably because they feel more financially secure and able to cope with the aftermath of disasters. They can also afford better housing, insurance, and recovery resources, thus reducing their vulnerability (Perić & Cvetković, 2019; Xu et al., 2019; Yin et al., 2021).

Lastly, individuals with prior exposure to natural disasters exhibit higher risk tolerance, potentially due to developed resilience or coping mechanisms, or because they become nonchalant, reasoning that a disaster is unlikely to strike the same place twice (Heitz et al., 2009). This aligns with existing research showing that personal experiences shape individuals' estimates of the frequency and consequences of disasters (Morgan et al., 2001). However, responses to prior exposure vary: while some individuals become indifferent, others develop heightened anxiety about future disasters (Onuma et al., 2017; Baan & Klijn, 2004; Udwin et al., 2000). These variations reflect differences in personality and cognition, which may lead to risk perceptions that diverge significantly from expert assessments and, consequently, to behaviours and resource allocation decisions that are irrational or inconsistent with recommended measures (Slovic, 1992; Rundmo, 1996; Becker et al., 2014; Ardaya et al., 2017). Moreover, exposure to natural disasters interacts with the availability and credibility of risk information: even experienced populations may lack comprehensive knowledge or doubt the reliability of information from authorities and experts, further shaping their risk perceptions and responses (UNISDR, 2015).

Previous research has shown that parents and homeowners tend to be more concerned about loss of life, health, or property; however, in this study, these variables were not statistically significant. Research also suggests that women are generally more sensitive to disaster risk, due to financial constraints and/or socialization (Slovic, 1992; Wachinger et al., 2013; Mızrak et al., 2021; Cuesta et al., 2022); however, this variable was not included in our analysis.

The second, simpler model (Table 4) was applied to reassess the role of socio-demographic variables, particularly rural vs urban location. This model explained approximately 46% of the variability in disaster risk tolerance. Location, age, and income were found to be significant predictors of risk tolerance. As before, urban residents were less tolerant of disaster risks, while higher-income individuals were more tolerant. Additionally, risk tolerance tended to increase with age, possibly due to greater financial security over time. Other studies have found age to be associated with a lower likelihood of participating in capacity-building and educational activities, which in turn increases vulnerability, limits the adoption of coping strategies, and heightens the risk of livelihood loss during flood events (Savari et al., 2025). Education and marital status, however, were not statistically significant.

Table 3. Model 1 results (N=104)

Variable	**Coefficient**	**Std. Error**	**t-statistic**	**p-value**
Dependent variable: Disaster risk tolerance				
Independent variables				
Socio-demographic profile				
Location (rural / urban)	-0.438850	0.130114	-3.372041	0.0011***
Gender	0.057915	0.102884	0.562912	0.5750
Education	0.009072	0.115829	0.080579	0.9360
Monthly household income	0.180343	0.077571	2.324888	0.0225***
Household size	-0.017814	0.039120	-0.455365	0.6500
Marital status	0.079030	0.067203	1.175983	0.2430
Employment	0.085968	0.153077	0.561600	0.5759
Personality and cognition				
Exposure to natural disasters	0.059177	0.027110	2.182836	0.0319***
Information about risk				
Awareness of flood warnings	0.097786	0.124749	0.783862	0.4354
National culture				
Fatalistic mindset	0.144300	0.132784	1.086726	0.2803
Attachment to home and hearth	0.067567	0.115264	0.586198	0.5593
Constant (C)	***2.063140***	***0.351463***	***5.870149***	***0.0000****
R-squared: 0.48 (moderate power)				
Adjusted R-squared: 0.411098 (reasonable fit)				
SE of regression: 0.451231				
Log likelihood: -52.78623				
*F-statistic: 6.965382****				
Prob(F-statistic): 0.000000 (overall model is statistically significant)				
Mean dependent variable: 2.861404				
SD dependent variable: 0.588000				
Akaike info criterion: 1.363921				
Schwarz criterion: 1.686516				
Hannan-Quinn criterion: 1.494273				
Durbin-Watson statistic: 1.720515				
**p<0.2 **p<0.1 ***p<0.05 ****p<0.01*				

Table 4. Model 2 results (N=104)

Variable	Coefficient	Std. Error	t-statistic	p-value
Dependent variable: Disaster risk tolerance				
Independent variables				
Location (rural / urban)	-0.511885	0.097851	-5.23181	0.0000****
Age	0.111113	0.004095	2.14159	0.0080***
Monthly household income	0.176439	0.072015	2.450028	0.0162***
Education	0.121427	0.090813	1.337112	0.1846*
Marital status	0.079466	0.056652	1.402709	0.1641*
Constant (C)	2.012567	0.254891	7.89510	0.0000****
R-squared: 0.4641 (moderate power)				
Adjusted R-squared: 0.434326 (reasonable fit)				
SE of regression: 0.443161				
Log likelihood: -54.99333				
*F-statistic: 15.58825****				
Prob(F-statistic): 0.000000 (overall model is statistically significant)				
Mean dependent variable: 2.861404				
SD dependent variable: 0.588000				
Akaike info criterion: 1.270694				
Schwarz criterion: 1.430966				
Hannan-Quinn criterion: 1.335479				
Durbin-Watson statistic: 1.705257				
**p<0.2 **p<0.1 ***p<0.05 ****p<0.01*				

Disaster risk communication

The qualitative portion of this research revealed that disaster risk communication was quite poor in all four case studies, with little difference between urban and rural areas. Typically, residents reported that they had received flood warnings only a couple of days before the event, which, according to them, allowed very little time for evacuation. An alarmingly low rate of residents (18% in villages and 8% in cities) had received training on how to cope with natural disaster situations. Nonetheless, many residents (48% in villages and 54% in cities) were aware that emergency management committees existed in their district, which could be consulted if necessary.

Prior research has similarly highlighted that, in Albania the concept of 'early warning' is typically limited to signalling an imminent disaster or accident whereas individuals tend to rely on hearsay from friends and relatives, instead of seeking reliable information from public authorities (Duro, 2015). Given a general attitude of distrust and disrespect for authorities, it is unclear whether earlier warnings and more trainings would have been effective. Similar communication gaps between authorities and local communities have been observed in other contexts, such as Pakistan, where delayed information from authorities has prevented people from taking precautionary measures to avoid the negative consequences of floods (Iqbal & Nazir, 2023). Furthermore, even when governments issue timely recommendations to evacuate or stay put, citizens may choose not to follow the advice due to limited financial means, lack of safe shelter, or fear of burglary (Auliagisni et al., 2022).

In Albania, despite the risks, only few residents planned on moving. This speaks to a level of cultural attachment to home and hearth (which, however, was not statistically significant in the quantitative model). Some - especially youth in the two rural areas, and the most impoverished residents in Tirana - wanted to move but felt that they had nowhere to go. Many people had been aware of the risk before purchasing or building their house, but they had accepted the risk because, due to weak finances, their options had been quite limited. The same pattern is observed in other studies. For example, in Pakistan, Iqbal & Nazir (2023) found that residents often relocated temporarily but tend to return, likely because they depend on the area for their livelihoods. This speaks to a short-term cultural orientation among people who face little choice

and many unsurmountable financial barriers in terms of access to adequate housing. Given their circumstances, people had framed their choice in fatalistic terms: "if it's meant to happen, it will happen." This attitude was expected, given the Albanian cultural context of prevailing fatalism, mentioned earlier.

Novosela was an exception: floods had not been common here before the construction of the Fier-Vlora highway, which disrupted the flow of the Vjosa River. As a result, residents were upset about being unexpectedly exposed to natural disasters due to a public planning intervention. Attachment to home and hearth was stronger in Novosela and Fier (both considered as part of southern Albania).

Despite (or perhaps because of) poor disaster risk communication, respondents were very anxious about the potential impact of floods. They worried about personal safety as well as damage to their houses and home appliances. In rural areas with more space and flexibility in terms of construction, some residents (53% in Dajç and 18% in Novosela) had built their houses on stilts to protect from flooding. In addition, 35% of rural respondents had secured the foundations of their houses. In urban areas, houses were usually built at ground level, and due to the type of construction (brick and concrete) could not be raised later. Only 16% of urban respondents had reinforced their home foundations.

With floods becoming more frequent, households had started to develop rudimentary emergency plans. In rural areas 53% of rural respondents had a plan, compared to only 34% of urban respondents. This disparity may reflect a greater sense of self-reliance in rural areas, with residents more accustomed to preparing for emergencies independently due to less immediate access to public services. Plans were always at the family rather than the community level. This is in line with an aspect of the national culture - lack of collaboration and volunteerism - discussed earlier. Tirana and Fier residents appeared to be the least prepared, which went against expectations of urban areas being more advanced and able to cope with disasters.

Typically, household emergency plans involved the steps needed to evacuate their area more efficiently. People had come to realise that, in some cases, evacuation might not be possible, and therefore kept some food and supplies in storage in case they became trapped. Specifically, 26% of all respondents had set aside some emergency supplies. Other studies have shown that emergency stockpiling may be linked to prior experiences of flood events (Auliagisni et al., 2022), highlighting the importance of risk awareness and knowledge for an effective response.

In all cases, a large majority of residents (61% in rural areas and 80% in urban areas) did not have sufficient savings to cover any losses. Consistent with previous findings (Grabova & Mesiti, 2018), very few people had property or life insurance - 12% in rural areas and 6% in urban areas. Additionally, not many were aware that public compensation is capped at 40% of the cost of losses. Overall, urban residents appeared to have less financial capacity than rural dwellers, despite wealth being concentrated in cities in Albania. This finding is likely due to the fact that, in cities, it is often the most impoverished and socially disadvantaged individuals who end up living in less desirable, disaster-prone areas, making them more financially vulnerable when disasters occur. Also, the cost of living is higher in cities.

Conclusion

This study emphasises the role of national culture - particularly dimensions such as fatalism and attachment to home and hearth - in shaping disaster risk perception and communication, alongside various contextual, psychological, and demographic factors. It differentiates between urban and rural areas, demonstrating that, in Albania at least, urban residents are less prepared and more vulnerable to flooding than those in rural areas. The findings further underscore that socio-cultural factors are critical in understanding disaster impacts, suggesting that disaster management efforts should not focus solely on the physical aspects of disasters and hazards (Mercer et al., 2012).

The Western approach to natural disaster management assumes stable government, economic strength, and a population receptive to early warning systems (Sickmiller, 2007). Since Albania does not fully meet these criteria, disaster preparedness must be community-based, relying on social capital in addition to addressing physical vulnerabilities. Only through a community-centred approach that emphasizes education, trust, and social cohesion, rather than strict regulation and enforcement, can Albanian cities and villages build resilience to natural disasters (see Sickmiller, 2007). However, given the small sample size, this study should be considered exploratory. Further research with larger samples and additional locations is needed to confirm and extend these findings and policy recommendations.

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