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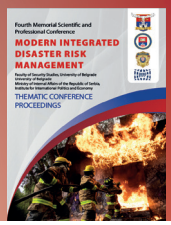

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Disaster Resilience in Serbia: A Narrative Synthesis of Institutional, Social, and Perception-Based Evidence

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Abstract

This paper examines disaster resilience from a multidisciplinary perspective in the Republic of Serbia. It analyses the development of disaster management within the contemporary Integrated Disaster Risk Reduction System, which is grounded in the core principles of com-

munity resilience. The study explores how resilience is perceived by stakeholders involved in its development, primarily institutions and their organizational structures in Serbia, as well as individuals, including professional representatives of institutions and citizens. Drawing on findings from studies measuring the resilience of local communities in Serbia, the paper identifies key challenges Serbia faces in strengthening disaster resilience. Although normative frameworks for enhancing resilience exist, mechanisms for implementing instruments at the local level remain insufficient. Limited public awareness, fragmented cooperation, and a pronounced reliance on central authorities persist as the main institutional constraints. At the individual level, structural and psychosocial factors shape perceptions of resilience. An assessment of the current status of key resilience stakeholders in Serbia indicates a clear need for continuous resilience measurement and for identifying the most influential determinants. Resilience cannot be adequately understood without a deeper and more comprehensive consideration of its constituent factors. Low perceived resilience among both institutional representatives and citizens underscores the need for comprehensive, targeted reforms to address deficiencies consistently revealed in empirical research. Strengthening the institutional capacities of local self-government units, encouraging citizen participation in planning processes, integrating traditional values with scientific approaches, and promoting a culture of prevention through education are among the short-term steps to be undertaken. In contrast, long-term strategic investment in community and institutional capacities is a fundamental requirement. These measures can foster social cohesion, institutional trust, and local capacities, which are key determinants of resilience.

Keywords

Community resilience; integrated disaster risk reduction system; disaster resilience measurement; resilience stakeholders; resilience perception; prevention.

1. Introduction

Disaster risk represents one of the most significant challenges to the stability, security, and sustainable development of contemporary societies (Beli, Renner, Cvetković, Ivanov, & Gačić, 2025; Dada, Hamza, & Mohammed, 2025; Desalit, Duque, Edradan, Enciso, Enriquez, & Pan, 2025; Hanspal & Behera, 2025; Jevtić, Cvetković, Gačić, & Raonić, 2025; Masaba, Aryatwijuka,

Ntayi, & Bagire, 2025; Tushabe et al., 2025; Vidović, Cvetković, Beriša, & Milašinović, 2025). In this context, disaster resilience has emerged as a central analytical and operational concept, referring to the capacity of individuals, communities, institutions, and systems to anticipate, absorb, respond to, recover from, and adapt to hazardous events while maintaining essential functions. Within the Republic of Serbia, a country exposed to a wide range of natural, technological, and environmental hazards, including floods, earthquakes, landslides, droughts, fires, environmental pollution, and industrial accidents, strengthening disaster resilience has become an increasingly important policy and research priority.

Although Serbia has developed a formal institutional and normative framework for disaster risk reduction and emergency management, the extent to which this framework is translated into practical resilience at the local and community levels remains a critical issue. Existing research indicates that resilience in Serbia is shaped by a complex interaction of institutional capacities, local implementation mechanisms, citizen preparedness, social capital, trust in authorities, demographic and socio-economic characteristics, and previous disaster experience. However, these dimensions are often examined separately, either through institutional analysis, resilience measurement models, or perception-based empirical studies. As a result, there remains a need for a more integrated interpretation of how formal institutions, community capacities, and individual perceptions jointly shape disaster resilience in the Serbian context.

This paper addresses this gap by synthesizing theoretical, institutional, and empirical evidence on disaster resilience in Serbia, with particular attention to the role of key resilience actors, including state institutions, local self-government units, professional response structures, civil protection actors, civil society, and citizens. Rather than presenting newly collected primary data, the paper integrates findings from recent studies on community disaster resilience, institutional capacities, regional disparities, social capital, trust, and perceived resilience. In doing so, it seeks to clarify how resilience is constructed and operationalized within the Integrated Disaster Risk Reduction System and how it is experienced at the community level.

The paper is guided by three analytical questions. First, how is disaster resilience institutionally framed and operationalized in Serbia? Second, what do recent empirical studies reveal about the gap between formal disaster risk reduction frameworks and actual community-level preparedness? Third, which institutional, social, and perceptual factors appear most relevant for strengthening disaster resilience in Serbia? By addressing these questions, the paper contributes to a more nuanced, evidence-based understanding of disaster resilience as a multidimensional and socially embedded process. It

also identifies key limitations in the current system and outlines potential pathways for strengthening resilience through institutional reform, local capacity-building, citizen participation, risk communication, and the development of a prevention-oriented culture.

Methodologically, the paper draws on a narrative and conceptual synthesis of the theoretical literature, institutional documents, and recent empirical studies on disaster resilience in Serbia. The following sections first outline the conceptual and institutional foundations of disaster resilience in the Serbian context, then examine the development of integrated disaster management and the role of key resilience actors, before synthesizing recent empirical findings and identifying implications for future resilience-building policies and practices.

2. Methodology

This study employs a narrative and conceptual synthesis of existing theoretical, institutional, and empirical evidence related to disaster resilience in the Republic of Serbia. Rather than presenting newly collected primary data, the research integrates and interprets available knowledge on resilience actors, institutional capacities, and community-level preparedness through a qualitative desk-research approach. The methodological design comprised three interconnected stages. The first stage involved reviewing relevant theoretical literature on disaster resilience, community resilience, social resilience, integrated disaster management, and disaster risk reduction to establish the conceptual foundation of the study. Special emphasis was placed on literature that conceptualizes resilience as a multidimensional construct encompassing institutional, infrastructural, social, economic, psychological, and cultural dimensions. This theoretical review established a framework for understanding resilience as both a technical or administrative capacity and a socially embedded process shaped by trust, participation, preparedness, and collective action.

The second stage examined the institutional and normative framework of disaster risk reduction and emergency management in Serbia. This analysis encompassed the organization, responsibilities, and operational roles of key actors within the Integrated Disaster Risk Reduction System, such as national institutions, local self-government units, emergency management bodies, civil protection structures, professional response units, humanitarian organizations, scientific and educational institutions, the private sector, civil society organizations, and citizens. This stage facilitated the identification of formal resilience actors and their expected roles in prevention, preparedness, response, recovery, and long-term resilience-building.

The third stage synthesized findings from recent empirical studies on community disaster resilience in Serbia, with particular attention to research addressing resilience measurement, the BRIC and DROP frameworks, perceived community resilience, institutional trust, social capital, demographic and socio-economic determinants, and regional disparities. These studies were selected for their direct empirical insight into the manifestation, measurement, and perception of resilience in the Serbian context. Their findings were interpreted comparatively to identify recurring patterns, structural weaknesses, and practical implications for disaster risk governance. The analytical procedure employed a thematic synthesis approach. The reviewed material was organized according to key analytical categories, including institutional capacity, local-level implementation, citizen preparedness, social capital, trust in institutions, risk perception, demographic and socio-economic differences, regional disparities, and the roles of formal and informal actors in disaster resilience. This process aimed to identify the primary gaps between normative frameworks and practical capacities, as well as the factors that strengthen or weaken disaster resilience in Serbia.

This study combines conceptual analysis, institutional review, and secondary interpretation of empirical findings. This approach is appropriate because disaster resilience in Serbia cannot be adequately understood through a single dataset or a one-dimensional indicator system. Instead, an integrated interpretation of formal institutional arrangements, measurable community capacities, and subjective perceptions of resilience among various actors is required. This methodological approach facilitates a comprehensive understanding of the interactions among policy, institutions, communities, and individuals in the development of disaster resilience. Several limitations must be acknowledged. This paper does not include original field research, interviews, or survey data collected specifically for this study. Consequently, its conclusions are based on the synthesis and interpretation of existing studies, institutional documents, and relevant scientific literature. Nevertheless, by integrating available empirical and conceptual evidence, the paper offers a structured overview of the current state of disaster resilience in Serbia and identifies key directions for future research, policy development, and institutional improvement.

3. Disaster resilience in the context of the Republic of Serbia

Disaster risks represent one of the most significant challenges to the long-term stability, security, and sustainable development of contemporary socie-

ties. The Republic of Serbia, as a country exposed to a wide range of natural hazards and technological–industrial threats, has intensified its efforts in recent decades toward establishing institutional and operational mechanisms for risk prevention and mitigation. At the same time, increasing emphasis is being placed on strengthening the resilience of local communities and the broader social system to ensure effective protection of the population, material assets, and natural resources, as well as maintain continuity in social and economic processes following catastrophic events (Milenković, Cvetković, Ivanov, & Renner, 2024). A particular source of vulnerability in Serbia lies in its exposure to diverse types of disasters, including floods, earthquakes, landslides, droughts, and fires. Historical records indicate that nearly 850 floods were recorded over the past century (through 2013), resulting in the loss of 133 human lives. The most severe and widely recognized were the catastrophic floods of May 2014. Under such conditions, the development and strengthening of local community resilience emerge as critical prerequisites for effective risk reduction and disaster impact mitigation (Cvetković et al., 2021).

Although Serbia formally aspires to establish a functional, integrated disaster risk management system, in practice, a unified index to measure community resilience has yet to be developed. According to findings by the United Nations Development Program (UNDP), key weaknesses include institutional and governance deficiencies, as well as limitations in risk reduction, which significantly diminish communities' overall capacity to respond effectively to disasters. In particular, systemic fragmentation, underdeveloped institutional frameworks and procedures, and insufficient capacities at both local and national levels in the domains of prevention, preparedness, and response have been identified as critical challenges directly affecting community resilience and operational efficiency (EU za Srbiju otpornu na katastrofe, 2024).

A fundamental prerequisite for effective preparedness, adequate response, and successful recovery from disasters is the systematic measurement of resilience, which has gained increasing importance over recent decades and toward which Serbia is progressively orienting its efforts. In this context, the Ministry of Interior conducted a national disaster risk assessment in 2017. When compared with internationally recognized indicators and models, the BRIC methodology was found to provide the most comprehensive and quantitatively robust framework for assessing resilience. This approach enables the systematic incorporation of Serbia's specific characteristics, thereby offering the most appropriate basis for further advancement of disaster risk management systems (Milenković, Cvetković, & Renner, 2024; Milenković et al., 2025).

In contemporary literature, resilience is increasingly conceptualized as a multidimensional construct that extends beyond narrowly defined technical frameworks and encompasses multiple interrelated dimensions. In addition to technical and infrastructural resilience, referring to the robustness and reliability of critical infrastructure, growing attention is being paid to economic resilience, which ensures the economy's stability and capacity to absorb losses and maintain functionality after a disaster. Furthermore, social connectedness, reflected in strong interpersonal ties and mutual support within communities, is recognized as a crucial factor enabling a more effective response and faster recovery. Institutional sustainability denotes the capacity of governance systems and public policies to ensure continuity in prevention, coordination, and response. At the same time, psychological flexibility highlights the importance of individual and collective mental resilience in coping with stress and the long-term consequences of disasters. This comprehensive perspective facilitates a deeper understanding of the complexity of societal responses to disasters and provides a foundation for more systematic risk reduction strategies (Cutter, Ash, & Emrich, 2014). In the Serbian context, research findings indicate that the greatest weaknesses lie in institutional and social capacities for risk management, a fact particularly evident during the floods that affected the country in 2014 (Cvetković, Jakovljević, & Gačić, 2015). At the same time, studies have shown that a high level of social cohesion can significantly compensate for institutional shortcomings, as demonstrated in several local communities during the floods in Obrenovac, Šabac, and other affected municipalities (Cvetković, 2023).

The concept known as the "MODERSI Model" (Predictive Model of Community Disaster Resilience based on Social Identity Influences) was developed to more precisely examine and quantify the impact of social indicators on local community resilience under disaster conditions. This model emphasizes the importance of trust among community members, solidarity, and overall social cohesion as key mechanisms facilitating more effective recovery processes following emergencies. Additionally, the model recognizes religious beliefs and cultural values as relevant factors that can significantly shape risk perception and influence population behavior during disasters (Cvetković, 2023).

Cultural values, religious beliefs, and traditional norms constitute important factors shaping how communities perceive and respond to disasters. Within the Serbian socio-cultural context, elements of fatalism are often present as a cultural pattern, the perception of disasters as "acts of God", which may reduce motivation among the population to engage actively in preventive measures and systematic risk reduction activities. However, religious communities and traditional forms of collective action, such as communal labor ("moba") or charitable initiatives, can play a constructive role

in mobilizing local populations. The positive influence of religion is most commonly reflected in the promotion of solidarity, empathy, and mutual trust among individuals; however, unless this influence is integrated into institutional frameworks and supported through cooperation with formal structures, its scope and effectiveness remain limited (Cvetković, Romanić, & Beriša, 2023).

Demographic and socio-economic factors, such as age structure, education level, income, gender, and overall health status, play a crucial role in assessing community resilience to disasters. In Serbia, the population is characterized by an unfavorable age structure, accompanied by significant emigration of younger generations, leading to demographic decline and the weakening of the working-age and healthy population, particularly in smaller and rural areas. These trends directly reduce local communities' capacity to organize and respond effectively to crises. Women in rural areas often face limited access to information, education, and training programs in disaster risk management, further exacerbating gender inequalities in this domain. Nevertheless, numerous studies indicate that, despite these limitations, women demonstrate high levels of solidarity, practical engagement, and organizational capacity during crises, making them a significant and often under-recognized resource in disaster response and recovery (Cvetković & Šišović, 2024).

Local self-governments are key actors in the overall disaster risk management process, as they are closest to the population and best positioned to identify community-specific needs. However, their functioning is frequently constrained by multiple challenges, including a lack of financial and technical resources, insufficient personnel training in applying modern risk management approaches, and limited, inadequately institutionalized cooperation with other stakeholders at the local, regional, and national levels. For this reason, the systematic strengthening of institutional and operational capacities at the local level constitutes a fundamental prerequisite for enhancing community resilience, both in the prevention phase and during response and post-disaster recovery processes (Cvetković & Radonjić, 2022).

4. Development of integrated disaster management in Serbia

Disaster management can be understood as a distinct discipline and professional field that integrates scientific knowledge, the application of modern technologies, systematic planning, and diverse management methods. Its primary objective is to prevent and control extreme events that could

endanger human lives, cause mass injuries or fatalities, result in significant material losses, and severely disrupt the normal functioning of communities. In addition, this field encompasses activities aimed at mitigating the consequences of disasters and enabling faster societal recovery, thereby strengthening overall resilience and public safety (Phillips & Jenkins, 2010).

In contemporary literature and practice, it is widely accepted that two dominant paradigms of disaster management exist: the traditional and the modern. Their fundamental differences are reflected in organizational structures, approaches to information, operational models, management methods, and established priorities. The modern concept of disaster management is based on a flexible organizational structure and a multidimensional approach, enabling faster and more effective adaptation to unforeseen circumstances. A key feature of this approach is system adaptability, manifested in the continuous adjustment of plans and measures in response to evolving conditions and crisis dynamics. Within this framework, information is oriented toward real-time conditions and serves as the basis for timely, evidence-based decision-making. Furthermore, individuals are not viewed solely as passive recipients of protection but also as active resources whose knowledge, skills, and engagement contribute to collective disaster response. Particular emphasis is placed on the community as a whole, where collective resilience, cross-sectoral cooperation, and citizen participation become central factors in managing and mitigating the impacts of extreme events (Hromada & Lukáš, 2012; Savić, Stanković, & Anđelković, 2005).

In scientific and professional practice, specialized models are frequently developed to simplify extensive empirical data, anticipate future events, and guide appropriate responses. These models are designed to enable timely, coordinated, and optimal actions under crisis conditions. Through modeling, complex and dynamic phenomena are structured and simplified, enabling rapid and systematic real-time responses. At the same time, modeling enhances situational awareness among all stakeholders, enables the quantification of disaster intensity and scope, and establishes a unified basis for understanding the context and challenges faced by different actors. Moreover, such models serve not only to improve immediate response but also to support mitigation processes and ensure more organized and efficient post-disaster recovery (Cvetković, 2023).

When a disaster management model is precisely designed and clearly defined, it becomes the foundation for all subsequent activities in this field. Such a model not only formalizes and structures response systems but also ensures consistency in implementing various measures and procedures. Its role is to encompass all phases of disaster management, from prevention and preparedness to response, mitigation, and recovery, thereby creating a com-

prehensive framework that guides the actions of institutions, organizations, and individuals. "In professional literature, general disaster management models are identified as logical, integrated, causal, and others" (Asghar, Alahakoon, & Churilov, 2006, p. 31). The essence of the integrated model lies in clearly structured phases that enable disasters to be understood through strategic planning and systematic monitoring. This model effectively organizes diverse actors and their activities, directing them toward coordinated, comprehensive action in disaster contexts. Events and activities within this approach are highly interdependent, requiring a high level of coordination and cooperation.

The integrated disaster management model, developed during the 1980s, forms the basis of contemporary approaches in this field. It encompasses all four phases of disaster management—prevention, mitigation, response, and recovery, while placing particular emphasis on hazard identification and vulnerability assessment. In this way, the model supports decision-making across all key segments, from preventive measures and timely response to post-disaster recovery processes (Lettieri, Masella, & Radaelli, 2009). It enables a balanced allocation of societal responses in accordance with established priorities, such as saving human lives, protecting property, and preserving the environment, thereby ensuring the long-term sustainability of communities following crises. The fundamental principles underlying this process include systematicity, partnership among all stakeholders, consideration of uncertainty, geographical orientation, the use of reliable data, and the application of scientific methods (Simonovic, 2011). These principles may be proactive through mitigation, preparedness, and early warning activities or reactive, focusing on efficiency, cooperation, communication, and the achievement of defined objectives after disaster occurrence. Consequently, the integrated model, as a systemic approach, enables comprehensive risk assessment, prevention, mitigation, and preparedness, significantly reducing overall disaster risk. It integrates real-time information, mitigation strategies, and response measures while involving all relevant actors across all stages of disaster management, thereby ensuring the rational and efficient use of available resources (Henderson, 2004).

As with most disaster management frameworks, the integrated model is fundamentally based on "four phases: preparedness, mitigation, response, and recovery. The implementation of these phases aims at addressing problems and deficiencies within disaster management processes; preventing, mitigating, preparing for, and responding to disasters through strengthening local capacities and capabilities, particularly in risk management, which includes identification, management, and reduction of risks, as well as decision-making; and applying a multidimensional and multidisciplinary approach in coordinating all actors and resources to achieve an effective re-

sponse and optimal use of limited resources" (Henderson, 2004, p. 23). "Within these phases of integrated disaster management, five processes are incorporated that complete the disaster management cycle: forecasting, warning, emergency response, recovery, and reconstruction" (Moe & Pathranarakul, 2006, p. 399). Forecasting involves implementing measures to mitigate and ensure timely preparedness, thereby reducing disaster impacts. The warning phase refers to the timely dissemination of information to authorities and the population regarding impending risks, enabling the adoption of effective measures. Emergency response is provided during and immediately after the disaster and may vary in duration, ranging from immediate, short-term actions to prolonged interventions. Recovery, as the final phase, includes activities undertaken after a disaster to restore and improve living conditions, allowing the community to reach or surpass its pre-disaster level of functioning. "Reconstruction encompasses a set of activities that enable the development of systems better prepared for future disasters, ensuring more efficient responses" (Moe & Pathranarakul, 2006, p. 400).

To fully understand the integrated disaster management model, it is necessary to consider it in direct relation to risk management. The risk context is essential in the mitigation phase, as it enables the identification of key threats and system vulnerabilities. Processes of risk identification, analysis, and assessment constitute central elements of both mitigation and preparedness phases, providing the foundation for planning appropriate preventive measures and ensuring effective action in disaster conditions. "Risk treatment, or appropriate response to risk, is associated with the response phase to disaster consequences" (O'Brien, O'Keefe, Gadema, & Swords, 2010, p. 500).

Disaster risk reduction through the integrated model represents a systemic approach involving a comprehensive and coordinated process. It is grounded in administrative decision-making, institutionally structured through appropriate organizations, and supported by the knowledge and skills needed to implement established policies and strategies. In this way, society's overall capacities are mobilized to confront disasters and reduce their impacts effectively (Cvetković & Martinović, 2020). The integrated model has significantly shifted the approach to disaster management, from a focus primarily on post-disaster recovery and immediate response toward proactive risk management and impact mitigation. The emphasis is no longer solely on hazards and protection against them, but also on community vulnerability, alongside the development of early warning systems and mechanisms to reduce exposure. This principle has evolved to the point where disasters are increasingly considered at the local level, as an integral component of societal functioning and planning (Cyr, 2005).

Although the integrated disaster management model has become a widely accepted standard, certain deviations have persisted in practice, particularly regarding the harmonization of approaches and the codification of the theoretical framework. The key scientific and theoretical foundations established during its development primarily concern the definition of process phases, the identification of system actors and capacities for protection and rescue, and the typology and flow of information. Additionally, particular importance has been attributed to technologies that serve as critical resources in disaster response, enabling faster and more efficient action (Balanggoy, 2024).

The preparedness phase focuses on organizing disaster response by institutions, forces, and actors within the protection and rescue system, including the broader public. This process requires integrating civil organizations and individuals who, through participation in planning and appropriate training, acquire the capacity to contribute to a more effective and comprehensive response (Alexander, 2003). Plans developed within the system must ensure effective and efficient integrated disaster management. Of particular importance is the main plan, which provides a clear, structured framework within which institutions, organizations, and individuals can act in a coordinated, optimal manner (Wisner, 2004). Furthermore, plans must be tested in practice to assess their effectiveness and identify potential weaknesses that need to be addressed (Janković, Sakač, & Iričanin, 2023).

Disaster mitigation aims to reduce the vulnerability of social and environmental systems by lowering risk and preventing disasters. Mitigation actions are undertaken prior to the manifestation of hazards and are based on the analysis and assessment of potential threats. This approach includes preventive activities, asset protection, and measures implemented during disasters. Within this context, the most vulnerable areas are identified, organizational plans are developed to reduce exposure, and actions are taken to create safer living conditions. Simultaneously, data collection is conducted, damage is assessed, aid distribution is organized, and measures are implemented to mitigate remaining consequences. Mitigation measures may be structural, such as the construction of protective infrastructure, or non-structural, involving planning, education, and organizational activities aimed at reducing community exposure to hazards (Cvetković, Romanić, & Beriša, 2023). "The organization of disaster response aims to minimize human and material losses. The main components of response include evacuation, sheltering, protection, search and rescue, property protection, and damage control" (Henderson, 2004, p. 23). Effective coordination among all participants is essential in this phase, and specific measures are defined within protection and rescue plans (Cvetković & Miladinović, 2018). "Disaster recovery involves a set of measures that rehabilitate affected areas, often restoring them to the same or an improved condition compared to the pre-disaster state" (Simo-

novic, 2011, p. 31). During the recovery phase, institutions, organizations, and communities implement measures to restore normal living conditions as quickly as possible. The pace and extent of recovery depend on the scale of damage and society's actual capacity to respond. Unlike reconstruction, recovery primarily refers to short-term activities and the implementation of temporary solutions that enable community functioning until conditions for permanent restoration are established (Cvetković & Šišović, 2024).

5. Institutional and organizational aspects

One of the most critical aspects of the Integrated Disaster Management model is the presence of institutions in a country capable of providing comprehensive and effective responses during disasters. The establishment of institutions is defined by each country's legal framework, which not only specifies the institutions themselves but also their responsibilities and tasks in disaster situations (Lipovac & Cvetković, 2015). In addition to their existence and mutual organization, institutions must meet several appropriate criteria, which also serve as measures of their capacity to respond to disasters. Institutions must satisfy organizational criteria, meaning they must have appropriate units prepared to respond to disasters. These units must be adequately staffed with individuals who meet the necessary expertise criteria. Furthermore, personnel must be trained and prepared to work during disasters, with clear tasks and responsibilities assigned to the institution in which they operate. Finally, to effectively counter disasters, institutions must be equipped with the necessary material resources essential for disaster response (Cvetković, 2022).

In accordance with widely accepted principles for the Integrated Disaster Management method, the Integrated Disaster Risk Reduction System relies on international agreements and strategies, such as Yokohama, Hyogo, Sendai, and the International Strategy for Disaster Risk Reduction. These agreements recognize the institutions involved in the systemic integrated approach to disaster response (Jazić, 2015). Based on the legislation of the Republic of Serbia, it can be concluded that it aligns with international norms for Integrated Disaster Management, and that institutions can be divided into three main segments. These include state (national) institutions, which are further divided into state, regional, and local levels. Specifically, these include government bodies, provincial authorities, local self-government units, public services, educational institutions, research organizations, public agencies, etc. The second segment comprises the socio-economic sector, including the economy, entrepreneurs, and other legal entities. The third segment involves individuals and their organizations, such as groups, associations, and civil

society organizations (Cvetković & Šišović, 2024). The role or function of these institutions in the disaster risk reduction system is clearly regulated by state institutions through regulations within their jurisdiction. Notably, the Law on Disaster Risk Reduction and Emergency Management in the Republic of Serbia defines the Government's role as the highest institution responsible for establishing, developing, coordinating, managing, and organizing the integrated disaster risk reduction system. The Ministry of the Interior has been designated as the agency responsible for directly executing government tasks. Within it, a special unit has been formed: the Sector for Emergency Situations, which addresses disaster-related issues. According to the law, the Ministry of the Interior is assigned 28 responsibilities that complete the Integrated Disaster Risk Reduction System. The Ministry of Defense is the second ministry with a role to play in disaster response if primary institutions are unable to address the situation. Other ministries, together with other state administration bodies and autonomous provinces, have defined obligations and tasks that ensure the smooth functioning of primary agencies during a disaster. Local self-government units are especially crucial, as they play a primary role in disaster risk management. They are responsible for field-level tasks, including assessments and plans, and for organizing the execution of disaster response tasks, including securing financial resources.

The second segment of institutions is the socio-economic sector, which, under the law, includes economic entities and other legal persons. These entities are required to take measures within their jurisdiction according to the scale and nature of their activities. They are also obligated to provide their material resources or facilities to state authorities as needed and to provide relevant data to authorities to create necessary documents and databases. Special emphasis is placed on critical infrastructure operators, including entities engaged in specific activities considered critical or possessing critical infrastructure. These entities are particularly obligated to contribute resources during disasters to ensure the protection and rescue of people and assets (Cvetković, Filipović, & Gačić, 2019). Higher education institutions and scientific research organizations are also required to provide expert support and information relevant to disaster risk reduction and management.

Humanitarian organizations and associations with special significance, such as the Red Cross of Serbia, the Mountain Rescue Service, and the Firefighters' Union of Serbia, play a vital role in disaster situations. These organizations assist when necessary and, upon engagement, are designated as Civil Protection units. Other associations and organizations have the right to be informed and take an active role in matters related to disaster risk reduction. Their involvement can be proactive, particularly in improving the system or raising awareness of the issue. Citizens hold a special and unique status within the Integrated Disaster Management model. In addition to the

right to full and comprehensive information, citizens are obligated to train and prepare for protection and rescue, participate actively in Civil Protection or Military units, respond to calls from established bodies for participation in their actions, and follow prescribed safety and rescue measures. Moreover, citizens must provide material goods and real estate when needed. The ability of institutions to respond adequately to all disaster risk reduction demands and immediate disaster situations primarily depends on the personnel and forces actively engaged in these tasks (Tanasić & Cvetković, 2024).

The Ministry of the Interior, through the Sector for Emergency Situations, organizes response forces within its depth. The Sector, as the direct carrier of all activities, includes organizational units staffed with appropriate personnel. The Sector's components include the Directorate for Preventive Protection, the Directorate for Firefighting and Rescue Units, and the Directorate for Risk Management. Additionally, the Sector has independent departments focused on economic and material-technical support, as well as on legal and international affairs (Milošević, Cvjetković, & Baturan, 2024).

The law prescribes that the forces within the disaster risk reduction and emergency management system include emergency response staff, Civil Protection units, firefighting and rescue units, the 112 emergency service, the Serbian Armed Forces, the Red Cross of Serbia, the Mountain Rescue Service, the Firefighters' Union of Serbia, the Serbian Radio Amateur Federation, and various other entities. The institutional responsibility for training and preparing their members lies with the Ministry of the Interior, which operates regional and national training centers. For medical first-aid training, health institutions and the Red Cross of Serbia are responsible for citizens, while Civil Protection units are responsible for the units.

International cooperation between institutions within the Integrated Disaster Risk Reduction and Emergency Management System is a key segment for the system's effective and successful operation. This cooperation ensures the implementation of international agreements, data exchange, and direct collaboration with foreign and international bodies. A special aspect of international cooperation involves the receipt or dispatch of international aid, which may include specialized teams, equipment, and resources necessary for disaster response. Regardless of the system, the Red Cross of Serbia holds special rights and powers regarding international cooperation (Ivanov, 2024).

The integrated disaster risk reduction system is based on a multidisciplinary and intersectoral principle. Its foundation is proactivity, encompassing planning, preparation, and preventive measures to reduce disaster risk before it occurs. As a modern approach, it reflects a prevention culture and promotes awareness of risks and the need for preventive actions. This approach integrates all aspects of society, from individuals to the highest state author-

ities, highlighting the importance and relevance of every actor involved. The collaboration of numerous entities necessitates interoperability among them, enabling simultaneous functioning across sectors, international aid, local communities, and individuals (Öcal, 2021).

For the integrated system to be successfully organized and operational, certain principles have been aligned to support this. The first principle is that people are the priority. The second principle is inclusivity, which highlights the need to include all necessary entities coordinated by the disaster protection sector. The third principle emphasizes the need to consider both human and environmental hazards without exclusion. The fourth principle is prevention and risk reduction, which integrates these into development processes and strategies. The fifth principle concerns the application of knowledge, innovation, and education, including the latest technologies and innovations, as well as training and educating the population. The sixth principle concerns the establishment and involvement of partnerships among the public and private sectors, civil society, and the academic community. The seventh principle is based on risk management, founded on knowledge and information necessary to reduce risks and provide an adequate response. The eighth, final, and key principle is precautionary, referring to the adoption of all available preventive measures to reduce the risk of a disaster, even when there is no scientific certainty about whether or not a disaster will occur or its magnitude. This principle is applied across all levels of the Integrated Disaster Risk Reduction model, from policy, planning, and funding to training and implementation (United Nations Office for Disaster Risk Reduction, 2015).

In addition to these principles, the successful organization and implementation of Integrated Disaster Risk Reduction requires sound policy, intersectoral cooperation, and public-private partnerships. Policy defines and influences societal priorities. It defines decision-making processes and the allocation of available resources within a society. Additionally, policy can guide society toward cooperation and coordination across sectors, and influence the development of new capacities aimed at reducing disaster risks or enhancing disaster response. Generally, societies establish one or more central bodies to organize, coordinate, and guide the system in disaster risk reduction (Schneid & Collins, 2001).

The Republic of Serbia strives to implement all European Union directives in this field. These directives standardize practices across the entire community and contribute to interoperability in international cooperation. The European Union's disaster risk reduction policy is based on five priorities: prevention, preparation, response, recovery, and international cooperation. When it comes to intersectoral cooperation, it is not only the essence and

application of all the principles but also an indicator of success in combating disasters. Since both risks and disasters are multidimensional and affect a broad spectrum of societal elements, intersectoral cooperation is the foundation for all societal actions. A society's resilience depends on the cooperation of all institutions, or societal entities. Through this cooperation, not only is direct action and collaboration achieved, but it also enables the exchange of knowledge, experiences, and, above all, resources among sectors of society. This way, society can more effectively and efficiently move toward the desired resilience against disasters. Special attention should be given to intersectoral cooperation with state institutions, which should be the initiators of cooperation with the private and civil sectors or the establishment of partnership relations. This leads to public-private partnerships that create a new way of organizing the implementation of elements that contribute to risk reduction. The state and public sectors often act as investors. In contrast, the private, scientific, or local sectors are the main drivers of projects that reduce risk, as they often have all other resources available, except for financial means (Cvetković V, 2023).

In the Republic of Serbia, the Law formulates these principles as guiding priorities: integrated action and intersectoral cooperation, the primary role of local communities, the gradual use of forces and resources, equality, joint participation, solidarity, and public information. The disaster risk reduction system is organizationally integrated into the security system, which uniquely and comprehensively manages and organizes all relevant entities. From a political perspective, the Strategy for Disaster Risk Reduction and Emergency Management is essential for setting policy and guiding government bodies and sectors in the country, directing the engagement of capacities. It also guides the development of the regulatory and institutional framework. The National Platform in Serbia is represented by the Republic Emergency Situations Headquarters, which adopts an intersectoral approach to disaster response and risk reduction. Disaster risk assessments are conducted according to the vertical principle, meaning that institutions and entities, starting from the state level down to the lowest levels, are responsible for conducting such assessments in compliance with the law. After the risk assessment, the necessary Disaster Risk Reduction Plans are created, in accordance with the Law, which outlines organizational measures for the entire risk reduction process. These plans also have a vertical structure, being developed from the national level down to the local level. In addition to these preventive plans, the Law also prescribes the development of protection plans. The protection and rescue plan provides an organizational framework for measures and activities to prevent and mitigate the consequences of disasters. It consists of five key sections: early warning and preparedness, mobilization and activation, protection and rescue, civil protection measures, and the use of

protection and rescue forces and entities. The external protection plan for large accidents refers to local government units with complexes containing hazardous substances. Following assessments and plans, the state also regulates specific registers that cover all disaster risks and define risk zones (Cvetković, Filipović, & Gačić, 2019).

A crucial element in organizing the Integrated Disaster Risk Reduction model is also the organization of the forces of the disaster risk reduction system entities. The forces of these entities form the basis for integrated actions to reduce risks and combat disasters. To monitor and coordinate activities aimed at disaster risk reduction, and to manage and coordinate activities during disasters, the state, according to the Law, establishes the Emergency Situations Headquarters. These Headquarters are formed from the national level down to the municipal level. The Headquarters may form expert-operational teams as needed, given that the command structure comprises political figures appointed to specific positions. Regardless of their level, Headquarters have 13 defined competencies, which pertain to organizing the entire process of risk reduction or disaster response. Particularly important are the powers that have imperative character in relation to specific institutions or entities. In addition to the core competencies, depending on the level of the Emergency Situations Headquarters, each has a specific range of authority, with the highest level of authority granted to the Republic Emergency Situations Headquarters. The organization of the Emergency Situations Headquarters comprises three phases: the preventive phase, the operational phase, and the recovery phase. In the preventive phase, the capabilities and readiness to respond to risks and threats are assessed. The operational phase is the most demanding, involving the organization, leadership, and coordination of the entities and forces of the risk reduction and emergency management system. The recovery phase involves planning, organizing, leading, and coordinating activities to enable the recovery, reconstruction, and rehabilitation of the affected community. The expert-operational teams formed by the Headquarters are responsible for specialized tasks requiring the involvement of skilled and competent individuals and entities with the necessary capacities (Milenkovic, 2025).

Civil protection is part of the forces within the disaster risk reduction and response system. Civil protection involves the personal and mutual protection of individuals, as well as measures, commissioners, deputy commissioners, and civil protection units. Personal and mutual protection is a form of citizen organization. Civil protection measures are divided into 13 sections, including: warning, evacuation, sheltering, care, CBRN protection, protection from technological accidents, rescue from debris, flood protection, rescue in inaccessible areas, fire and explosion protection, protection from unexploded ordnance, first aid, and terrain sanitation. For all these

measures, organizational principles have been defined to specify how system forces must act during implementation. Commissioners and deputy commissioners are considered members of civil protection and are responsible for coordinating the engagement of system forces during risk reduction and disaster response. Civil protection units are the equipped and trained operational forces of the system entities that execute civil protection measures. These units are divided into general-purpose units and specialized civil protection units. The Ministry of the Interior forms specialized units, while local governments form general-purpose and warning units. To enhance the capacity and capabilities of civil protection units, an active civil protection reserve can be formed in accordance with the regulations. Units are formed by the relevant authorities in cooperation with the Ministry of Defense to ensure record alignment. Specialized units are formed for fire-fighting, water and underwater rescue, medical care, first aid, CBRN protection, debris rescue, and warning. Civil protection units can be engaged independently or in combination with other forces in situations such as the declaration of an emergency, extraordinary events, imminent natural disasters, or technological accidents, and during a state of emergency or war, for training and drills. General-purpose units are engaged in other tasks related to risk reduction and, where possible, mitigating the consequences of disasters.

Firefighting-rescue units, in one part, represent the only professional and continuously engaged components of the disaster risk reduction and emergency management system. This component comprises professional, permanent employees within the Ministry of the Interior's Emergency Situations Sector. In general, fire-fighting units can be professional or volunteer-based. Professional units are divided into: firefighting-rescue units of the Ministry of the Interior, firefighting units of the Ministry of Defense, firefighting units of local governments, and firefighting units of legal entities. Legal entities and associations can form volunteer firefighting units. Firefighting-rescue units are territorially organized and prepared to respond in operations aimed at eliminating disaster occurrences, rescuing endangered populations and material goods, and removing disaster consequences. The organization of professional firefighting units within the system is defined in the Law. It consists of 13 sections that generally pertain to the imperative powers of authorized commanders, who, for their engagement, have certain rights and capabilities, mainly concerning the disposal and use of material resources and the directing of other individuals during direct engagement processes (Emergency Situations Sector, Serbia, 2025).

6. Main actors involved

The concept of resilience encompasses specific actors, first and foremost, individuals, various social groups, and the community as a whole. All of these actors draw on the resources available to them, both individual and collective, in efforts to overcome chronic or sudden threats to life. In doing so, they not only seek pathways for adaptation and recovery but also identify opportunities for self-improvement, transformation, and social development under crisis conditions, thereby linking resilience directly to processes of empowerment and progress (Pavićević, Bulatović, & Ilijić, 2019).

A complex interplay of internal and external factors conditions individual resilience. Internal factors include the person's physical and psychological characteristics, which, to a certain extent, make the individual more resistant to the impacts of disasters (Cvetković, 2020). An empirical study conducted in Australia sought to identify the traits of "resilient people" living in rural areas. Respondents highlighted resourcefulness, acceptance of change, a positive outlook, adaptability and flexibility, innovativeness, creativity, goal-setting or a future vision, readiness for a new start, persistence, and "grit," diligent work, the use of humor as a defense mechanism, as well as hope and faith. It was found that, as life experience and age increase, individuals are more likely to adopt and develop these traits, thereby strengthening their personal resilience (Maclean, Cuthill, & Ross, 2013). Conversely, excessive fear or denial of disaster threats can yield adverse consequences that directly reduce a person's readiness for preventive action (Hegney et al., 2007; Mavrodieva, Budiarti, Yu, Pasha, & Shaw, 2019).

Beyond identifying traits associated with "resilient individuals," a sizable body of research examines factors that increase resilience itself. Findings indicate that people who have previously experienced a disaster or accident, as well as those with greater knowledge of and information about risks, are better able to prepare, recover, and mitigate the impacts of crises. Such individuals also exhibit a lower likelihood of depression or post-traumatic stress disorder (Maduz, Prior, Roth, & Käser, 2019). Research further points to the concentration of economic and financial resources in urban areas, the unequal distribution of natural assets, and structural inequalities in urban development. Urban residents enjoy a greater degree of protection than those in rural regions. Insufficient or ineffective resilience at one social level can have negative repercussions for other levels, destabilizing the broader system (Boon, Cottrell, King, Stevenson, & Millar, 2012).

A central principle underlying strategies that enable individuals and groups to cope with unpredictable and ever-changing situations is captured by the concept of habitus. Habitus is defined as a set of internalized skills and

dispositions that guide behavior in specific social situations, often without conscious planning or deliberation. In other words, it enables individuals to make the "right move" intuitively within a given context. As such, habitus functions as a form of social inculcation through which a group systematically orients its members, fostering reflexes that contribute to faster and more effective responses in crises, thereby reducing negative consequences and elevating collective resilience (Bourdieu, 1990). Social resilience refers to the capacity of diverse societal actors, individuals, groups, communities, and organizations to respond adequately and successfully to problems and crises. It includes the composite set of collective capabilities that constitute social resilience, as well as recovery capacities, and encompasses all actions undertaken to overcome disasters and mitigate their impacts (Maguire & Hagan, 2007; Keck & Sakdapolrak, 2013; Guo & Kapucu, 2019).

Creativity within a community, as a distinct dimension of social resilience, is reflected in the ability to implement an effective and efficient recovery process across social levels, ultimately restoring functioning to pre-crisis conditions. At the same time, community capacity represents the essential power to overcome the consequences of disasters and to transform negative experiences into opportunities to strengthen cohesion (Maguire & Hagan, 2007). A society that can attain such functioning, ensuring a healthy, safe, and fulfilling life for its members, may be regarded as genuinely successful (Hall & Lamont, 2013).

Globally, resilience to natural and climate-related hazards has attracted considerable attention since the early twenty-first century. Multiple United Nations–sponsored conferences mapped and defined mechanisms for strengthening resilience. They also specified expected outcomes and set goals, including enhancing and empowering institutions, tools, and capabilities across sectors, with particular emphasis on the local community. In addition, these efforts highlighted the use of scientific advances and the adoption of innovations to cultivate a culture of safety and resilience across all social strata (Cvetković, Filipović, & Gačić, 2018).

Social resilience can be improved by strengthening economic indicators, such as income growth and higher living standards, as well as by enhancing communication mechanisms, increasing population preparedness for crises, building interpersonal trust, and improving the education system and access to protective resources. Collectively, these dimensions foster communities capable of acting preventively, recovering more rapidly, and developing a culture of resilience as a lasting social value (Cutter, 2024).

7. Key research findings in Serbia

Recent empirical studies on disaster resilience in Serbia consistently depict a system that is formally established yet unevenly implemented. While Serbia has developed institutional and normative foundations for disaster risk reduction, resilience remains moderate to low, territorially inconsistent, and highly contingent upon institutional performance, local capacities, social capital, trust, and citizens' risk perceptions. Collectively, these studies demonstrate that disaster resilience in Serbia cannot be fully understood through legal frameworks or administrative structures alone. Instead, it must be analyzed as a multidimensional and socially embedded process shaped by interactions among institutions, communities, and individuals (Cvetković et al., 2025; Cvetković, Milenković, & Lukić, 2026; Cvetković et al., 2026).

A key recurring finding is the persistent gap between formal institutional arrangements and their practical implementation at the local level. Research indicates that local self-government units typically possess basic organizational structures, planning documents, communication mechanisms, and prior disaster experience. Nevertheless, these components often remain procedural and are insufficiently operationalized in daily preparedness and response activities. Constraints such as limited financial resources, uneven technical capacities, inadequate personnel training, weak intersectoral coordination, and discontinuity in preparedness efforts hinder the transformation of formal responsibilities into effective resilience-building measures. Thus, institutional resilience in Serbia is determined not solely by the presence of laws, plans, and authorities, but also by the extent to which these arrangements are implemented, tested, localized, and adequately resourced (Cvetković et al., 2025; Cvetković, Milenković, & Lukić, 2026).

At the citizen level, empirical evidence reveals fragmented preparedness and an underdeveloped culture of prevention. Citizens' knowledge and readiness are more frequently shaped by prior disaster experience than by systematic education, organized training, participation in drills, or familiarity with emergency protocols. While past events, particularly floods, have increased practical awareness in certain communities, such experiences do not necessarily foster sustained preparedness or long-term preventive behavior. Generational differences are notable: older citizens often exhibit greater awareness due to direct experience, whereas younger groups may be less familiar with disaster risks and response procedures. As a result, resilience tends to be reactive rather than preventive, activated primarily during or after disasters rather than being continuously developed through education, planning, and community engagement (Cvetković et al., 2025; Cvetković et al., 2026).

The reviewed studies further demonstrate that social capital and informal support networks constitute significant sources of resilience in Serbia. Family ties, neighborly assistance, local solidarity, and community-based support often compensate for institutional shortcomings during crises. These informal mechanisms enhance immediate coping capacity and facilitate short-term recovery, particularly in communities where formal responses are perceived as slow or insufficiently effective. However, this dynamic reveals a broader resilience paradox: while Serbian communities may exhibit strong informal adaptive capacities, these are not consistently integrated with formal disaster risk reduction mechanisms. Informal solidarity can support response and recovery, but it cannot substitute for institutional preparedness, professional expertise, reliable early warning systems, or systematic risk reduction policies. Consequently, social capital should be regarded as a valuable yet incomplete resilience resource that requires integration with institutional planning and local governance (Cvetković et al., 2025; Cvetković et al., 2026).

Institutional trust and communication emerge as additional critical factors. Citizens' assessments of resilience are significantly shaped by their confidence in public authorities, early warning systems, evacuation planning, administrative efficiency, and the perceived ability of institutions to provide timely and reliable support. In contexts with low trust, citizens tend to assess resilience more critically, even when formal institutional capacities are present. This underscores that resilience depends not only on infrastructure, equipment, legal competence, or planning documents, but also on credibility, transparency, communication, and perceived institutional reliability. A lack of trust in warnings, plans, or authorities can diminish citizens' willingness to follow instructions and participate in preparedness activities. Therefore, strengthening resilience in Serbia necessitates not only technical and organizational enhancements, but also ongoing risk communication, public participation, transparent decision-making, and trust-building between institutions and communities (Cvetković et al., 2025; Cvetković et al., 2026).

Empirical evidence also reveals that resilience in Serbia is both territorially and socially uneven. Regional disparities manifest in economic development, infrastructure, institutional resources, environmental exposure, and local preparedness. More developed and urbanized regions generally exhibit stronger structural capacities, whereas less developed regions often experience greater vulnerability due to weaker infrastructure, limited financial capacity, and fewer institutional resources. However, higher socio-economic development does not guarantee resilience across all dimensions, as urbanized and economically robust areas may also encounter environmental pressures, technological hazards, and complex governance challenges. These findings confirm that resilience is a multidimensional phenomenon,

and regional differences must be analyzed using a combination of social, institutional, infrastructural, economic, and environmental indicators (Cvetković, Milenković, & Lukić, 2026).

Socio-demographic factors further influence perceptions and capacities for resilience. Variables such as age, gender, education, income, prior disaster experience, and risk awareness shape how citizens interpret hazards and assess their own preparedness and community capacities. Older citizens and women may report more critical perceptions of resilience, potentially reflecting heightened risk awareness or perceived vulnerability. Individuals with higher education or greater economic status may exhibit greater skepticism toward institutional performance, possibly due to heightened awareness of systemic deficiencies and heightened expectations of public authorities. These findings suggest that perceptions of resilience are shaped not only by available resources but also by awareness, expectations, social position, and lived experience (Cvetković et al., 2026).

The reviewed findings carry significant implications for resilience measurement and policy development. While structural indicators such as infrastructure, economic capacity, and institutional organization are essential for assessing resilience, they are insufficient in isolation. These must be supplemented with indicators addressing citizen preparedness, institutional trust, risk communication, social capital, demographic vulnerability, regional disparities, and hazard-specific perceptions. The application of adapted BRIC and DROP-based methodologies offers a robust foundation for measuring spatial and structural dimensions of resilience, whereas perception-based research provides valuable insights into how resilience is experienced and evaluated by citizens and institutional actors. Integrating these approaches facilitates a more comprehensive understanding of resilience as both an objective and subjective phenomenon (Cvetković, Milenković, & Lukić, 2026; Cvetković et al., 2026).

In summary, empirical evidence indicates that disaster resilience in Serbia remains in a developmental stage. Further progress requires more effective implementation of existing normative frameworks, enhanced local capacities, improved intersectoral coordination, systematic citizen education, increased institutional transparency, and the integration of informal community strengths into formal disaster risk reduction mechanisms. Accordingly, resilience should be conceptualized not as a static institutional condition, but as an ongoing process involving continuous interaction among institutions, communities, and individuals (Cvetković et al., 2025; Cvetković, Milenković, & Lukić, 2026; Cvetković et al., 2026).

8. Conclusion

This paper has analyzed disaster resilience in the Republic of Serbia through a multidisciplinary lens, with particular emphasis on the role and perception of key resilience actors, including institutions, professionals, and citizens. The analysis was explicitly grounded in the empirical findings presented in the section "Key Research Findings in Serbia," which served as the primary evidence base for understanding how resilience is structured and experienced in practice.

The synthesized findings confirm that disaster resilience in Serbia remains uneven, fragmented, and context-dependent. Despite the existence of a formally developed Integrated Disaster Risk Reduction System, there is a persistent discrepancy between normative frameworks and their practical implementation. Institutional capacities are often characterized by limited coordination, uneven operational efficiency, and insufficient localization of disaster risk management functions. At the same time, citizens' preparedness levels remain relatively low and are predominantly shaped by personal experience rather than systematic education or institutional engagement.

A key conclusion emerging from the empirical findings is that resilience in Serbia cannot be reduced to infrastructural or institutional indicators alone. Instead, it represents a complex interaction between formal governance structures, informal social networks, trust in institutions, and individual perceptions shaped by socio-demographic and experiential factors. In many cases, informal mechanisms such as family support and local solidarity partially compensate for institutional weaknesses, yet they remain insufficient for ensuring sustainable, system-wide resilience.

The analysis further confirms that perceptions of resilience vary significantly across population groups and hazard types, reinforcing the conclusion that resilience is not a homogeneous category but a socially differentiated construct. Trust, risk perception, and prior disaster experience emerge as decisive factors influencing both individual and collective preparedness. These findings underscore the importance of integrating psychological, social, and cultural dimensions into resilience-building strategies, alongside technical and institutional reforms.

Overall, the study demonstrates that strengthening disaster resilience in Serbia requires a shift from a predominantly formal, reactive system to a more integrated, participatory, and prevention-oriented model. This includes enhancing the capacities of local self-government units, improving intersectoral coordination, strengthening public trust, and systematically developing a culture of preparedness through education and training. In the long term, resilience can only be achieved through the coherent integration

of institutional efficiency, social cohesion, and informed citizen participation. In conclusion, the empirical evidence presented in this study clearly indicates that disaster resilience in Serbia is still in a developmental phase. Addressing existing gaps between policy and practice, as well as between institutional and community-level capacities, is essential for building a more robust, adaptive, and sustainable disaster risk reduction system.

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