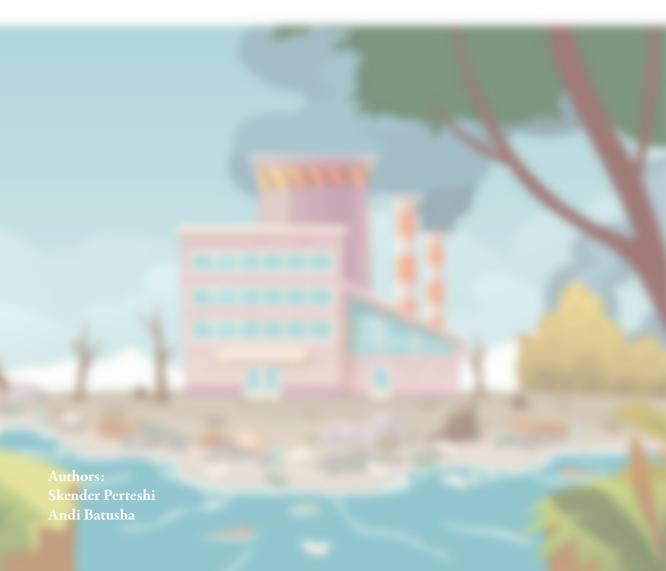


Research report

KOSOVO ON THE FRONTLINE WITH THE CONSEQUENCES OF CLIMATE CHANGE

Institutional capacities





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About Institute PREVENT

Established in 2024, the Institute for Security and Resilience - PREVENT aims for a Kosovo where security, stability and the rule of law are maintained through innovative and collaborative approaches. By promoting resilience and inclusiveness, PREVENT strives to create a society where individuals, communities and institutions work together to address complex security challenges. The mission of the PREVENT Institute is to build sustainable communities by providing comprehensive support and expertise in public policy development, advocacy, and project implementation.

PREVENT focuses on empowering marginalized groups, especially youth, through evidence-based research, capacity-building initiatives, and providing expertise by promoting sustainable development and actively countering violent extremism.



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Executive Summary



Climate change poses an urgent and complex challenge for Kosovo, affecting not only the environment, but also public safety, food and water security, public health, the economy, and social stability. The increasing frequency of floods, droughts, extreme storms and other phenomena related to climate change is testing social resilience and the capabilities of institutions to prevent and respond effectively.

This research paper, conducted by the Institute for Security and Resilience – PREVENT and funded by the Open Society Foundations - Western Balkans (OSF-WB), analyzes Kosovo's institutional capacities to address climate challenges. The report assesses the preparedness of government and local institutions to design, implement and coordinate climate-related disaster response policies. The analysis involves key institutions such as the Ministry of Internal Affairs, the Emergency Management Agency, the Kosovo Police, the Ministry of Health, the Kosovo Security Force and municipalities.

Key findings

Kosovo is facing a serious lack of institutional capacities in managing climate risks, especially in emergency response, coordination between central and local institutions, as well as in financial and technical resources.

Kosovo is highly vulnerable to frequent floods, prolonged droughts, water crisis, forest fires and extreme temperatures, which pose threats food security, public health and economic stability.

Although Kosovo has adopted climate strategies such as the Climate Change Strategy (2019-2028) and the Law on Climate Change (2024), implementation remains weak, partly due to weak monitoring mechanisms, inadequate budgeting, and lack of interinstitutional coordination.

The emergency system in Kosovo is fragile; municipalities lack sufficient preparation and risk assessments.

Kosovo is limited in receiving assistance from international organizations/mechanisms; Kosovo is not part of the EU Civil Protection Mechanism (UCPM) due to political constraints, but has in place cooperation agreements with Albania, North Macedonia, Croatia, Montenegro and other countries for coordination in emergency cases.

The lack of citizen engagement and awareness programs limits Kosovo's ability to develop a sustainable community resilience strategy to climate disasters.

Introduction



Climate change is one of the most urgent and complex challenges of our time, directly impacting not only the environment, but also public safety, water and food security, public health, the economy, and social stability. Frequent floods, droughts, extreme storms and other phenomena related to climate change are testing not only the resilience of ecosystems, but also the capabilities of institutions to prevent and respond in a timely manner to their consequences.

Climate change is no longer simply seen as as environmental protection issue, but a major security challenge that affects the stability of states and communities. Deteriorating climate conditions can escalate existing conflicts, create new sources of tension, and increase insecurity for vulnerable communities. Countries with limited natural resources and weak infrastructure are more exposed to the effects of the climate crisis, which can lead to massive population displacement, increased food insecurity, and worsening socio-economic conditions.

Kosovo is not immune to these challenges. On the contrary, due to fragile infrastructure, lack of a clear vision, and limited institutional capacities, the country faces severe consequences from climate change. This report analyzes the impact of the climate crisis in Kosovo, institutional capacities to address climate challenges, and strategies for strengthening institutional and civil resilience towards these risks.

Some of the main threats facing society and institutions in Kosovo include frequent floods, especially in the northern and western regions of the country, which have recently caused extensive damage to infrastructure, agriculture and households, challenging the capacities of institutions for emergency management. Droughts are becoming more common, affecting the provision of drinking water, crop yields and endangering food security and public health, while farmers often lack the necessary support to cope with economic harms. The water supply crisis in some areas of Kosovo is worsening due to droughts, river pollution, and a lack of adequate investment

in the maintenance and expansion of water supply infrastructure and wastewater treatment systems. These are some of the major challenges and growing risks that arise as a result of climate change and that require the proper attention of institutions to cope with them as efficiently as possible.

In this context, a sustainable climate risk management system requires well-prepared institutional capacities, both at the central and local levels. These capacities include not only the legal, strategic and policy framework, but also the human, financial and technical resources that enable institutions to carry out their duties effectively, as well as to cope with the risks arising from climate change.

This report aims to analyze the capacities of institutions in Kosovo that are responsible for preventing and responding to the consequences of climate change. The main institutions that will be tackled include the capacities of the Ministry of Internal Affairs, the Emergency Management Agency, the Kosovo Police, the Ministry of Defense, the Kosovo Security Force, the local level of government, as well as other institutions that have a role and responsibility for addressing climate change or coping with the consequences that these changes are bringing.

Through an empirical and analytical approach, the report will examine the main challenges facing these institutions, including the lack of financial and human resources, inter-institutional coordination, technical capacity, and the implementation of existing policies. Another important aspect of the analysis will be the assessment of the interaction between different levels of government (central and local) and other relevant stakeholders. The report also provides an overview of international standards and obligations stemming from Kosovo's aspirations to join the EU and the UN.

In conclusion, the report will provide recommendations aimed at addressing existing gaps and improving institutional policies and practices for a more effective and sustainable solution to climate crises.

1. Climate change as a security issue



Research on climate change and its impact on security issues is still limited, especially in the academic field, respectively the stress of this phenomenon is relatively insufficient. Based on assessments conducted so far, especially by international organizations such as NATO, it is emphasized that the Western Balkans region is increasingly recognized as a region vulnerable to climate risks. These risks include increased flooding, heat waves, the spread of wildfires, and water resource challenges, which could compound existing sociopolitical and security tensions in the region.

The Climate Change and Security Impact Assessment Report 2024³ emphasizes that climate change is no longer just an environmental issue, but a complex challenge that directly impacts international security. In this context, it is emphasized that climate change not only brings new risks, such as more frequent and severe natural disasters, but also exacerbates existing threats, including conflicts over natural resources, mass migration, and economic destabilization in sensitive areas, such as Kosovo and the Balkans. These dynamics require a comprehensive and collaborative approach from NATO member states and international partners.

This report emphasizes that Kosovo should work closely with its local and international partners, such as NATO and other international organizations responsible for climate issues, in order to best address the security challenges that arise as a result of climate change. Squarely for this reason, NATO is integrating climate change into its strategic operational and

security plans, including military operations, in order to be as efficient and secure as possible in addressing the security challenges resulting from climate.

The measures that NATO and other developed countries are taking include strengthening infrastructure, developing rapid response capabilities, and improving international cooperation to address these threats. These measures represent a significant shift in the way NATO now conceives of security and sustainability in its work and operations around the world, ensuring that the Alliance is ready to face the challenges of the 21st century. As a result, climate change is no longer seen simply a challenge of the future, but a present reality that requires immediate and coordinated action.

In line with NATO recommendations and its security reforms, the measures that Kosovo should take to address the security challenges resulting from climate change should also be reflected. Therefore, the challenges arising from climate change must be well integrated into the country's legislation, as well as security policies and strategies, including policies that address human and public security challenges, in order to best tackle the impact that climate is having on the daily life of the community. Furthermore, NATO rules and standards to address the security challenges resulting from climate change should also be integrated into the structure, work and operational plans of the country's security institutions, such as the Kosovo Security Force (KSF) and the EMA.

¹ Barnett, J. (2014). Climate and security: evidence, emerging risks, and a new agenda. Climate Change, available at: https://link.springer.com/article/10.1007/s10584-014-1074-7

See also Rothe, D. (2021). Climate change and security research: Conflict, securitisation and human agency. PLOS Climate; available at https://journals.plos.org/climate/article?id=10.1371/journal.pclm.0000072

² NATO. (2024). Climate Change and Security Impact Assessment Report 2024. available at https://www.nato.int/nato_static_fl2014/assets/pdf/2024/7/pdf/240709-Climate-Security-Impact.pdf

³ NATO, Climate Change and Security Impact Assessment, 2024, https://www.nato.int/nato-static-fl2014/assets/pdf/2024/7/pdf/240709-Climate-Security-Impact.pdf

2. Raising institutional and civic awareness about climate change

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In the Western Balkans region, citizens and security institutions, both at local and central levels, often lack adequate information regarding climate, security and the consequences of climate change. This information is essential, as effective measures cannot be taken without a full understanding of the impacts that climate change may have on stability and security in the country. Likewise, citizens of Kosovo and the region are often victims of fake news and disinformation. According to the fact-checking platform in Kosovo -Hybrid, around 60 to 80 news items with inaccurate content are discovered every month. Inaccurate information as such often creates further uncertainty and confusion that makes it more difficult to understand the consequences of climate change and their impact on security issues.

In this regard, it is necessary to strengthen information and awareness mechanisms on climate change and its potential impact. This will enable citizens and institutions to be better prepared and able to respond to the challenges that may arise as a result of these changes. To effectively address the impacts of climate change in Kosovo, it is essential to raise awareness among citizens and institutions, especially professionals working in the public sector. A study published in the journal "Sustainability" highlights that widespread public awareness of the consequences of climate change has great potential to create a powerful momentum that can contribute to the development of policies and practices that address these challenges.

To address climate change effectively, it is necessary to develop comprehensive and multifaceted strategies. This can be accomplished through organizing educational campaigns to increase public awareness, training public officials on integrating adaptation measures into their policies, and encouraging community engagement in decision-making processes. The European Environment Agency and the UNFCCC have provided practical guidance on these aspects. Information and awareness remain key elements for optimizing preventive and response capacities to climate change.

⁴ Bllaca, E. (2023, September 21). Hybrid: In Kosovo, 60 to 80 news articles per month contain misinformation. Voice of America. Available at https://www.zeriamerikes.com/a/7278366.html

⁵ Rahimi M. Public Awareness: What Climate Change Scientists Should Consider. Sustainability; 2020; available: https://doi.org/10.3390/su12208369

3. Local legislation and policies to address climate change

Faced with the global challenges of climate change and its consequences at the national level, Kosovo has taken important steps to integrate environmental and security issues into its development policy. However, there is still a need for improvements in aligning the country's strategic and legislative framework with international climate goals and standards, particularly those set by the EU. Among the most important actions taken by Kosovo to address these challenges is the creation of an institutional architecture for managing the consequences of climate change, which also relates to important aspects of national security. The main document that has guided this process is the Climate Change Strategy 2019-2028,6 which, together with the Action Plan approved in 2018 by the Government of the Republic of Kosovo, 7 presents the framework for reducing greenhouse gas emissions and adapting to climate change.

The implementation of the Climate Change Strategy has led to the development of specific laws and action plans. In particular, the Law on Climate Change 20248 was adopted to define Kosovo's mitigation and adaptation measures, ensuring compliance with binding international agreements and facilitating the transition to a low-carbon economy. This document is designed to complement the Energy Strategy of the Republic of Kosovo 2022-20319 by creating a unified approach to sustainable development. By integrating climate concerns into energy planning and environmental conservation efforts, Kosovo aims to achieve balanced and sustainable socio-economic

growth.10

In addition to the Climate Change Strategy, several other strategic documents have been adopted, such as the Kosovo Security Strategy 2022-2027¹¹ which contains specific measures to minimize risks and strengthen institutional mechanisms for managing climate consequences, and the National Development Strategy 2030¹² which includes similar measures to address these issues.

A particularly important document for addressing the risks arising from climate change is the State Strategy for Reducing the Risk from Natural Disasters and Other Disasters 2023-2028¹³. This document aims to reduce disaster risk at the national level, by planning and implementing measures by central and local institutions. Disaster management issues are also regulated in the National Response Plan¹⁴, which provides a coordination structure for dealing with emergency incidents, such as pandemics, wildfires, floods, and other extreme climate-induced phenomena.

Despite progress in recent years, the EU Kosovo Report 2024 notes that Kosovo is still in the initial stages of alignment with the EU acquis on environment

⁶ Official Gazette, Climate Change Strategy 2019-2028 and Climate Change Action Plan 2019-2021 (Government of the Republic of Kosovo), 15 June 2020, available here: https://gzk.rks-gov.net/ActDetail.aspx?ActID=29356

⁷ Ibid

⁸ Official Gazette, Law No. 08/L-250 on Climate Change, 5 January 2024: https://gzk.rks-gov.net/ActDetail.aspx?ActID=85112

⁹ Government of the Republic of Kosovo, Energy Strategy of the Republic of Kosovo 2022-2031: https://kryeministri.rks-gov.net/wp-content/up-loads/2023/03/Strategjia-e-Energijse-e-Republikes-se-Kosoves-2022-2031.pdf

¹⁰ Ibid.

¹¹ Government of the Republic of Kosovo, Kosovo Security Strategy: https://kryeministri.rks-gov.net/wp-content/uploads/2022/10/1-Strategjia-e-Sigurise-e-Kosoves-ALB.pdf

¹² Government of the Republic of Kosovo, National Development Strategy and Plan 2030, March 2030: https://kryeministri.rks-gov.net/wp-content/up-loads/2023/03/06032023-Strategjia-dhe-Plani-Kombetare-per-Zhvillim-2030.pdf

¹³ Government of the Republic of Kosovo, The State Strategy for Reducing Risk from Natural Disaster and Other Disasters 2023-2028, 2022, available here: https://ame.rks-gov.net/vleresimilRrezikshmerise/al-sq/STRATEGJIA%20 SHTET%C3%8BRORE%20P%C3%8BR%20ZVOG%C3%8BLIMIN%20 E%20RREZIKUT%20NGA%20FATKEQ%C3%8BSIT%C3%8B%20 NATYRORE%20DHE%20FATKEQ%C3%8BSIT%C3%8B%20TJERA%20 2023%20-%202028.pdf

¹⁴ Government of the Republic of Kosovo, National Response Plan, 2023, available here: https://mpbrks-gov.net/Uploads/EditorFiles/TextHtml/1118/Plani%201%20Reagimit%20Komb%C3%ABtar%201%20miratuar.pdf

and climate change. The capacities of environmental institutions, both at central and local level, remain extremely limited, seriously hindering progress in this sector. Moreover, structural reforms continue to be delayed due to a lack of political commitment and insufficient funding. These shortcomings not only hinder the implementation of adopted laws and strategies, but also create an environment where environmental degradation continues without effective punishment, thereby worsening/escalating the negative effects in the event of floods, droughts, storms and other natural disasters.

The biggest improvement in this area is the adoption of the Climate Change Law in December 2023, but it

still lacks a clear target for carbon neutrality by 2050. Likewise, Kosovo should adopt the National Energy and Climate Plan (NECP) as soon as possible and implement greenhouse gas reporting and verification mechanisms. ¹⁵ These steps are essential to ensure alignment with EU climate policy and to pave the way for carbon pricing mechanisms, which could help decarbonize Kosovo's energy sector. However, implementation of climate adaptation and mitigation measures remains insufficient, while public awareness of climate issues is still limited.

¹⁵ At the time of writing this report, the status of the NECP was still available for public consultation, December 2024. available here: https://konsultimetrks-gov.net/viewConsultphp?ConsultationID=42695

4. Threats and Risks of Climate Change in Kosovo



4.1 Present Risks in the territory of the Republic of Kosovo

Although relatively small in size, the Republic of Kosovo is exposed to many natural hazards due to its predominantly mountainous territory and the presence of two plains. Kosovo is exposed to several geological and hydrometeorological hazards, such as floods, heavy snowfalls, droughts, forest fires and earthquakes, which affect the country's diverse terrain. Mountainous areas are affected by floods

and landslides, while climate change is increasing the risk of fires, which have become more frequent, particularly affecting the forests that cover 43% of the territory. In 2021, 92 fires burned 7,580 ha of land. To increase resilience, strength in risk assessment and community engagement are needed.

Most industrial production and heating systems operate with lignite/coal which generates significant pollution, as well as sources of technological hazards, from extraction to final use.

Below are some of the risks that threaten the Republic of Kosovo:

NATURAL HAZARDS	RISKS IN SENSI- TIVE TECHNI- CAL BUILDINGS - CRITICAL IN- FRASTRUCTURE	RISKS DURING TRANSPORTA- TION	INDUSTRIAL HAZARDS	EPIDEMIOLOGI- CAL RISKS
Fires	€ Dam failure	Road transport	Energy	Water intoxication
Storms		Rail transport	Industrial accidents	Transmissible zoonotic diseases
Floods		Air transport	Industrial and hazardous waste	
E arthquakes		Transport of hazardous materials		
Rockfalls, landslides/ demolition of rock masses				

TABLE 1: Main risks in Kosovo

4.1.2 Extreme temperatures

Kosovo has experienced significant changes as a result of climate change, facing extreme temperatures, heavy rainfall, and frequent flooding. Compared to the 1960s, the region has experienced a significant increase in heat waves, which have become more frequent and intense, as well as heavy rainfall that has caused widespread flooding since the 1980s. Forest fires have also increased significantly since the 2000s. Severe droughts have been recorded in 1993, 2000, 2007, 2009, 2012, 2020 and 2022, negatively affecting water supplies and the agricultural sector.¹⁶

In recent years, the country has recorded breaking heat high temperatures, which have lasted for weeks, affecting the health of citizens, increasing the demand for medical assistance and spreading fires. In addition to public health impacts, heat waves and droughts have caused reductions in water supplies, making life difficult in urban and rural areas. The impact has been particularly felt in the agricultural sector, where staple food production has been significantly damaged, jeopardizing food security and affecting the rural economy.

Rising temperatures and poor forest management have also led to an increase in fires, damaging the country's ecosystems and biodiversity. This increase in extreme heat, as a result of climate change, has increased threats and risks to security in the country, such as the spread of fires, the impact on food production, the reduction of water, as well as the impact on health problems for citizens.

Furthermore, little attention has been paid to the protection of water resources and river management in the country. Institutions have invested little in the management of water resources, which are vital to subsist with periods of extreme temperatures that are expected to prevail in the country in the coming years. The risk of fires spreading in lowland and mountainous areas, as a result of climate change and extreme temperatures, is very high. This is especially true due to the fact that a large part of the territory of Kosovo is

lowland and mountainous areas, where the possibility of fires spreading is high. In recent years, fires have become more frequent in Kosovo, lasting for days, with no possibility for local institutions to manage or extinguish them.

During 2024, the country encountered a series of fires in tourist areas, such as the Sharr Mountains, Prevalle, and the Dukagjini Plain mountains, which were a signal that in the future the country will face frequent cases of fires as a result of climate change and rising extreme temperatures. The Kosovo Environmental Protection Agency has also raised the alarm about the risk of fires, noting in 2023 that Kosovo has become part of the countries with an extreme level of risk for forest fires. This has also been confirmed by the a significant number of fire cases that have emerged in Kosovo, especially during the last three years, respectively in 2024 alone there were up to 100 fire cases, some of which were very large and required KFOR intervention from the air, as well as assistance from the KSF. Climate change, accompanied by unusually high temperatures and long periods of drought, has created favorable conditions for the rapid spread of fires. The increasing number of fires in Kosovo, especially during the summer period, challenges the country's institutions to deal with them. During the summer, the fire situation often gets out of control, and EMA, as the primary response institution, finds it almost impossible to react to bring the spread of fires under control.

In respect to these changes, Kosovar society and state institutions have not been sufficiently prepared, on the contrary, they have allowed the destruction of agricultural land and forests, water resources, which are important mechanisms for protecting and coping with fires and other consequences of climate change. Over the years, the various governments of Kosovo, as well as the local governance level, have not prioritized the preparation of institutions and society to cope with climate change, including high temperatures. Furthermore, no attention has been paid to protecting the environment, forests, or creating green spaces in urban areas, where construction has made it almost impossible to expand public parks or green spaces in cities. As a result, it has become almost impossible to grow vegetation in green spaces in urban areas during the heat period of July and August.

¹⁶ KEPA. (2022). Annual Report on the State of the Environment in Kosovo 2022. Kosovo Environmental Protection Agency. Available at: https://www.ammk-rks.nerf

See also: UNKT. (2023). Annual Results Report 2023. United Nations Team in Kosovo. Available at: https://kosovoteam.un.org/sites/default/files/2024-04/ <u>UN_Annual%20Report%202023_Digital.pdf</u>

4.1.3 Floods and inundations

One of the risks and consequences of climate change that Kosovo and the region are facing is frequent and heavy rainfall, which has intensified in recent years. 17 Frequent and heavy rainfall in Kosovo has led to frequent floods and landslides, which have caused great damage to households, agriculture, and even with fatal consequences for the lives of citizens. In 2023, as a result of floods in the municipality of Peja, two citizens lost their lives, a mother and her daughter, who died as a result of the floods and inundations that occurred. 18 According to the assessments of civil protection experts and other security institutions, this event occurred due to the fact that the place where the floods occurred and the house where the girl and her mother lived was exposed to danger and potentially flooded. The local authorities that granted permission for the construction of this house did not take into account the chance of risk that this house could be endangered by floods, and did not take measures to prevent this construction in such a place. This case is indicative of the need to set in place optimal criteria and standards during the construction process to address future challenges arising from climate change. Furthermore, rigorous inspection and supervision of high-rise construction and infrastructure projects is required in order to better cope with challenges such as fires, floods and storms.

The immense challenge remains the drafting and strict implementation of municipal and urban development plans, which should establish strict standards and criteria for the construction sector, to also address the challenges arising from climate change. The failure to implement strict criteria for the construction sector in urban areas, as well as the failure to structure the appropriate infrastructure, has led to construction building in urban areas not implementing any criteria at all, making it impossible to follow normal procedures for discharging water resulting from rapid rainfall. The lack of appropriate water infrastructure and wastewater systems has caused flooding and flash

floods, especially in urban areas.

Another major challenge is the destruction of river basins and the failure to maintain the condition of river beds in different regions of Kosovo. The lack of investments and plans by local and central governments for the preservation of rivers and the maintenance of their beds, is an indicator that addressing climate issues, as well as the consequences that come from this phenomenon, is not among the main priorities. So, as long as there is no political and institutional will to address these challenges, citizens will continue to face these phenomena.

4.1.4 Severe storms and thunderstorms

Kosovo is increasingly facing severe storms and thunderstorms, which have intensified recently. These extreme weather phenomena, accompanied by strong winds, heavy rainfall, hail and lightning, have caused significant material damage and endangered the lives of citizens. Flash floods have affected urban and rural areas, damaging infrastructure, private property and agriculture, while strong winds have toppled trees, electricity poles and roofs of houses, leaving thousands of households without power.

The national strategy for reducing natural disasters and other disasters has predicted an increase in the number of storms, thunderstorms and heavy rains as a result of climate change. ¹⁹ In addition to drafting municipal plans and response to natural disasters, special attention should be paid to preserving green spaces, forests, the sewage system, and implementing strict construction criteria, especially for high-rise buildings in urban areas.

Hail has severely damaged the agricultural sector, destroying crops and causing significant losses for farmers, while lightning has increased the risk of fires and damaged electrical equipment and public structures. In recent years, Kosovo has experienced several powerful storms with consequences for the economy and the lives of citizens. In 2022 and 2023, several regions, including Pristina, Peja, Vushtrri, Gjakova and Mitrovica, were hit by major storms,

¹⁷ Kosovo 2.0. (2023). Vërshimet ende e zënë Kosovën në befasi.

Marrë nga: https://kosovotwopointzero.com/vershimet-ende-e-zene-kosoven-ne-befasi/

¹⁸ KOHA.net. (2024, 6 mars). Nënë e bir vdesin si pasojë e vërshimeve në Pejë, familjarët kritikojnë institucionet. Koha.net.
Marrë nga: https://www.koha.net/lajmet-e-mbremjes-ktv/nene-e-bir-vdes-in-si-pasoje-e-vershimeve-ne-peje-familjaret-kritikojne-institucionet

¹⁹ Qeveria e Republikës së Kosovës. (2023). Strategjia Shtetërore për Zvogëlimin e Rrezikut nga Fatkeqësitë Natyrore dhe Fatkeqësitë Tjera 2023–2028.

which brought flooding, damage to infrastructure and power outages. In July 2023, a powerful storm in the municipalities of western Kosovo caused extensive damage to agriculture due to hail and lightning, while in 2020, Prizren faced a severe storm that damaged the power grid and public infrastructure. In January 2024, as a result of a storm, the roof of the Pristina municipality building collapsed, and a citizen was seriously injured. These are just some of the frequent cases of powerful storms and thunderstorms that the country is facing with.²⁰

In this respect, it has been found that in most cases, where as a result of storms we have consequences of material damage or danger to people's lives, they occur due to the failure to implement construction criteria

and standards. In the case of the collapse of the roof of the Pristina municipality in January 2024, the investigations of the prosecution and the assessments of the Pristina municipality have confirmed that the collapse of the roof built by a private operator was a result of the failure to implement construction criteria during the process of reconstruction the roof of this facility.²¹ It has also been established that the contract manager, official of the municipality of Pristina, for personal gain, permitted deviations from the contract criteria for the reconstruction of the roof, resulting in poor construction and unstable work. As a result, a storm that was assessed not strong in power by the Kosovo Hydrometeorological Institute, caused the collapse of the roof of the municipal building and the injury of a citizen of the municipality of Pristina.

²⁰ KALLXO.com. (2024, March 7). What happened to the roof of the new building of the Municipality of Prishtina? Available at: https://kallxo.com/komuna/cka-ndodhi-me-kulmin-e-objektit-te-ri-te-komunes-se-prishtines/

²¹ Radio Free Europe. (2024, March 7). Arrest in Pristina following the collapse of the roof of the new building of the Municipality of Pristina. Available at: https://www.evropaelire.org/a/arrestim-renia-e-kulmit-komuna-prishtine-/32787110.html

5. Kosovo and international standards



In 2003, EU member states at the Thessaloniki Summit unequivocally affirmed the EU integration perspective of the Western Balkan countries, including Kosovo²². Since then, Kosovo's strategic orientation has been based on the alignment of legislation, standards and practices with those of the EU. The concrete formalization of this journey became predictable only in 2015²³ following the signing of the Stabilization and Association Agreement (SAA) between Kosovo and the EU²⁴ Since then, Kosovo has formalized the framework of reforms that it must undertake, including those in the field of climate and consequently those of civil protection. Namely, Kosovo has drafted the National Plan for the Implementation of the SAA (NPISAA) which clarifies the tasks and responsibilities for the local and central levels.²⁵

In parallel with undertaking reforms stemming from European integration, Kosovo continues to make efforts to become a full member of the UN, its specialized agencies and other multilateral mechanisms. In this regard, Kosovo has harmonized its strategic, sectoral and legislative approach in accordance with the policies and decisions stemming from being a member of the UN.

This journey of Kosovo with relatively new institutions has been accompanied and continues to go with various challenges. Despite this, there is no lack of institutional will to address these challenges.

5.1 Challenges and the path towards European integration

The Stabilization and Association Agreement (SAA) serves as a framework for Kosovo's integration into the European Union (EU), setting out the steps the country must take to advance towards membership. More specifically, with Articles 115, 116 and 117 under Title VIII on Cooperation Policies, the SAA requires Kosovo to implement European standards in the areas of environmental protection, emergency management and climate change mitigation. Furthermore, Chapter 30 of the Acquis Communautaire on External Relations (extensively elaborated in the NPISAA) underlines the importance of regional cooperation and integration into EU civil assistance mechanisms.

For Kosovo and other countries aspiring to join the EU, the Instrument for Pre-Accession Assistance (IPA) funds are essential in implementing the SAA and developing capacities. In a broader context, these funds are designed to support countries aspiring to EU membership in carrying out political, economic and institutional reforms, helping them to align their policies and legislation with European standards. A concrete example of IPA support is the "IPA Floods and Fires" (IPAFF) program²⁶, which aims to improve civil protection capacities in Kosovo and the region to carry on with floods and forest fires. Through IPAFF, the Kosovo Emergency Management Agency (AME) benefited with trainings, equipment and exchanges of best practices, thus increasing the country's capabilities to manage and prevent natural disasters.

Another important document for Kosovo is the European Reform Agenda II (ERA II), which prioritizes the alignment of Kosovo's policies with the European Union, within the framework of the Stabilization and Association Agreement (SAA). Among its main priorities is strengthening institutional capacities for environmental protection and climate security. ERA II aims to develop strategies for reducing pollution, improving waste management and increasing resilience to climate change. It also includes measures for flood and fire preparedness, improving the capacities of institutions to manage emergencies and

²² European Commission. (2012, December 20). Commission approves restructuring plans of Spanish banks Liberbank, Caja 3, Banco Mare Nostrum and Banco CEISS. Retrieved from https://eccuropa.eu/commission/presscorner/detail/en/pres 03 163

See also: Council of the European Union. (2015, October 27). Kosovo signs the Stabilisation and Association Agreement with the EU. Retrieved from: https://www.consilium.europa.eu/en/press/press-releases/2015/10/27/kosovo-eu-stabilisation-association-agreement/

²⁴ European Union and the European Atomic Energy Community. (2016, March 16). Stabilisation and Association Agreement between the European Union and Kosovo. Official Journal of the European Union, L 71/3. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex-%3A22016A0316%2801%29

²⁵ Government of the Republic of Kosovo. (2021). National Plan for the Implementation of the SAA, 2022-2026.

²⁶ See the IPAFF project page at: https://www.ipaff.eu/

respond to natural disasters in more effective manner.

Kosovo's efforts to improve institutional capacities and climate change resilience are also strategically supported by the Western Balkans Investment Framework (WBIF) and the Growth Plan.²⁷ WBIF focuses on providing direct financial support for key infrastructure projects aimed at mitigating climate change and promoting environmental sustainability.²⁸ These projects are linked to the EU integration agenda and serve as essential tools to address the region's vulnerability to environmental challenges. Unlike the WBIF, the Growth Plan offers a more comprehensive approach by emphasizing broad economic and institutional reforms aimed at strengthening the country's capacity to manage development in various sectors, including environmental issues. While the WBIF helps Kosovo secure funding for climatefocused projects, the Growth Plan supports the broader institutional framework needed for their effective implementation. Together, these two documents create a complementary framework that enables Kosovo to be better prepared for and address climate change, ensuring that financial and institutional resources are mobilized effectively.

Although more detailed and updated information regarding overall donor support for the implementation of the NPISAA, NDS and other sectoral strategies is lacking, what should be noted is that Kosovo needs to increase investments to address institutional needs related to climate impact reduction. In monetary terms, the World Bank's Kosovo 2024 report²⁹ highlights the need for significant investments

- estimated at \$2.8 billion over the next decade - to mitigate the escalating climate impacts that will hit the country in the next 10 to 15 years. According to this report, investments should be directed at areas that are most at risk and vulnerable as a result of climate change, such as water resources, addressing potential floods and fires, and building institutional capacities and social resilience to cope with this phenomenon.

Another binding framework of measures and reforms for Kosovo is the EU Green Deal, which represents both an opportunity and a challenge for Kosovo, as it requires a rapid transition away from coal, which still remains the main source of energy in the country. The EU Green Deal aims not only to reduce emissions and energy transition, but also to improve countries' capacities to encounter with natural disasters, which will intensify due to climate change. For Kosovo, this means investing in climate-resilient infrastructure, improving water management systems, and strengthening civil protection and emergency mechanisms.

Critics argue that the EU has not yet provided sufficient financial support to help Western Balkan countries cope with this change, placing them at a competitive disadvantage. At the same time, some political actors in Kosovo see this as another burden imposed by the EU, calling for a more flexible approach and longer transition periods. However, inclusion in the Green Agenda for the Western Balkans remains necessary to advance the EU integration process and ensure access to EU funds for clean energy and sustainable development.

5.2 EU Report on Kosovo 2024

In the European Commission's 2024 Kosovo Report³⁰, several challenges similar to those of 2023 were identified regarding planning for and responding to the consequences of climate change. However, the 2024 report highlights progress in some aspects and identifies the need for further improvements. Among other things, the European Commission's 2024 Report on Kosovo identifies several important challenges

²⁷ European Commission, Growth Plan for the Western Balkans: https://enlargementec.europa.eu/enlargement-policy/growth-plan-western-balkans en

²⁸ Note: Two examples of projects financed through the Western Balkans Investment Framework (WBIF) related to climate change and environmental sustainability in Kosovo:

Kosovo Energy Efficiency and Renewable Energy Project (KEEREP):
 This project focuses on improving energy efficiency in the public sector and promoting the use of renewable energy sources. It supports the government's efforts to reduce greenhouse gas emissions, to comply with EU energy policies and to improve overall energy sustainability in Kosovo.

Wastewater Treatment and Environmental Protection Project: This project
aims to improve the wastewater treatment infrastructure in Kosovo,
especially in urban areas. By improving wastewater treatment facilities, the
project contributes to better water quality, public health and environmental
protection, while addressing the challenges posed by climate change and
urbanization

²⁹ World Bank, Kosovo – Country Climate and Development Report, December 9, 2024, : https://www.worldbank.org/en/country/kosovo/publication/kosovo-country-climate-and-development-report#:-:text=The%20

 $[\]frac{1}{20} report \% 20 concludes \% 20 that \% 20 Kosovoes calating \% 20 impacts \% 20 of \% 20 climate \% 20 change.$

³⁰ European Commission, Kosovo Report 2024, 30 October 2024, Retrieved: https://enlargement.ec.europa.eu/kosovo-report-2024_en

related to the country's capacities to manage climate change and the consequences of natural disasters. One of the main shortcomings is the lack of a national risk assessment that complies with EU standards. This assessment is necessary to identify and address the risks that may arise from climate change and natural disasters. Without such an assessment, Kosovo does not have a clear picture of potential risks and opportunities to brace with them.

In addition, the report highlights that capacities for responding to natural disasters remain limited. Although some efforts have been made to improve these capacities, a gap still remains in the management of emergency situations, particularly in relation to floods, fires and water pollution. Kosovo still lacks a well-established and tested system to respond quickly and effectively to these disasters, consequently makes the country more vulnerable to potential damage.

Another fundamental shortcoming is the lack of detailed strategies for disaster recovery, as well as insufficient emergency response planning. This means that after a major disaster event, Kosovo may face difficulties in organizing an efficient recovery, further compounding the social and economic consequences. Without clear and approved strategies and plans for emergency response, the entire disaster management infrastructure remains at a disorganized level, increasing the risk of insecurity and chaos.

The report further highlights the need for improved coordination between the central government and the local level in emergency management. The lack of effective coordination can hinder a rapid and coordinated response to disasters, creating delays in interventions and increasing the risk of loss of life and property. To ensure efficient management, it is essential that central and local authorities work together to ensure a coordinated and rapid response.³¹

Another important problem is the non-use of the European Union's Common Emergency Communication System (CECIS). Kosovo has not yet managed to fully integrate This limits Kosovo's capability to receive rapid and effective assistance from international partners during crisis situations, hindering the capability to respond appropriately. However, examples of the effective use of communication for assistance can be observed during the (COVID-19) pandemic when Kosovo, using the

What is also foreseen through medium-term measures in the NPISAA in the civil protection sector is the development of an early warning or public warning system, which is currently lacking³³. This system is scheduled to be developed this year (2025) through a public procurement process, bringing EMA one step closer to standardization for dealing with natural disasters and beyond.

These challenges constitute a significant obstacle to Kosovo's progress in managing climate change and the consequences of natural disasters. The report emphasizes that, to address these shortcomings, it is necessary to take rapid and coordinated steps to improve institutional capacities, develop clearer strategies, and strengthen cooperation between local and international institutions.

The report also identifies several important advances related to emergency management and the country's preparedness for the consequences of climate change. One of the main achievements is the improvement of the legal and institutional framework for emergency management. The report assesses efforts to create a more structured and coordinated system for responding to natural disasters, enabling a faster and more effective response. This improvement has created opportunities for strengthening cooperation between central and local institutions, as well as enabling better crisis management at different levels.

Another important progress is the increase in awareness and provision of training on disaster management. The report highlights that significant steps have been taken to improve the skills of actors involved in disaster management, by providing dedicated training to emergency managers and local government employees. This increase in response capacities has contributed to improving disaster response, especially at the local level, where there is greater sensitivity to these issues.

Emergency Response Coordination Center (ERCC) - which is the functional pillar of the UCPM, received assistance from Slovenia (mainly with basic packages and protective masks).³²

ability to respond

32 European Commission. (2021, September 9). Slovenia helps Western
Balkan countries face the COVID-19 emergency. Retrieved from: <a href="https://civil-protection-humanitarian-aidec.europa.eu/resources-campaigns/cam-paigns/emergency-preparedness/slovenia-helps-balkan-countries-face-covid-19-emergency-en/gree

³³ $\,$ Interviews conducted with officials from the Ministry of Interior, December 2024.

³¹ Interview with EMA officials, December 2024.

5.3 Kosovo's involvement in civil protection mechanisms

Kosovo is not part of the EU Civil Protection Mechanism (UCPM) due to political, technical and legal challenges related to the non-recognition of its independence by five EU member states. To be admitted to this mechanism, unanimity of all member states is required, which is currently an obstacle for Kosovo. The UCPM is an EU structure that coordinates international assistance for natural disasters and emergencies, providing access to logistical, technical and financial resources for disaster prevention, preparedness and response. ³⁴ If Kosovo were part of the UCPM, it would benefit from:

- Rapid assistance from the EU in cases of natural disasters;
- Funds for emergency infrastructure improvements;
- Participation in training and exchanges of expertise with EU countries.

However, the EU has taken steps to strengthen Kosovo's civil protection capacities. In 2024, the European Commission, in cooperation with the World Bank, launched a new financial instrument with an initial funding of €6 million.³⁵ This fund aims to assist civil protection authorities of EU member states, UCPM participating states, as well as Georgia and Kosovo, to improve their capacities in achieving the Disaster Resilience Goals.

Kosovo, although not part of the UCPM, actively participates in regional civil protection mechanisms such as the Western Balkans Civil Protection Cooperation Framework. These alternative platforms enable the exchange of knowledge, resources and coordination of emergency responses with neighboring countries, regional mechanisms and bilateral cooperation. Kosovo has signed memorandums of cooperation with several countries in the region for mutual assistance in cases of emergencies such

However, challenges remain in terms of harmonizing procedures and building a centralized emergency management system that complies with EU standards, an important requirement for the country's future integration into European civil protection structures. The EU recommends improving the legal, governance and financial framework for disaster preparedness, as well as developing a preparedness investment plan. Kosovo should also improve coordination between the central and local levels and start the process of installing the EU Common Emergency Communication System (CECIS).³⁷

5.4 Kosovo and the UN

The lack of being a member state of the EU, the UN and other regional organizations has placed Kosovo in a disadvantageous position in relation to the benefits that stem from membership. UN membership would offer Kosovo the opportunity to participate in various international agreements and mechanisms related to climate change, including the Paris Agreement and the UN Framework Convention on Climate Change (UNFCCC), which provide a platform to discuss and implement climate change policies.

Despite its lack of UN membership, Kosovo has taken important steps to address the challenges of climate change and integrate environmental policies into its national development. This approach includes adopting international policies, regional cooperation, and advancing domestic legislation.

as Albania, North Macedonia and Montenegro, increasing the capacity to respond to natural disasters and humanitarian crises. These mechanisms help Kosovo settle up with for its lack of participation in the UCPM and increase cooperation on regional emergency assistance. Institutions such as the EMA work closely with their counterparts in Albania and North Macedonia to coordinate emergency operations, develop joint preparedness plans, and exchange technical information on crisis prevention and management.³⁶

³⁴ European Commission, EU Civil Protection Mechanism, Retrieved: https://civil-protection-humanitarian-aidec.europa.eu/what/civil-protection/eu-civil-protection-mechanism_en

³⁵ European Commission, Press Release, 29 February 2024, Retrived: https://ec.europa.eu/commission/presscorner/detail/en/ip_24_1184

³⁶ Interview with representatives from EMA, Pristina, December 2024

³⁷ European Commission, Kosovo Report 2023, 8 November 2023, https://enlargement.ec.europa.eu/document/doënload/760aac-ca-4e88-4667-8792-3ed08cdd65c3_en?filename=SED_2023_692%20Kosovo%20report_0.pdf

Lacking official status as a UN member, Kosovo has opted to unilaterally adopt the 2030 Agenda for Sustainable Development, including a specific focus on Sustainable Development Goal (SDG) No. 13 "Climate Action" .This strategy enables Kosovo making national policies aimed at reducing greenhouse gas emissions and promoting renewable energy sources. Through this approach, Kosovo not only aligns its policies with international ones, but also gains credibility in the global arena.

Although Kosovo is not a member of the UN, its agencies, such as the Food and Agriculture Organization (FAO), continue to provide aid through

various mechanisms. The most recent example is the FAO Emergency Flood Response Plan, which provided vouchers for agricultural supplies to farmers affected by the floods. This project, supported by the Swiss Agency for Development and Cooperation (SDC), was implemented through the UN Team in Kosovo.³⁸ This example shows that, despite political challenges, Kosovo can still receive international assistance in critical areas such as natural disaster recovery.

38 United Nations Team in Kosovo, FAO's Emergency Recovery Plan after floods provides relief to the most vulnerable farmers, 13 September 2023: https://kosovoteam.un.org/en/245772-fao-post-flood-emergency-recovery-plan-offers-helping-hand-most-vulnerable-farmers

KOSOVO'S BENEFITS FROM UN MEMBERSHIP

ACCESS TO INTERNATIONAL AGREEMENTS AND STANDARDS

UN membership would enable Kosovo to fully participate in international discussions and negotiations on climate change. Participation in the Paris Agreement, as well as the opportunity to contribute to the proposal of global policies to reduce greenhouse gas emissions, would offer Kosovo the opportunity to achieve new standards and be assisted by the most advanced countries in this field.

FINANCING AND TECHNICAL SUPPORT:

As a member of the UN, Kosovo could have easier access to international financing mechanisms, such as the Green Climate Fund (GCF) and the Global Environment Facility (GEF), which are essential for financing climate projects and supporting sustainable development.

FINANCING AND TECHNICAL SUPPORT

UN membership would empower Kosovo to engage in global climate discussions and raise its case at the international level. This engagement would help strengthen Kosovo's position for new international relations and investment opportunities in green technologies and climate projects.

WHAT DOES KOSOVO HAVE TO LOSE?

osovo, by not being UN member, cannot participate in many international organizations, including the Intergovernmental Panel on Climate Change (IPCC), which provides scientific reports and recommendations for global climate policies. This restriction makes it more difficult for Kosovo to participate in and influence international climate negotiations.

Access to important financial mechanisms and support that are reserved for UN member states, making it more difficult to implement climate and sustainable development projects.

Another important obstacle for Kosovo is the lack of opportunity to benefit from the Post-Disaster Needs Assessment (PDNA), a process led by the UN and the World Bank, which aims to help countries assess and address the impacts of natural disasters. Kosovo experienced this obstacle in 2022, after massive floods hit cities such as Fushë Kosova, Vushtrri and Vitia. Kosovo authorities had requested the opportunity to participate in the PDNA, but due to their nonmembership in the UN, they could not benefit from this process and receive international support to assess and address the damages.

The lack of UN membership prevents Kosovo from signing several international agreements and engaging in cooperation with states seeking UN membership to develop diplomatic relations and direct cooperation on climate.

TABLE 2: Benefits and losses from being and not being member of international organizations

At the time of drafting this report, Kosovo benefits/loses from these EU organizations, mechanisms or programs:

ORGANIZATION/ MECHANISM/ PROGRAMS	KOSOVO	OTHER WESTERN BALKAN COUNTRIES
UCPM	Not a member	Member ³⁹
UN/UFCCC	Not a member	Cooperation agreement
TAIEX	Agreement (IPA regional)	Agreement (IPA regional)
TWINING	Agreement (IPA annual and regional)	Agreement (IPA annual and regional)
WB/EBRD/KfW/UNICEF/ UNDP	Cooperation agreement/IPA beneficiary	Cooperation agreement/IPA beneficiary
The Southeast European Cooperative Initiative (SECI)	Observer ⁴⁰	Member

TABLE 3: Status of the Republic of Kosovo in international organizations and mechanisms

³⁹ Decision 1313/2013/EU of the European Parliament and of the Council of 17 December 2013 on a Union Civil Protection Mechanism, as amended, Official Journal L 347, 20 December 2013, p. 924, hereinafter referred to as the "UCPM Decision". The Mechanism comprises 27 Member States and 10 Participating States: Iceland, Montenegro, North Macedonia, Norway, Serbia and Turkey; Albania and Bosnia and Herzegovina joined in 2022; the Republic of Moldova and Ukraine joined in 2023

⁴⁰ Kosovo is not a member of SECI, but there have been cases when it has been represented indirectly through UNMIK, in the absence of its full recognition as a state by all countries in the region.

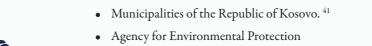
6. Institutions in charge to respond to natural disasters: Challenges and needs



In the event of natural and man-made disasters, the first responders and institutions are the health service, the Kosovo Police and the EMA.

In Kosovo's institutional architecture, different institutions have mandates and responsibilities to deal with different climate-related aspects.

SECTOR/FIELD	RESPONDING INSTITUTIONS
HORIZONTAL (INTERINSTITUTIONAL) IMPLEMENTATION OF ENVIRONMENTAL LEGISLATION	Ministry of Environment, Spatial Planning and Infrastructure (Department of Environmental and Water Protection/Division for Protection from Industrial Pollution)
၅၇ AIR	 Ministry of Environment, Spatial Planning and Infrastructure (Department of Environmental and Water Protection/Division for Protection from Industrial Pollution;) Environmental Protection Agency/Hydrometeorological Institute. OTHER INSTITUTIONS: Ministry of Agriculture, Forestry and Rural Development Ministry of Health Ministry of Local Government Administration





OTHER INSTITUTIONS:

for Chemicals and

• Ministry of Agriculture, Forestry and Rural Development (MAFRD))

• Ministry of Environment, Spatial Planning and Infrastructure (Division

- Ministry of Health (MoH)
- Ministry of Local Government Administration (MLGA)



• Ministry of Environment, Spatial Planning and Infrastructure (Department of Environmental and Water Protection)

- River Basin Regional Authority
- Environmental Protection Agency

OTHER INSTITUTIONS:

- Ministry of Agriculture, Forestry and Rural Development
- Ministry of Health
- Ministry of Local Government Administration
- Water and Wastewater Regulatory Office



- (Department of Environmental and Water Protection/Division for Protection from Industrial Pollution)
- Agency for Environmental Protection
- Hydrometeorological Institute



⁴¹ Assembly of the Republic of Kosovo. 2012). Law No. 04/L-060 on Waste, Article 13. Official Gazette of the Republic of Kosovo. |... Municipalities, according to the Law on Waste, are competent for the management of solid waste, bulky waste, waste from the construction and demolition of construction facilities...|

- Ministry of Internal Affairs
- Emergency Management Agency Ministry of Environment, Spatial Planning and Infrastructure (Department of Environmental Protection, respectively Division for Protection from Industrial Pollution))
- Hydrometeorological Institute



OTHER INSTITUTIONS DEALING WITH THE FIELD OF CIVIL PROTECTION ARE PRIMARILY

- Ministry of Foreign Affairs and Diaspora
- Ministry of Finance, Labor and Transfers
- Ministry of Agriculture, Forestry and Rural Development
- National Institute of Public Health
- Kosovo Fire Department
- Ministry of Local Government Administration



- Ministry of Agriculture, Forestry and Rural Development (Department of Forestry)
- Kosovo Forestry Agency

OTHER INSTITUTIONS:

- Ministry of Environment, Spatial Planning and Infrastructure
- Ministry of Local Government Administration.

6.1 Emergency Management Agency and Natural Disaster Response Capacities in Kosovo

The EMA is the primarily institution responsible for managing natural disaster cases and emergency situations in Kosovo. It operates under the authority of the Ministry of Internal Affairs (MIA) and has the mandate to manage natural disasters, pandemics and other public safety emergencies. EMA has a staff of around 720 employees, including administrative, operational and management staff, but this number is considered insufficient to meet the needs of a country with over 1.5 million inhabitants. An increase in the number of employees would enable better quality

of work and help the state better deal with natural disasters.

One of the Agency's main problems is the lack of specialized human resources. EMA is not structured with dedicated teams for search and rescue in urban areas, mountains or other specialized situations, excluding a small team for rescue and evacuation in shallow waters. Further, it is limited with equipment, with possession with two powerful pumps for extracting water and a few small boats. The EMA equipment were subject to a short test and encountered problems during calls for assistance, as happened with its Macedonian counterparts a few years ago. 42 EMA

⁴² Interview with officials from EMA, 11.12.2024

has a contingent of firefighters operating locally, but the technology and mechanisms used are outdated and do not meet the modern standards required for rapid and efficient response to disasters. A significant portion of the annual budget goes to maintaining old equipment, some of which dates back to the 1970s.⁴³

Another challenge is the advanced age of EMA employees, especially firefighters. This problem challenges the daily work of EMA, especially when it comes to interventions in extinguishing fires or managing the consequences of frequent rainfall, floods and inundations. The process of recruiting new and trained employees is necessary for the renewal of this institution and strengthening its capacities to face the growing challenges.

Another problem is the fragmentation of the operational structure. EMA has no direct control over firefighters, who are assigned across all municipalities and managed by municipal protection and rescue directorates. Although this model has been used successfully in other countries, such as Slovenia and Croatia, in Kosovo this system has failed due to weak local-level capacities. This fragmentation causes delays and ineffective coordination in emergency cases. A more centralized model, similar to that of Albania and North Macedonia, could enable a faster and more efficient response.

To address these issues, we need to focus on strengthening the human and technical capacities of the EMA. Regulating the legal status of firefighters and appointing them under direct management by the EMA is one of the first steps. By increasing the number of firefighters, considering that that those who are currently working are at a very advanced age, it is necessary and can be achieved through the recruitment of 350-500 new employees. Improving working conditions for EMA employees and firefighters is also a priority, including the purchase of new equipment for firefighting and search and rescue in case of natural disasters.

Another measure that the Ministry of Interior and the Government of Kosovo should take is to support the formation of specialized units for search and rescue in case of earthquakes, floods, mountain search and diving, as well as for the establishment of barriers for

The establishment and operationalization of the Civil Protection Brigade, within the framework of the EMA, could increase Kosovo's resilience to natural disasters and civil emergencies. Providing professional training in search and rescue and civil emergency response is very important to make this institution better prepared to respond to natural disasters and emergency situations. The operationalization of EMA with all the necessary units and in accordance with EU standards would strengthen local capacities to cope with natural disasters and other disasters that may arise as a result of climate change.

6.2 Kosovo Security Force and respond to natural disasters

The KSF is one of the best prepared institutions in the country for responding to natural disasters, especially for search and rescue missions. Within the KSF is a specialized urban search and rescue unit, which has carried out successful interventions during devastating earthquakes in Albania and Turkey. The KSF is equipped with modern equipment, including the K9 unit, who use trained dogs for search and rescue. However, despite the modern equipment, the KSF still needs additional capacity and staff to meet the growing challenges posed by climate change.

The KSF remains one of the most credible institutions in duty on protecting the country, not only from classic national security threats, but also from those related to natural disasters and the impacts of climate change. Currently, the KSF has capacities for response to natural disasters, search and rescue, and has specialized equipment for these operations. To cope with the threats and risks that continue to increase due to climate change, the KSF must focus efforts on increasing its response capacities to natural and other disasters.

Another important priority should be the increase of the capacities of the KSF air units, which will be useful for responding to natural disasters and other emergencies. Currently, Kosovo relies solely on KFOR support for air support, including fire management, flood intervention, and search and rescue needs.

the protection of infrastructure. These units can cope with natural disasters and can help to cope with the impact of climate change.

⁴³ Interview with officials from the MIA, 12,12,2024

Kosovo has received support from NATO allies and the US to begin the process of purchasing air equipment (helicopters), which will improve the country's capability to face security threats and challenges, including those resulting from climate change.

The Ministry of Defense needs to commence the procedures as soon as possible for the purchase of aerial equipment and other general support equipment, to ensure the country's proper preparation to face natural disasters and emergencies that may arise.

6.3 Other institutions

The Kosovo Police, together with the EMA and emergency medical personnel, is one of the first responders in cases of natural disasters. The KP is the first institution to be informed about any disaster that occurs in the country and provides assistance and various interventions, based on its competencies and mandate. It ensures order and security, while also providing logistical assistance and intervention, depending on requests from other institutions.

The Ministry of Health (MoH), the municipal health directorate, local health care centers and regional hospitals, are also part of the group of first responders in cases of natural disasters and those caused by climate change. The MoH, under its authority comprises with six regional hospitals and the University Clinical Center in Pristina, as well as a number of local health care centers and FHCC/AMF in villages, which can provide various health services. However, the MoH has limited capacity to manage a large influx of patients in cases of major disasters, such as earthquakes or other major disasters.

The Ministry of Environment, Spatial Planning and Infrastructure (MESPI) oversees the implementation of the Disaster Risk Reduction Strategy and develops policies for environmental and health protection, addressing radioactive radiation, air, water and soil pollution, and monitoring rainfall and hydrometeorological disasters. It also ensures the development and maintenance of railway, road and air infrastructure.

The Ministry of Agriculture, Forestry and Rural Development (MAFRD) is responsible for the administration and management of forests, including

protection and reforestation, fire prevention and disease and pest management. This ministry has an important role in coping with the consequences of climate change, by monitoring and protecting forests, which are affected by damage and destruction, as a result of various factors, including climate change.

6.4 Local level

Municipalities, as local government units, play a key role in developing plans to address threats and risks arising from climate change and other factors. Law No. 03/L-040 on Local Self-Government grants municipalities broad competencies in various areas, particularly in spatial planning, economic development and natural resource management.⁴⁴

However, one of the biggest failures of municipalities is the incapacities to integrate climate change measures into their development plans or urban plans. In many cases, municipalities have contributed to the worsening of the consequences of climate change through poor urban planning, uncontrolled use of natural resources and inadequate management of construction projects, as well as poor construction of water infrastructure and sewage systems.

Uncontrolled urbanization and the loss of green spaces are significant issues in Kosovo. Municipalities often adopt urban plans without considering environmental impact, allowing construction on green areas and public spaces. This has led to the loss of green zones and tree-covered surfaces, which are vital for reducing urban temperatures and absorbing greenhouse gases. Many municipalities fail to implement sustainable urban planning standards and frequently permit construction without environmental impact assessments. According to a KDI report, many municipalities have not implemented any measures to improve the environmental situation, putting citizens' health and local ecosystems at risk.⁴⁵

Municipalities often struggle with water management and flood risk reduction. Many municipalities have

⁴⁴ Official Gazette of the Republic of Kosovo, Law No. 08/L-043 on Environmental Protection. Available at: https://gzk.rks-gov.net/ActDocumentDetail.aspx?ActID=2530

⁴⁵ KDI. (2025). Environmental bulletin of municipalities. Kosovo Democratic Institute. Retrieved from: https://kdi-kosova.org/wp-content/up-loads/2025/04/06-Raport-Fletenotimi-Mjedisor-i-Komunave-ALB-05-1.pdf

not invested in the infrastructure needed to cope with extreme rainfall, which has intensified as a result of climate change. Old sewers and a lack of green absorbent areas have made floods more frequent, damaging infrastructure and private property. A World Bank report states that about 60% of municipalities in Kosovo have serious problems with flooding, due to a lack of proper spatial planning and water resources management. 46

Land degradation and loss of natural resources is another problem occurring in territories that municipalities have management responsibility for. Uncontrolled use of land for construction and exploitation of minerals and natural resources by private businesses often occurs without proper oversight by municipalities. This land degradation contributes to the disappearance of biodiversity and the deterioration of air and water quality. Most municipalities in Kosovo do not have clear plans for environmental protection, allowing companies to exploit land without regenerative measures.⁴⁷

Waste management is also an alarming concern. Many municipalities in Kosovo have serious problems with waste management, leading to water, air and soil pollution. Burning waste and dumping it in open areas directly affects air pollution and increases the level of greenhouse gas emissions. This situation worsens the quality of life and increases the risk of respiratory diseases for urban residents. According to the UNDP report on waste management practices, 80% of municipalities do not have integrated waste management systems and rely mainly on unsustainable practices for their disposal.

In relation to the implementation of the Stabilization and Association Agreement (SAA), municipalities face a number of challenges. The Ministry of Local Government Administration (MLGA) does not physically monitor European integration officials at the local level, leaving them isolated from decision-making processes. Furthermore, these officials are not included in consultations or meetings of directors, reducing their effectiveness in implementing European integration policies.

Another problem is the lack of training at the local level on how municipalities can benefit from European Union programmes and other financial instruments. Many officials are not informed about funding opportunities or technical assistance, which limits the participation of municipalities in EU-funded development projects and human capacity building. European integration officials are not included in meetings with the Department of European Integration and Policy Coordination (DEIPC) within respective ministries or with the National IPA Coordination Office (NIPAC Office), making it difficult to coordinate and exchange information on policies and opportunities to benefit from the EU.

At the level of inter-municipal cooperation, municipalities do not cooperate sufficiently with each other on important issues such as the protection of forests, waters and the environment in general. Furthermore, cooperation between the local and central levels also remains weak. The Kosovo Report 2024 highlights that the lack of effective coordination between municipalities and central institutions has affected the implementation of policies. Thus, it can be concluded that the impact has also negatively affected the coordination of environmental policies and European integration, limiting the impact of measures taken for sustainable development and environmental protection.

6.4.1 Municipal capacities in respect to the disaster prevention and response

Each municipality in Kosovo is required to have established a Directorate for Protection and Rescue, which is responsible for assessing risks and emergency threats facing the municipality and for preparing to manage them. In cases where municipalities lack sufficient capacity to handle emergency situations, they request assistance from the regional level and, subsequently, the central level—primarily from the Agency for Emergency Management (AME).

According to current legislation, municipalities are mandated to develop plans for fire protection, forest protection, emergency response, and local-level operational emergency plans. These documents are essential for responding to natural disasters and other emergency events and must be approved by the AME and the Ministry of Environment,

⁴⁶ Data from the organization of focus groups and interviews at local and central levels, December 2024.

⁴⁷ Data from the organization of focus groups and interviews at local and central levels, December 2024

Spatial Planning, and Infrastructure (MESP). Research conducted on the institutional capacities of municipalities in emergency management clearly shows a serious lack of organization and political will to ensure sustainable civil protection. According to the data, the municipality of Prizren has established the Directorate of Public Services and Emergency Management and has adopted the Risk Assessment Document for Natural and Other Disasters, in line with Regulation no. 28/2012. Meanwhile, Ferizaj and Suhareka, although they have the respective directorates for public services and emergencies, have not issued this vital document, while Vitia has not even established the relevant directorate and therefore lacks an approved risk assessment document. Fushë Kosova also has no such directorate established. Every municipality should have a functional Directorate for Protection and Rescue (or one integrated within public services), as well as issue a Risk Assessment Document and an action plan for disaster management, in which funds and resources would be allocated and inter-institutional coordination during emergencies clearly defined. The absence of these documents not only reflects a lack of institutional preparedness but also makes coordination and response during crises more difficult, directly impacting the duration and quality of the recovery phase—as also highlighted in the European Commission's 2024 Country Report. This points to a lack of professional knowledge and the necessary capacities for effective emergency management.

In most cases, municipalities request immediate assistance from the central level for equipment and expertise in cases of floods or fires. This reality proves that the responsibility for responding to natural disasters remains mainly at the central level, while strengthening local capacities has not been set as a priority by municipalities.

Despite the mandate to draft local emergency documents and plans, many municipalities have not taken any steps to address the threats from climate change and natural disasters. Municipalities should start drafting risk assessment documents and foresee concrete steps to address them, coordinating closely with the central level and respecting the state strategy for reducing the risk from natural and other disasters.

The effective implementation of the oversight role of municipal bodies, such as the Directorate

for Protection and Rescue, is essential for safety and effective management of risks from climate change and natural disasters. This requires a strong commitment to ensuring that the construction sector implements appropriate standards for construction and environmental protection, striving to protect green spaces and infrastructure that will help to deral with risks.

6.5 Cooperation with civil society, community and informal volunteer groups

Cooperation between the community, central and local institutions, and the private sector is essential to respond to and handle with the consequences of the risks and threats resulting from climate change. The creation of volunteer groups in each municipality, who can assist state authorities in cases of natural disasters and other emergencies, is a great and lasting help for state and local authorities to deal with the risks that may threaten the state. Local authorities, in cooperation with the Ministry of Interior and its agencies (EMA and the Kosovo Academy for Public Safety), can organize basic and advanced training for volunteers to deal with challenges such as firefighting, flood response or inundation. The creation of volunteer groups in each municipality can serve to strengthen national resilience, both at the central and local levels, to cope with the risks and consequences resulting from climate change or global warming.

Formalizing and strengthening cooperation between the local level and the private sector is also essential to deal with this phenomenon. A proper organization of this cooperation and providing the private sector with information regarding the role that companies have in different sectors (construction, transport, food and supermarkets, road maintenance, etc.) can help in handling with the risks and threats that arise as a result of climate change. The private sector has extensive human and technical capacities that can be used for work in various sectors such as construction, transport, road maintenance, etc., equipment that can easily be used to assist state authorities in dealing with risks such as fires, floods and landslides. Therefore, local authorities should start by creating local bodies, composed of the community and the private sector,

who can be ready to react in emergency cases.

Strengthening cooperation with public institutions such as regional enterprises for water resource management, waste collection and management, wastewater management and treatment, as well as with

central and local institutions for the protection of parks and forest lands, remains essential for creating a safer and more sustainable environment against climate change processes and their consequences.

Recommendations



- 1. More efficient oversight of the implementation of strategies through monitoring the level of achievement of the objectives and targets set in the medium-term action plans in relation to climate measures. Monitoring should be summarized in a process where both the ministries responsible for monitoring but also profiled CSOs are involved in the area coverage of the strategies. For the latter, more structured support is required for the identified CSOs so that, in parallel with the monitoring by the institutions, objective external monitoring is also carried out.
- 2. Improving the capacities of security institutions, including the Kosovo Police, the Security Force and the Emergency Management Agency, to respond to natural emergencies caused by climate change. This process should include advanced training for personnel, as well as improving inter-institutional communication and coordination systems to enable faster and more efficient responses in cases of natural disasters such as floods, fires, storms and others. The advancement of the EMA mission as an institution with response capacities in all required profiles (except for the current and mainly coordinating mission) should be done as soon as possible in accordance with EU standards. In addition to the mission, the EMA should include specialized teams in its organization chart and begin preparing for air search and rescue operations. The provision with helicopters and other operational air equipment is more than necessary.
- 3. Rehabilitation of emergency response infrastructure for the efficient handling of natural emergencies requires investments in the renovation of emergency response infrastructure. This includes renovating the fleet of emergency vehicles, as well as improving equipment for dealing with fires and floods. In addition, investments should be made in improving the infrastructure for water and energy supply, which will provide support in difficult emergency situations and facilitate rescue operations.

- 4. The preparation of municipal emergency plans must be respected. In cases of failure to prepare this document, it is recommended that the EMA proceed with disciplinary procedures. Each municipality should develop detailed emergency plans to address the challenges of climate change and natural disasters. This process should include identifying specific risks for each area and developing protocols for managing potential situations. The plan should be based on in-depth analyses of resources and opportunities, including cooperation between local and central authorities to ensure a rapid and coordinated response.
- 5. Involving the private sector and NGOs:
 - Addressing climate emergencies requires a comprehensive approach that includes the private sector and non-governmental organizations. The private sector can help with the development of innovative technologies for predicting and monitoring natural disasters, while NGOs can contribute to community education and awareness about the consequences of climate change and the measures that can be taken to protect the environment and public health.
- 6. For successful emergency management, it is essential that the community is activated and prepared to face the consequences of climate change. Communities need to be educated on ways to prevent and respond to natural disasters. The formation of rapid response teams at the local level can ensure the protection of citizens' lives and property during emergencies.
- 7. Strengthening regional and international cooperation: In the face of shared threats from climate change, it is important for Kosovo to strengthen regional and international cooperation. This can be achieved through participation in international agreements and initiatives for natural emergency management and environmental protection. Cooperation with other countries can bring great benefits by helping to share resources

- and expertise, as well as creating a sustainable disaster response network.
- 8. Natural resource management: To reduce the impacts of natural disasters, it is essential to invest in the management and conservation of natural resources. This includes protecting forests, waters and biodiversity, as well as developing policies that prevent deforestation and pollution. Protecting natural resources will help strengthen Kosovo's resilience to the challenges of climate change.
- 9. Construction policies and urban planning: To deal with the consequences of climate change, it is essential that structure construction and urban development are sustainable. Building policies should include high standards of safety and sustainability, as well as the use of materials and technologies that reduce environmental impacts. Urban planning should also take into account opportunities for water management and flood protection.
- 10.Improving infrastructure for wastewater treatment and water management: Dealing with floods and inundation requires investments in improving wastewater treatment systems and building infrastructure for rainwater management (stormwater systems). In addition to renovating existing infrastructure, strict criteria should be set for new construction, especially in urban areas that are vulnerable to flooding.
- 11. Increasing fire management capacity: In a period of climate change, it is imperative that the Environmental Protection Agency and local institutions strengthen their capacities for fire prevention and management. This can be achieved through continuous training, investment in modern equipment and the creation of coordinated plans for dealing with fires, especially in the mountainous and lowland regions of Kosovo.

Annex



	KEY AREAS	CURRENT PROBLEMS	RECOMMENDATIONS FOR MUNICIPALITIES
1.	INTEGRATING CLIMATE CHANGE ADAPTATION AND MITIGATION INTO URBAN PLANNING	Municipal Development Plans (MDPs) and Urban Regulation Plans (URPs) do not contain strong measures for climate change adaptation.	 Require green infrastructure in zoning regulations (e.g., walkable sidewalks, urban forests, stormwater management). Implement energy efficiency requirements in building permits. Implement heat-resistant designs in public spaces (e.g., green roofs, shaded areas, reflective materials). Strictly implement the construction plan according to the granted permit and have regular inspections.
2.	BETTER WASTE MANAGEMENT AND CIRCULAR ECONOMY POLICIES	Many municipalities do not implement waste separation and recycling.	 To establish and implement mandatory waste separation at the household and business level. To promote composting and biogas production as part of waste management strategies. Develop partnerships with private companies and donors for investments in waste-to-energy projects.
3.	RENEWABLE ENERGY AND ENERGY EFFICIENCY INITIATIVE	Municipalities are short off local strategies for renewable energy, although the Law on Energy in Kosovo allows for planning at the municipal level.	 Support solar panels on municipal buildings and promote community solar projects. Develop energy efficiency programs in public buildings (schools, hospitals, administrative offices). Create financial incentives at the municipal level for businesses and households to adopt energy-efficient technologies.

4.	WATER MANAGEMENT IN TERMS OF CLIMATE SUSTAINABILITY	Water losses in Kosovo exceed 50% due to outdated infrastructure.	 In cooperation with Regional hydro-systems authorities, upgrade the water distribution system to reduce leaks and losses. Create policies for rainwater collection and reuse. Implement sustainable water systems for agricultural areas.
5.	SUSTAINABLE TRANSPORT (MOBILITY PLANS) AND AIR QUALITY MANAGEMENT	Investments in public transport are minimal, and there is a need of infrastructure for nonmotorized transport.	 Expand the public transport network with low-emission buses. Paving bicycle paths and pedestrian-friendly areas to reduce use of cars. Design low-emission zones in urban centers to control pollution.
6.	DEVELOPMENT OF CLIMATE ADAPTATION PLAN AND DISASTER RISK MANAGEMENT (DRM)	Almost none of municipality has functional climate resilience plans.	 Conduct climate risk assessments and integrate them into municipal action plans. Strengthen early warning systems for floods, droughts and extreme weather events. Training of local officials and emergency services to prepare for climate-related disasters.
7.	STRENGTHENING PUBLIC PARTICIPATION AND AWARENESS	There is a lack of civic engagement in climate-related decision-making processes.	 Organizing public forums on climate action to raise awareness. Encouraging young people and civil society organizations to participate in municipal climate councils. Provide incentives for green businesses and climate-friendly initiatives at the local level.

8.	LACK OF COORDINATION BETWEEN THE MUNICIPALITY AND THE GOVERNMENT	Poor coordination between municipal and central institutions delays climate action.	 Create better communication channels between local governance authorities and national government. Harmonize municipal climate policies with national strategies. Increasing financial and technical support for municipalities from central institutions.
9.	LACK OF MONITORING AND ACCOUNTABILITY	Data collection is limited and implementation of climate policies is weak.	 Develop municipal climate monitoring and reporting systems. Increase the current funding and criteria for municipal performance grants. Performance-based criteria for municipalities achieving climate objectives is essential. Increasing transparency through public reporting on progress on climate action.



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