

SAFE AND RESILIENT SOCIETY

CHALLENGE	CAUSE	EFFECT	SOCIETAL CHANGES-SYSTEMIC APPROACH
<p>Hybrid Threats Hybrid threats are multidimensional, extremely horizontally dispersed and encompass primarily political, diplomatic, informational, military, economic, financial, intelligence and legal aspects. Hybrid threats imply already existing subversive forms, whose speed, scope and frequency of occurrence are amplified with the help of modern technologies.</p>	<p>Increased vulnerability; Geopolitical interests and influence; Weaknesses in the state's resilience and functioning of institutions;</p>	<p>Erosion of institutions and the political system; Distrust in democratic and state institutions. Intra-ethnic, inter-ethnic, social, cultural, gender and political polarization of societies; Fake news;</p>	<p>Raising public awareness of risks among men, women and vulnerable groups of citizens; Building resilient state and societal systems; Establishing a central body for monitoring and coordinating responses, protection and defense against various forms of hybrid threats; Comprehensive, inter-sectoral and inter-ministerial approach and cooperation; Coordinated action within the framework of the EU and NATO; Unified process for assessing the risk of working on critical infrastructure, planning measures for its protection and responding to different types of threats;</p>
<p>Information and Cyber Threats The key threat to national information and communication infrastructure.</p>	<p>Cyber surroundings and global nature without geographical and temporal limitations; Difficult determination of the true source and actor of the threat; Activities of state and non-state actors; Vulnerability of modern society;</p>	<p>Cyber espionage; Intellectual property theft; Spreading disinformation, cybercrime, cyber terrorism; Jeopardizing the critical information network infrastructure;</p>	<p>Monitoring the international dynamics of response to cyber threats; Adapting the national strategy and normative regulations in the field; Establishing a national body for comprehensive management of the area and coordination with all departments and other entities in all security challenges; System for protecting key communication and information systems;</p>
<p>Foreign Actor Intelligence Activities Intelligence activities are carried out using both classical forms of data</p>	<p>Through the activities of foreign intelligence factors, the security, political and economic interests of the state are jeopardized; Used by foreign actors on the</p>	<p>Obtaining secret information and data regarding the interests of the RNM's diplomatic and economic activities in the international landscape;</p>	<p>Preventive raising of security awareness should be conducted in targeted environments falling within the domain of interest of foreign intelligence operations; Integration of the existing Agency for National</p>

<p>collection with human resources and utilizing modern information technology and systems.</p>	<p>territory of the Republic of North Macedonia (RNM) to act against third countries;</p>		<p>Security and Intelligence Agency into one Agency; Establishment of a counterintelligence department within the Ministry of Foreign Affairs; Enhanced exchange of knowledge and perceptions related to foreign actor intelligence activities and preparation of measures for more effective prevention of their activities; Designing training for a security culture for all employees in security institutions and the state administration;</p>
<p>Military Threats and Crisis Hotspots Directly impacting the broader regional and global stability, development, migration flows and creating safe havens for terrorist groups, violent extremism and organized crime. The unfinished post-conflict transition in the Western Balkans has a significant influence on the national security of the Republic of North Macedonia, especially in the areas of democratization, rule of law, security and socio-economic development.</p>	<p>Increased and worsening local and regional instability that can easily surpass its scope due to conflicting interests of global power centers; The international community is facing the emergence of unstable and dysfunctional states, activities of terrorist and extremist armed groups, a rise in organized crime and gross violations of human rights and fundamental freedoms;</p>	<p>Unstable political and security state of affairs, as well as an arms race in the southeastern part of Europe, Latent presence of military threats in the broader global and regional space; The unfinished post-conflict transition in the Western Balkans has a significant influence on the national security of the Republic of North Macedonia;</p>	<p>An integrated approach to building and securing defense and military capacities; Ensuring an adequate level of self-defense capability and preparedness, relying on the system of collective defense with mutual assistance from NATO and the EU; Providing the necessary personnel, financial and material resources for the construction, functioning and modernization of comprehensive and sustainable, peacetime, military and defense capabilities at an appropriate level of preparedness; Appropriate national military capacities in terms of scope, structure, equipment, training, preparedness and resilience; Enhancing resilience of the country and society, both in the military and civilian defense fields, in line with the concept of the army reserve; Balanced and coordinated contributions from relevant ministries, government departments and other state authorities, public and private economic institutes and companies, as well as government and non-governmental development and humanitarian organizations;</p>

			<p>In its peacekeeping, development and humanitarian efforts, it will focus on assisting in order to achieve gender equality and enhancing the role of women. In this way, it will contribute specifically to social development, peace, stability, and security, strengthening the economy, and establishing open societies in developing countries;</p> <p>Integration of the General Staff of the Army of the Republic of North Macedonia into the Ministry of Defense;</p>
<p>Terrorism Violent Extremism and Radicalization</p> <p>The emergence and spread of terrorism remain closely linked to ideological, political, religious, economic and socially motivated radicalization of a relatively small portion of civil society. As a result, terrorism is also becoming an increasingly frequent form of long-term threat in the Euro-Atlantic environment;</p> <p>The families of returning foreign terrorist fighters are missing</p>	<p>Terrorism is related to other security threats (organized crime, illicit activities in the field of weapons of mass destruction and nuclear technology, illegal migration and human, arms and drug trafficking);</p>	<p>The targets of terrorist threats and attacks primarily include the civilian population, state representatives and institutions, diplomatic and consular services, critical infrastructure and members of international forces in international operations and missions;</p> <p>Various extremist movements and organizations, whose legitimate expression of opinions and positions can be transformed into a threat to the constitutional system of the Republic of North Macedonia, denial or violation of basic human rights and freedoms, uncontrolled violence and a threat to human dignity, security and life;</p>	<p>The response in the fight against terrorism should continue to be based on integrated national and international cooperation of departments;</p> <p>Development of mechanisms and organizational solutions for coordination between competent authorities to successfully detect and prevent terrorist activities in a timely fashion;</p> <p>Consistent implementation of legal instruments and strategies of the United Nations, the Council of Europe, the European Union and other international organizations, bilateral cooperation, restrictive and preventive measures and judicial cooperation in criminal matters related to terrorism;</p> <p>Formulation of a policy that strictly adheres to the Constitution, international agreements and applicable legislation;</p> <p>Program for working with children and women of returning foreign terrorist fighters</p>
Organized Crime	Transit and logistics, and to a lesser	Harming the victims and the	Joint action with the European Union in the fight

<p>Important cross-border security threats related to operations of organized crime include drug trafficking, human trafficking, illegal migration, illegal trade of waste, arms and high-tax excise goods, corruption, money laundering and counterfeiting, and misuse of modern information and communication technology.</p>	<p>extent, a target country for international criminal groups, especially along the so-called Balkan route.</p> <p>Organized drug trafficking, human trafficking, illegal migration, illegal trade of waste, arms and high-tax excise goods, corruption, money laundering and counterfeiting, and misuse of modern information and communication technology</p>	<p>negatively impacting social and economic aspects of life and the entire society<</p>	<p>against severe and organized forms of crime; Intensive international police cooperation; Continuous exchange of criminal and intelligence information, data with foreign security and intelligence services, Europol, Interpol, etc.; Strengthening operational capacities for conducting criminal intelligence activities and covert investigative measures; Implementation of new methods, tactics and techniques for more effective prevention, detection, and investigation of all forms of severe and organized crime; New methods, tactics and techniques for more effective prevention, detection and investigation of all forms of severe and organized crime, which will require appropriate normative adjustments. Exchange of data and cooperation among competent authorities at the national level;</p>
<p>Threats to Public Security Various forms of disturbance of public order and peace, including more serious violations that may subsequently escalate into criminal offenses with consequences for the security of individuals and broader communities, can be expected.</p>	<p>Attacks on the lives and property of citizens, including women and vulnerable groups of citizens, economic crime, corruption, financial fraud, document forgery, counterfeiting of money and goods and disturbances of public order and peace;</p>	<p>Discontent among the population with the functioning of the institutions of the national security system and lack of trust in their effectiveness; Weakening of individual and national security; Serious violations that may subsequently escalate into criminal offenses;</p>	<p>United and coordinated action of appropriately trained and equipped police, judicial, administrative and police segments of the internal security system; Enhanced cooperation with regional and international security institutions and the transfer and promotion of good practices; Partnership between the public and private sectors; Coherence of policies and strategies across different departments; Measures to improve safety in traffic, with active support for the activities of the national traffic safety authority; Programs for safe cities that take into account the needs of women to feel safe in their work and living environments</p>

<p>Migration The pressure of illegal migration flows will be significantly influenced by socio-economic and political-security conditions both globally and in the mentioned region. A broader scope of illegal or mass migration can pose a threat to the security and well-being of the inhabitants of our country and represent a significant burden for the entire national security system.</p>	<p>The Balkan route of illegal migration; The return of possible "foreign fighters" from the Middle East and other members of terrorist organizations who would like to enter the territory of the EU through the Western Balkans;</p>	<p>Indirectly influences the development of extremism, worsening security conditions, external and internal politics.</p>	<p>Building coherent border management, which will enable even more effective control of external borders, considering the risks of potential threats at these borders, including illegal migration and cross-border crime;</p>
<p>Financial-Economic Risk, Social Risk and Technological Risk Financial institutions, with their global presence and significant influence on money flow and financial transactions, along with the rapid development of information technology, increase the speed of important financial and monetary flows. As a result, the sensitivity of these institutions to information, policies or events worldwide represents a constant risk</p>	<p>Due to unfavorable long-term demographic movements in Europe and the Republic of North Macedonia (population aging, declining birth rates, emigration of the population and labor shortage); High levels of digitalization increase the risk of cyber-attacks;</p>	<p>The unregulated cryptocurrency market enables uncontrolled financial transactions for organized crime and terrorist groups; There is an increase in healthcare and social protection costs, as well as the risks providing sustainable economic development;</p>	<p>Measures to mitigate global financial and economic risks; Addressing poverty and other forms of social insecurity as a social, economic and political issue in the country; Promoting more effective market operations with simultaneous measures and targeted interventions by the state at various levels, including advancing humanitarian activities and focused actions of social services; Greater economic development and prosperity, improving the quality of life for its citizens, ensuring sustainable development in the economic and social sphere and promoting a creative, technological and open society; Economic policies should be based on equal treatment of economic, social, gender and</p>

<p>regarding the availability of financial resources.</p>			<p>environmental dimensions of well-being and sustainable development; Preventive actions, addressing and mitigating negative effects of globalization; Measures to increase trust in financial institutions, improve the liquidity of companies, preserve jobs, with fiscal stimuli to slow down the economic decline, promote progress, competitiveness, research, development and education, and utilize the positive aspects of technological progress;</p>
<p>Natural and Man-Made Hazards</p> <ul style="list-style-type: none"> • The existing risk profile of the country is characterized by a series of natural and man-made hazards, with floods being the most frequent and having the greatest intensity and impact on society and the communities. Weather-related events are on the rise, forest fires are increasing in frequency and there are consequences for nature and biodiversity, while earthquakes have the potential to cause the most significant impact on the 	<ul style="list-style-type: none"> • Increased damages and losses, for example, according to GFDRR, the average annual population affected by flooding is around 70,000 and the annual affected GDP is 500 million USD, while the average annual population affected by earthquakes is 40,000 and the annual affected GDP is 200 million USD.⁶ • The country is facing a warmer and drier climate with an increased occurrence of extremely hot events and a reduced number of extreme cold spells. Drier conditions result in a potential increase in extreme precipitation events, leading to a higher risk of flash floods. The expected decrease in summer 	<ul style="list-style-type: none"> • More intense catastrophic events with greater magnitude. • Increased number of climate extremes. Warmer and drier climate in the future with an increased occurrence of extremely hot events resulting in prolonged heatwaves, drier conditions leading to droughts and heatwaves and extreme precipitation events resulting in a higher risk of flash floods. • Increased vulnerabilities and deepened new social inequalities. • The extremely powerful impact of the COVID-19 pandemic crisis contributed to the 	<ul style="list-style-type: none"> • Providing a multi-risk, multi-hazard and multi-sectoral approach in risk reduction and crisis and disaster management. • Strengthening the resilience of society needs to be based on understanding and anticipating risks and threats, good governance, sufficient and disaggregated data, innovative solutions, adaptability and the transformative capacity of society and communities. • Understanding the systemic and evolving, complex and uncertain nature of risks. • Risk assessment anticipating new risks that are shared with all national and local institutions and contributes to creating and implementing proactive policies for resilient development. • Ensuring sustainable and stable financing for risk reduction and hazards through appropriate budget planning, including involvement of the

⁶ Global Forum for Disaster Reduction and Recovery. *North Macedonia section*. 2017. <https://tinyurl.com/47pdmfar>

<p>country and its citizens in terms of loss of life and long-term damages and losses.</p> <ul style="list-style-type: none"> • Over the last two decades, in 14 disasters there were 79 human casualties, more than 1.3 million inhabitants were affected and only eight disasters had a price tag of half a billion USD¹. • Most human casualties were registered during the Skopje August 2016 catastrophic torrential floods (22), wildfires in July 2007 affected almost half of the population (1,000,000 inhabitants) and the floods in 1995 had the highest damages of 245 million USD.² • In the period of 1999-2021 each year, an average area of 8837.0 ha has been affected by forest fires with average 	<p>precipitation and prolonged durations will increase the risk of drought, extended vegetation periods and a greater number of forest fires.</p> <ul style="list-style-type: none"> • Insufficient understanding of risk, especially systemic risk and the contributing factors. • Reactive disaster risk management which is mainly response-oriented rather than prevention and mitigation. • Fragmented risk management policies and insufficient policy-making and risk-informed decisions, i.e. achieving risk-informed development. • Inadequate coordination and implementation of a multi-sectoral approach, with institutions primarily guided by their own laws, without applying provisions from other relevant laws fully and efficiently. • Lack of anticipation of new and emerging risks and threats. • Outdated policies and normative frameworks, i.e. the laws related to 	<p>creation of the "new vulnerable and new poor" (people, especially from the urban centers, that are experiencing vulnerabilities for the first time as a result of the crisis).</p> <ul style="list-style-type: none"> • The unplanned urban development leads to higher risks of hazards and the overpopulation in the city of Skopje¹¹ results in air pollution, traffic jams and an all round low quality of life. • Lack of adequate inclusion of disaster risk reduction in development sectors, strategies and programs. • Inadequate decentralization of disaster risk reduction. Municipalities are still the first responders to events instead of being the first actors to prevent the occurrence or mitigate the consequences of risks. • Insufficient interpretation of uncertainty and future trends. • Aging critical infrastructure due 	<p>private sector and innovative financing methods.</p> <ul style="list-style-type: none"> • To ensure that limited finances are spent most effectively, a clear cost management process can be defined.¹⁴ • Inclusion of disaster risk reduction in the new Spatial Plan of the country for the period 2023 - 2043, where sustainable and resilient spatial management will be regulated and managed, contributing to reducing risks and their consequences. • Changes in urban development practices based on the approach of urban resilience. • Transformative risk-informed management, providing a transition to proactive disaster risk reduction and its integration into sectors, strategies and programs. • Identifying the black swan, i.e., events with low probability of occurrence and significant consequences for society and communities. • Localization and further decentralization of disaster risk reduction and resilience building. • Established partnerships with stakeholders, including the private sector and the academic community, to improve risk management, policy coherence, inclusiveness and participation. • Improving risk transfer mechanisms that contribute to building resilience with increased participation of the private sector and citizens.
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¹ Popovski, Vasko. *Policies for Disability-inclusive Disaster Risk Reduction in the Context of the Republic of North Macedonia*. UNDP. 2023.

² Ibid.

<p>damage estimated around 7.8 million EUR.³</p> <ul style="list-style-type: none"> • This trend is expected to further increase in the future due to rising temperatures, the anticipated impact of climate change and the increase in extreme climate events, as well as environmental degradation, pollution, urbanization, etc. • On the other hand, numerous small-scale catastrophic events continuously exert pressure on the resilience landscape of society and communities, including women, men and vulnerable groups of citizens by depleting their available resources. • The risks become complex, and new risks threaten the sustainable and resilient development of the state, 	<p>the disaster risk reduction segment (crisis management and protection and rescue) are from the pre-Sendai era, there is a lack of a national strategy for disaster risk reduction.</p> <ul style="list-style-type: none"> • Insufficiently integrated and shared disaggregated data on risks and hazards. • Insufficiently integrated and shared risk and hazard assessments at national and local levels. • Constant changes in the built environment, for example, increased urbanization rate (approximately 58.79% for 2021), unplanned urban development (illegal construction practices, for example, by March 2023, a total of 296,810 illegal constructions were legalized without checking their resilience and seismicity⁷, overpopulation in larger cities resulting in informal populated areas, development of 	<p>to insufficient investments in maintenance and development.</p> <ul style="list-style-type: none"> • Poor incorporation of hazard assessments in the private sector (e.g., insurance) and development plans. • Persons with disabilities are bearing the greatest burden from impacts of crises and disasters, both due to their characteristics and prevailing vulnerabilities and due to the very frequent exclusion from disaster risk reduction policies and insufficient inclusive risk reduction practices. • Insufficient involvement of the academic community and scientific research institutions. • Over 3,000 people die each year as a result of polluted air.¹² • Life expectancy is 75.69 years (2020) and is lower than countries in the region and the EU.¹³ 	<ul style="list-style-type: none"> • Alignment with global and regional mechanisms for sustainable and resilient development, such as the Sendai Framework for Disaster Risk Reduction 2015 - 2030, Sustainable Development Goals, the Paris Agreement and active involvement in developing global, regional and national solutions for the period after 2030. • Integrated national and local strategic planning. • Continuous capacity building and education for all. • Programs for resilience building and investments in critical infrastructure. The Guidance notes on building critical infrastructure resilience in Europe and Central Asia¹⁵ can be a starting point. • Integrated adaptation to climate change and building resilience of women, men and vulnerable groups of citizens. • Improving social protection and safety nets to reduce vulnerability. • Inclusive disaster risk management for building resilience of all in society. • Comprehensive measures and actions to combat air pollution in cities. • Improving existing and establishing new early warning and alerting systems for multiple
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¹¹ <https://tinyurl.com/2m94p2t3>

¹⁴ <https://tinyurl.com/47jck926>

³ <https://tinyurl.com/4du52ceb>

⁷ <https://denesen.mk/divogradbi-vo-makedonija-dosega-se-legalizirani-296-810-nelegalno-izgradeni-objekti-kolku-od-niv-se-otporni-na-zemjotres/m>

¹² <https://tinyurl.com/bdzb7a79>

¹³ https://datacommons.org/place/country/MKD/?utm_medium=explore&mprop=lifeExpectancy&popt=Person&hl=en

¹⁵ <https://www.undp.org/albania/publications/guidance-notes-building-critical-infrastructure-resilience-europe-and-central-asia>

<p>such as migrant and refugee crises, health risks, etc.</p> <ul style="list-style-type: none"> • The COVID-19 pandemic was an unprecedented crisis that significantly impacted society and communities. From January 3, 2020, to April 26, 2023, there were 348,059 confirmed cases and 9,672 deaths, with cumulative production losses of 3.7 billion US dollars in 2020 and 2021⁴. • On the other hand, health risks are the leading cause of the high mortality rate among the population. Smoking and poor nutrition are at the top of the list of causes, and in addition to non-communicable diseases, air pollution is also included (in 2017, 13.7% of deaths in Skopje were linked to air pollution).⁵ 	<p>infrastructure in hazard-prone areas, etc.)</p> <ul style="list-style-type: none"> • Increased vulnerability of risk elements, i.e. the population (unemployment rate, high percentage of social welfare beneficiaries, ongoing food insecurity, etc.⁸) and infrastructure. <ul style="list-style-type: none"> • Disaster risk reduction still does not include all members of society, i.e. citizens and especially vulnerable women, vulnerable categories and persons with disabilities, who remain "invisible"⁹ to the system. • Expected impact of climate change and climate extremes¹⁰. • Utilization of limited resources for risk reduction. • Insufficient financial resources and lack of 	<ul style="list-style-type: none"> • The population and businesses are affected by the poor early warning system. • Only 0.02% of the population is entitled to financial assistance in case of shock or catastrophe. • There is no systematic system for catastrophe and climate risk insurance (except for agricultural insurance or agricultural crops, which are partially subsidized by the government). • Insufficient integration of strategic documents for health policies and public health, where priorities are not properly formulated. • Insufficient preparedness of the healthcare sector for responding to disasters and crises. • Lack of a risk prevention culture. • Brain drain of skilled and 	<p>hazards, including health hazards.</p> <ul style="list-style-type: none"> • Enhanced partnership and cooperation involving all members of society. • The private sector as a driver of resilient development. • Improving socio-economic development through strengthening sectoral policies (social or health policy) can lead to reduced vulnerability. • The coping capacity can be improved by further developing the country's infrastructure such as road connectivity or promoting activism through increased interest in volunteerism (humanitarian component) or improving health capacities (healthcare component).¹⁶ • Improving the existing national data infrastructure platform by including new data sets and data exchange among multiple institutions. • Establishing a national database on disasters and losses to identify disaster trends and create inter-sectoral policies and tools for strengthening resilience. • Institutional functionality through strengthening the enforcement of legal obligations and responsibilities of institutions and individuals.
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⁴ UNDP. *Socioeconomic Assessment of COVID-19's impact in North Macedonia*. UNDP. June 2020. p. 8. Available at: <https://www.impact-covid19.mk/>

⁵ <https://tinyurl.com/y48dbjba>

⁸ <https://northmacedonia.un.org/en/173663-open-source-inform-index-provides-overview-disaster-risk-north-macedonia>

⁹ Popovski, Vasko. *Policies for Disability-inclusive Disaster Risk Reduction in the Context of the Republic of North Macedonia*. UNDP. 2023.

¹⁰ Gjurgjevik, Vladimir. *Projection report on climate change and changes in extreme climate events in the Republic of North Macedonia*. UNDP. 2020. p.4. [online] Available at <https://tinyurl.com/yc3r4yaa>

¹⁶ <https://northmacedonia.un.org/en/173663-open-source-inform-index-provides-overview-disaster-risk-north-macedonia>

<ul style="list-style-type: none"> • The challenges related to natural and man-made hazards impact society, the communities, infrastructure and the environment in segments related to risk understanding and management, prevention and mitigation, early warning systems, climate change adaptation, critical infrastructure resilience, long-term strengthening and sustainability, financial resources, etc. 	<p>budget policies oriented towards prevention and mitigation.</p> <ul style="list-style-type: none"> • Insufficient funding for the healthcare sector and policies. • Unsustainable practices in the environment resulting in increased risks and threats. • Industrial accidents and technical-technological defects. • Lack of early warning systems for multiple hazards. • Absence of a national database on past events. • Lack of collective responsibility among institutions and individuals. • Inadequate human resources management policies, leading to an outflow of human resources, especially in the public health sector. 	<p>specialized personnel.</p>	<ul style="list-style-type: none"> • Creating a sustainable and resilient education system that utilizes new technologies in times of crisis
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<p>Climate Change</p> <p>The energy sector has the most significant contribution to greenhouse gas emissions, accounting for 75.4% in 2019, followed by agriculture with 12.1%, the sector of industrial processes and product use with 6.8%, and the waste sector with 5.6%. The aggregate emissions and removals of greenhouse gases (net emissions) in 2019 were estimated at 12,902 Gg CO₂-eq. Total greenhouse gas emissions from all sectors are expected to increase by 37.3% in 2040 compared to 1990, or by 64.7% compared to 2005, reaching 16,844 Gg CO₂-eq in 2040.¹⁷</p> <p>The sectors most at risk are the water sector, agriculture (crop production, soil and livestock), forestry and biodiversity. <i>Water sector:</i> In</p>	<ul style="list-style-type: none"> • The following projections for climate change are expected: <ol style="list-style-type: none"> a) Temperature: an increase in temperature (average, minimum and maximum), an increase in hot temperature extremes and a decrease in cold temperature extremes. b) Precipitation: an annual decrease (for the RCP8.5 scenario), a redistribution in the annual cycle, less summer precipitation (risk of drought), and an increase in the number and intensity of extreme precipitation events (risk of floods).¹⁹ • Climate change is predicted to impact different geographic regions in North Macedonia slightly differently in terms of intensity, frequency and duration of rainfall; temperature changes/variables in terms of duration and intensity.²⁰ • An increase in the number of climate-related extreme events. 	<ul style="list-style-type: none"> • The various impacts of climate change on North Macedonia include the following: <ol style="list-style-type: none"> 1. Drought may result in a loss of cultivable land and changes in cultivation periods/seasons. 2. Drought can cause changes in sub-surface water levels, especially water tables, affecting both groundwater resources and confined and unconfined aquifers. 3. Changes in soil salinity, moisture and drainage capacity caused by drought. 4. Drought can also cause changes in the shoreline of lakes and water bodies. Perennial water bodies may experience drying caused by lowering water tables. Non-perennial water bodies which are dependent on rainfall can also dry up due to extended dry spells, but at 	<ul style="list-style-type: none"> • Alignment with global and regional mechanisms and climate resilience standards. • Advancement of policies and regulatory frameworks, particularly the implementation of individual legislative solutions. • Adaptation to climate change and control of greenhouse gas emissions. • Integration of climate change adaptation across sectors and policies, including the defense and security sector. • Better utilization of national and local budgets to finance climate change activities, including climate bonds to raise funds for addressing climate impacts, earmarking the climate budget and climate-related levies. • Increased research and development activities to contribute to adaptation and resilience building in the country. • Designing policies and activities for adaptation and resilience building among men, women and vulnerable groups of citizens. • Incorporation of the principle of protection of critical infrastructure investments from climate change. • Efforts to build resilience should focus on improving social systems and the capacities of society and the communities, raising awareness of the impacts of climate change, promoting education and training, empowering vulnerable
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¹⁷ <https://tinyurl.com/4du52ceb>

¹⁹ <https://tinyurl.com/4du52cebc>

²⁰ UNDP (2020) Methodology for mainstreaming Climate Change considerations into spatial planning, with a focus on National Spatial Plan.

<p>the years of intensive water use, the water use index (WEI) was about 20%, and at peak times, as in 2012, up to 35%. With irrigation of less than 10% of agricultural land and climate change causing more frequent and intense heatwaves and droughts, losses in agricultural production can be expected. <i>Forestry:</i> Higher mortality of trees, insects and fungi infestation, larger number of heavy rain days and more forest fires. Forest fire trends have changed, with the period between two severe fire events shortening. <i>Agriculture:</i> Extreme precipitation events are causing low permeable soils to become waterlogged, destroying sensitive crops. Climate change has a severe negative effect on livestock's productivity and welfare, resulting in frequent and prolonged heat stress. <i>Biodiversity</i> is highly vulnerable to climate change with consequences such as the invasion of alien species</p>	<ul style="list-style-type: none"> • Climate finance, technology transfer and capacity-building needs. • Detailed, specific and quantified data on the lack, sensitivity and potential for adaptation. • Insufficient inclusion of climate change adaptation in key sectors, including disaster risk reduction and defense and security, both from a policy and decision-making perspective and in terms of investments and sustainable and resilient practices. • Institutional capacities for climate risk reduction and response are insufficient in key sectors. • There is a lack of rational education for climate risk reduction at all levels of education, especially in raising awareness among the general population. • Financial resources are primarily allocated to mitigation; for example, globally, in 2019, out of 637 billion US dollars, 571 billion US dollars were allocated for mitigation and only 46 billion US dollars for investments for adaptation 	<p>the same time cause flash floods when there are extreme rainfall events (the risk of such flash floods is higher in urban landscapes with non-permeable surfaces, as this will result in increased runoff and reduced time of concentration).</p> <ol style="list-style-type: none"> 5. Flooding of rivers and long-term changes in river morphology in areas with predicted increase in rainfall. 6. Catchment capacity changes caused by increased runoff, which can mean additional storage needs for dams and potential risks of dam breaches due to extreme precipitation events. 7. Flash floods, depending on their occurrence, pose additional erosion and landslide risks. 8. Water resource variability (changes in incident rainfall, seasonal changes in rainfall, extreme rain events leading to flash floods). 	<p>populations and enhancing governance and institutional frameworks. Community engagement and participation are vital for fostering local-level resilience.</p> <ul style="list-style-type: none"> • Systemic integration and implementation of adaptation • Sustainable financing and strengthening financial capacities with nature-based solutions. • Establishing responsibility at the state, institutional and individual levels. • Establishment of a groundwater cadastre. • Adoption of a National Adaptation Plan that identifies and prioritizes key vulnerable sectors, citizens, measures and activities for comprehensive climate change adaptation.
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<p>and the movement and migration of threatened plants and animal species. <i>Livelihoods</i>: the human capacity to cope with the effects of climate change is not equally dispersed and varies greatly across the municipalities.¹⁸</p> <p>This trend is expected to keep increasing in the future due to rising temperatures, the anticipated impact of climate change and an increase in extreme events.</p>	<p>exclusively from public sources.²¹ In the Macedonian context, much of the international support received has been used to finance projects predominantly to mitigate the effects of climate change.²²</p> <ul style="list-style-type: none"> • Climate change impacts demographic trends and patterns. • While climate change rarely results in direct security threats, they interact with existing stress factors, including socio-economic, political and natural hazards to undermine resilience. • Inadequate financing for priority areas 	<ol style="list-style-type: none"> 9. Glacier melting and snow destabilization may increase avalanche risks in new areas. 10. Heatwaves can increase the risks of heat exhaustion, especially for people in urban landscapes with additional effects of heat islands; it can also affect the flora landscapes, plant health and cultivation. 11. Health risks and human mortality are some direct impacts, with greater risks of emergence of new diseases. 12. Reduced frost days would mean early spring arrival, affecting plant blooming and other ecosystem life-cycle changes. 13. Changes in cultivation periods and productivity due to drought (pH changes, nutrient losses/salinity) and redistribution of annual 	
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¹⁸ <https://tinyurl.com/4du52ceb>

²¹ <https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2021/>

²² <https://api.klimatskipromeni.mk/data/rest/file/download/b7237187fb7ace50cb566904daffebe2a3e6050aefde6e246ae1d9b1985a8d59.pdf>

		<p>precipitation cycles.</p> <ol style="list-style-type: none">14. Increased cases of pests and diseases (risks to humans and agriculture).15. Species migration changes in terms of spatial and temporal shifts.16. Habitat regions can change with altering weather and shift in flora spread (new regions may become preferred habitats for different species, some other hot-spots and habitats may no longer be preferred habitats for species).²³ <ul style="list-style-type: none">• Insufficient integration of climate scenarios and models in risk and hazard assessments.• Inadequate integration of climate risk analyses in the design and implementation of risk reduction activities.• Critical infrastructure exposed to climate change impacts.• Emergence of "climate displaced persons" and migration to less exposed and vulnerable areas, globally, regionally and nationally.	
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²³ <https://tinyurl.com/4du52ceb>

		<ul style="list-style-type: none"> • Insufficient support for research and development for adaptation and resilience. • Insufficient funding for measures and activities to address climate changes. • The National Adaptation Plan, defining critical and vulnerable sectors and providing comprehensive adaptation measures and activities, has not yet been adopted. 	
Natural Resources and Environmental Degradation	<p>17. Inappropriate use of natural resources;</p> <p>18. Widespread illegal logging.</p> <p>19. Natural resources, such as forests are viewed as resources for logging and commercial exploitation.</p> <p>20. Corrupt practices in the field of environment.</p> <p>21. Inadequate policies for</p>	<ul style="list-style-type: none"> • From 2001 until today the country has lost about five percent of the forests at its disposal through illegal logging²⁴ contributing to the depletion of the forest resources, erosion, etc. • Inadequate integration of sustainable forest management and understanding of the protective functions of forests. • Existence of environmental 	<ul style="list-style-type: none"> • Biodiversity measures and policies • Preventing illegal logging • Soil pollution prevention • Effective water management (resilience of water resources and their reserves), including cross-border cooperation on water • Implementation of payment for ecosystem services. • Reducing waste generation and promoting recycling and the reduction of noise and electromagnetic emissions through active inclusion of women in these programs • Ensuring sufficient supply of key energy resources

²⁴ <https://www.osce.org/files/f/documents/5/7/527568.pdf>

	<p>granting concessions for mining and exploitation of natural minerals.</p> <p>22. Insufficient treatment of municipal and industrial wastewater.</p> <p>23. Climate change exacerbates environmental degradation and poses significant challenges to ecosystems and natural resources.</p> <p>24. Lack of a system for payment for ecosystem services.</p> <p>25. Industries, the energy sector, agriculture, trade, settlements and tourism will continue to exert the greatest pressure on the environment and have a decisive impact on environmental processes.</p>	<p>corruption, including illegal logging, air pollution, concessions for mineral resources, concessions for water resource use, etc.</p> <ul style="list-style-type: none"> • Excessive exploitation of resources. • Water, air and soil pollution. • Potential pollution of the fertile Strumica Valley from the copper mine Ilovica. • Pollution of watercourses and rivers with industrial and municipal wastewater. • Reduced financial contributions to operators and entities responsible for natural resource management due to the absence of schemes for payment for ecosystem services. • Challenges in the supply of high-quality drinking water and limited natural resources for safe food production. 	<p>through appropriate diversification of supply sources</p> <ul style="list-style-type: none"> • Increased use of local renewable energy sources and transition to alternative sources
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<p>Corruption and corrupt practices in the security and defense system</p> <ul style="list-style-type: none"> • Corruption is acknowledged as one of the biggest problems in society.²⁵ • 33.7% of citizens have been exposed to corrupt pressure, while 32.9% have been involved in corruption.²⁶ • Nearly every third citizen (31%) is susceptible to corruption and an additional 31% of citizens exhibit mixed behavior.²⁷ 	<ul style="list-style-type: none"> • Giving and receiving bribes • Non-transparent and corrupt practices in public procurement within the security and defense sector, during crises, emergencies and disaster response • Lack of transparency of promotions, deployments and allocation of merits to soldiers, officials and members of protection and rescue forces • Misuse of institutional budgets and fund manipulations • Utilization of resources for generating off-budget profits • Inadequate financial compensation in the form of salaries for employees in the security and defense sector, negatively affecting morale and increasing the risk of corrupt behavior.²⁸ 	<ul style="list-style-type: none"> • Hindering the effective and efficient functioning of the system • Weakening operational readiness for response • Diverting, as well as increased misallocation of limited resources • Equipment and resources with reduced quality or not meeting standards • Failure to fulfill obligations arising from NATO, EU, the European Civil Protection Mechanism, etc. • Risk to the reputation and diminishing credibility of security and defense forces • Decreased morale among soldiers, officials and members of the protection and rescue forces • Potential for illegal acquisition of information and data • Conflicts of interest lead to corruption. 	<ul style="list-style-type: none"> • The focus should be on procedures and protecting the system from corruption • Raising public awareness and knowledge about the existence and combating corruption and corrupt practices • Codifying good practices and lessons learned and improving the regulatory framework and operational procedures by implementing global practices and standards • Establishing a framework for public procurement during emergencies and disasters • Establishing mechanisms and tools for monitoring and detection • Effective protection for whistleblowers who play a crucial role in exposing corruption. • Implementing the Law on Prevention of Corruption and Conflict of Interest. • Amending and supplementing ethical codes for administrative servants and employees in the Ministry of Defense and the Army to encourage them and other public servants to report corrupt and illegal acts. • Regular adoption of an Integrity Plan in relevant institutions. • Improved management of public finances.
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²⁵ <https://mcms.mk/images/docs/2021/izveshtaj-za-procenka-na-korupcijata-nivo-na-korupcija-2021.pdf>

²⁶ <https://mcms.mk/images/docs/2021/izveshtaj-za-procenka-na-korupcijata-nivo-na-korupcija-2021.pdf>

²⁷ <https://mcms.mk/images/docs/2021/izveshtaj-za-procenka-na-korupcijata-nivo-na-korupcija-2021.pdf>

²⁸ <https://mod.gov.mk/storage/2021/09/Plan-za-integritet-MK-2021-2024.pdf>

	<ul style="list-style-type: none">• Poorly managed situations of conflict of interest.²⁹	<ul style="list-style-type: none">• The majority of citizens believe that corrupt pressure will continue to exist in the future.• Corruption remains unpunished in North Macedonia.	<ul style="list-style-type: none">• Designing and using tools to assess corruption risks to enhance the internal control system.• Corruption is linked to the forms of organized crime and rigorous vetting needs to be conducted.
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²⁹ <https://mod.gov.mk/storage/2021/09/Plan-za-integritet-MK-2021-2024.pdf>