Safety Management of Environmental Protection and Preservation and Sustainable Development of the Local Community

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Abstract: Many security risks lurk in the modern world, including security risks in the field of environmental protection and preservation. Ensuring the quality of the environment means maintaining the local and planetary biosphere as an essential support system for the realization of all human activities, and above all, the concept of sustainable development of the local community. Therefore, a systematic approach to safety management in the field of environmental protection and preservation must be provided. As a result, an adequate local community security strategy should be developed at the local level.

Key words: Sustainable development, local community, modern security risks, security strategy, environmental protection and preservation, environmental quality

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Introduction

Environmental security as the absence of threats, damage to the natural environment and population health has no limits and is a global challenge. Therefore, it must be taken care of by the United Nations (UN), with the obligatory cooperation of national security entities. Special attention should be paid to the prevention of possible accidents in the field of environmental safety. Addressing a number of environmental security challenges is highly dependent on the economic power of individual states.

Ecological safety according to Vranješ [Vranješ N., 2009] includes: 1. a complex of conditions, phenomena and actions that provide ecological balance on the Earth at the local, regional and global level; 2. exclusion of any human activity that has a harmful effect on the environment; and 3. a situation in which there is no danger of causing damage to the natural environment and the health of the population.

The modern world is aware that environmental safety[22] depends not only on humans and their activities, but also on natural disasters (earthquakes, floods, volcanic landslides, hurricane winds, etc.). The main carriers of environmental threats are people, i.e. their actions or inaction.

This paper will look in detail at previous research and security challenges at the global, regional and national levels. Also, a strategic-doctrinal and systemic approach in solving the preservation of society and environmental safety will be proposed, with special reference to the security strategy of the local community as a cell of the world. Without that, there is no realization of the concept of sustainable development.

Environmental safety as a product of the work of a number of researchers

The modern world is well aware that national security has the state as the main reference, while human safety has the human or human species as references. Lothar Brock, a researcher at the Frankfurt Institute for Peace Research, asks: "What is the reference of environmental security - safety or the environment, conflicts over natural resources or environmental quality of life?" To answer his question, it is necessary to connect the academic community and the community that deals with the creation of security policy. Security policy makers focus on new, non-military security challenges, while environmental policy makers use foreign experiences and security policy arguments to point to the urgency of solving environmental problems, especially those at the global level [Carius & Imbusch, 1998: 8].

The term Environmental Security[23] is associated with a number of researchers in this field [Ullman, 1983; Mathews, 1989; Myers, 1993; Westing, 1989; Buzan et al., 1998]. Environmental safety has gone through three stages of development since the 1970s [Rønnefeldt, 1997; Brauch, 2003] and is now in the fourth phase of synthesis and reconsideration of the notion of security [Dalby, 2002: 96]. This phase is characterized by the ENVSEC (Environmental security) initiative, which is aimed at: 1. vulnerability assessment and

[22]Katrina Rogers distinguishes the notion of *environmental security* from *ecological security* [Rogers, 1997: 503–509]. *Environmental security* is used in terms of protection and defense of natural resources and describes the threat to political stability due to environmental problems.

[23]Encyclopaedia Britannica defines the environment as a set of physical, chemical and biotic factors that have an effect on an organism or ecological community and essentially determine its shape and survival. Ecology refers to "the study of the relationship between organisms and their environment."

environmental monitoring and security connectivity; 2. policy development and implementation; and 3. institutional development, capacity development and protection. The ultimate goal of the fourth phase of research on human and environmental security and peace is to persuade politicians to recognize and point out the causes of fatal outcomes of environmental degradation, and prevent serious crises, which can even lead to war conflicts, etc. Specific strategies that would be initiated must vary from case to case and must include specific context, history, and propensity for conflict [Brauch, 2003; 2005]. The World Federation of UN Associations (WFUNA) also addressed this issue, defining environmental security[24] as "the ability of the environment to provide support for life", and consists of three sub-elements: a) prevention or recovery from environmental damage during military actions; b) prevention or response to environmental conflicts; and c) protection of the environment due to its inseparable moral values [WFUNA, 2008].

World peace sometimes depends on the environment. In his research, Brock [Brock, 1991: 408] identified the following links between peace and the environment: a) environmental impoverishment leads to far-reaching social conflict and war; b) modification of the environment as an instrument in inter-social relations; c) environmental impoverishment as a specific cause of violence; d) trust and confidence on which ecological cooperation is built; d) use of military means for the implementation of environmental standards; and f) a healthy environment as an integral part of comprehensive security.

Dyer [Dyer, 2002: 67–81] believes that environmental security should “take into account the spatial and temporal dimension (universal and intergenerational) of environmental change”. Matthew [1997: 89] sees environmental security as “a component of a more general approach to the theory and practice of world politics that underscores the importance of the way in which social and ecological systems influence each other. At the same time, environmental security is capable of standing on its own as a link between environmental and community security experts.” Jon Barnett [2001: 129] argues: “environmental security is a process that reduces environmental insecurity to its minimum”, setting people as the main reference of safety. Environmental security requires that states

[24]In 1995, in the US National Security Strategy, the United States stated: "Protecting our national security - our people, our territory and our way of life - is a priority of the government and a constitutional obligation… A wide range of environmental degradation threatens political stability in many regions and countries." [Woodrow Wilson Report, 1995: 47].

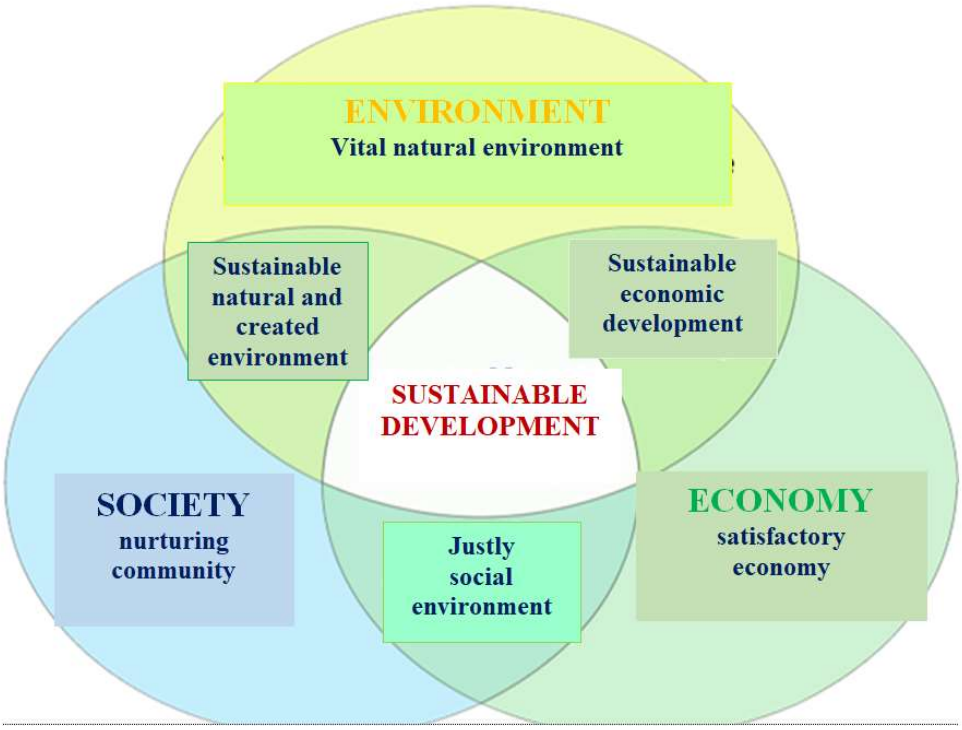
"act internally and curb global, regional and local processes that lead to environmental degradation and human insecurity."

As the quality of life does not exist without its constant improvement, which implies constant ecological safety and environmental protection, a new concept was introduced in the 1980s - sustainable development.

The concept of sustainable development - a paradigm of overall development

The concept of sustainable development corresponds in time to environmental safety and environmental protection. With *the Bergen Declaration*, the ministers of European countries in 1990 better defined the term: sustainable development. This concept was subsequently accepted by the international community and is based on the triangle: **ecological balance, economic security and social justice** (Fig 1). Some experts had a different view, so they defined that sustainable development lies on "4 pillars". Every concept takes great care of environmental safety and environmental protection.

Figure 1. The concept of sustainable development



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The importance of sustainable development can best be seen in the statement by Rajendra K. Pachauri, director of the TATA Energy and Resources Institute (TERI) in New Delhi,

who defined environmental safety as "minimizing environmental damage and promoting sustainable development, with emphasis on cross-border dimensions… Economic vulnerability and resource dependence play a key role in relation to environmental change and the potential for violence and insecurity in developing countries." Pachauri also points to the link between poverty and degradation of natural resources:

"First, the constant struggle to provide food and meet basic needs increases land degradation in developing countries… Second, worsening pollution affects air quality, along with traffic and industrial expansion… Third, global climate change is leading to rising temperatures and sea levels, as well as dire consequences when it comes to the coasts of South Asia… Fourth, water quality and quantity are endangered due to land use, deforestation and water pollution, both at the local level and across national borders"; according to: [Brauch, 2003: 69].

The complexity of the present moment has led to the existence of numerous experts and practitioners dealing with the phenomenon of sustainable development. In this, they are helped by the identification of areas and indicators of sustainable development that the EU has determined in its Sustainable Development Strategy (Table 1).

It is evident there is no sustainable development without ecological security.

Ecological security and preservation of the environment - preconditions for sustainable development

Ecological security means creating conditions in which the physical environment of the community enables the satisfaction of the needs of the population without reducing the natural reserves [Rogers, 1997: 503–509]. Dennis Pirages and Ken Cousins define environmental security as maintaining four dynamic balances: a) between people living at high levels of consumption and the ability of nature to provide resources and the supply; b) between the human population and pathogenic microorganisms; c) between humans and animal and plant species; and g) in the human population [Pirages & Cousins, 2005]. The notion of environmental security defined like this clearly separates it from the notion of ecological security[25], as a threat of ecological degradation to political stability.

[25] The difference between ecological and environmental security is shown by the example: If a state invades another state to appropriate additional natural resources or to protect, defend or ensure permanent access to resources, in that case it strives for the security of its environment.

Buzan et al. [Buzan et al., 1990] argue that: "Environmental security is concerned with maintaining the local and global biosphere as an essential support system, on which all human activities depend." Buzan [Buzan et al., 1998: 74–75] includes the following topics in the scientific scope of the environment: 1. *destruction of ecosystems*; 2. *energy problems*; 3. *population problems*; 4. *food problems*; 5. *economic problems*; and 6. *civil unrest.*

Table 1. Areas, basic and operationalized indicators of sustainable development

AREA	BASIC INDICATORS	OPERATIONALIZED INDICATORS
Socio-economic development	Real GDP per capita	**Economic development** **Innovations, competitiveness and ecological efficiency** **Employment**
Sustainable consumption and production	Resource productivity	**Used resources and waste** **Consumption patterns** **Production patterns**
Social involvement	People at risk of poverty or social exclusion	**Material poverty and living conditions** **Availability of the labor market** **Education**
Demographic changes	Employment rate of older workers	**Demographics** **Adequate income in old age** **Sustainability of public finances**
Public health	Number of healthy life years by gender and life expectancy at birth	**Health and health inequalities** **Determinants of health**
Climate changes and energy	Greenhouse gas emissions Primary energy consumption	**Climate changes** **Energy**
Sustainable transport	Energy consumption for transport in relation to GDP	**Transport and mobility** **Impacts of transport**
Natural resources	Common bird index	**Biodiversity** **Freshwater resources** **Marine ecosystems** **Land use**
Global cooperation	Share of official development assistance in gross national income	**Market globalization** **Financing sustainable development** **Global resource management**
Proper management		**Political coherence and efficiency** **Openness and participation** **Economic instruments**

According to Gaćeša (Gaćeša, D., 2008), ecological security is the protection of citizens from:

- irresponsible pollution of air, soil, flora and fauna;
- irresponsible use of natural resources (water, ore, minerals, fish and hunting stock, gravel, sand, etc.);

- inefficient law enforcement institutions
- and people themselves in their behavior towards nature and the environment.

Environmental security can be compromised directly or indirectly. Man can intentionally or unintentionally endanger environmental safety. The threat itself can be short-term or long-term, and consequently the consequences of the threat. The complexity of the issue of environmental security has led the EU in 2014 to identify areas and indicators of environmental security (EEA Indicators, Luxembourg) (Table 2). It is obvious that the environmental safety indicators defined in this way occupy a significant place in the extended concept of safety (Table 3).

Table 2. Ecological security indicators

AREA	**INDICATORS**
A: Air pollution, transport and noise	
Air pollution	Emissions of major air pollutants
	Exceeding the air quality limit value in urban areas
	Exposure of ecosystems to acidification, eutrophication and ozone
Transport	Demand for passenger and freight traffic
	Use of cleaner and alternative fuels
Industry	Polluting waste from industrial facilities released into the air, soil and water
Noise	Population exposed to noise exceeding the limit values (for road traffic)
B: Climate changes and energy	
Climate change mitigation	EU and national overall gas emission trends greenhouses and projections
	Concentration of atmospheric gases with a greenhouse effect
	Production, consumption and emissions of fluorinated gases
Climate change influence	Global and European temperatures
	Melting trends of European glaciers and sea ice
Energy	An overview of the European energy system
	The share of renewable energy sources in final energy consumption
C: Freshwater resources	
Water resources / water scarcity and drought	Use of fresh water resources
Freshwater ecosystems	Trends and ecological status
Water pollution and quality	Oxygen-consuming substances in rivers
	Nutrients in fresh water
Water and health	Bathing water quality
Impact of climate change on water	Impact of climate change on water
Pressure on water resources	Pressure on water resources

D: Marinas and the maritime world	
Transitional, coastal and marine water quality	Nutrients in transitional, coastal and marine waters
	Chlorophyll in transitional, coastal and marine waters
	Hazardous substances in marine organisms
Fishing	Marine fish stock status
	The quality of the fishing fleet
Climate changes	Sea surface temperature
	Global and European sea level rise
E: Biodiversity and ecosystems	
Status and trends of biodiversity components	Species and habitats of European importance
	Protected areas
	Abundance and distribution of selected species
Biodiversity threats: habitat loss and degradation	Loss of land
	Habitat and ecosystem fragmentation
Agriculture and forestry sectors	Agricultural land under Natura 2000
	Forests: wood stocks, increments and dead forests
F: Waste and resources	
Waste production	Waste production
Waste recycling	Waste recycling
Landfill diversion / disposal	Diversion of waste from the landfill
Household consumption	Intensity of household pressure on the environment
Energetic efficiency	Intensity of total primary energy
Separation of environmental pressures	Separating resource use from environmental pressures
Separation of environmental impacts	Separating the use of resources from the impact on the environment

The environment is the foundation of the life of all living beings, animals and plants and is an important factor of internal stability and national security. Environmental degradation also affects the internal security of a country. The causes of its endangerment can be:

- *social,* as predominant and the result of human actions as dominant factors of protection and endangerment of the environment, and
- *natural.*

Endangerment of the environment can be:

a) "Endangerment by radiological-chemical, physical (noise, vibrations, particles, etc.) and biological agents, with numerous modifications of sources and forms of endangerment originating from peacetime or war conditions. This way of endangerment is primarily related to its artificial origin, as a product of

scientific, technical and technological progress in the field of civilian and military technologies.

b) Endangerment with geophysical weapons to change weather and climate, seas and oceans, causing earthquakes and storms and manipulating electromagnetic radiation reaching the earth, often referred to in the literature as "weapons for changing the human environment", "environmental weapons", etc. These are intentional geophysical modifications that are applied in peace and war in order to undermine the security of a certain country. It is based on the fact that in some regions of the world a larger amount of natural energy is accumulated than usual, and that it is possible to cause its instability if it is identified and triggered by lower energy potential (Bhupenr, 1976: 157 cit. According to Keković, Todorović, 2008: 26). Therefore, it is possible to artificially cause earthquakes, high waves, disturbance of the ecological balance of a landscape, changes in the precipitation regime, etc." (source: Matijašević-Obradović DJ & Obradović MA, 2014).

Table 3. Position of environmental security in the extended concept of safety

Dimensions (sectors) of security Levels of interaction	**Security – for whom and what**	**Security – for which values**	**Security – from what threats**
National (political) and military dimension	State	Territorial integrity, organizational stability, sovereignty	Other countries, guerrillas, terrorism (substate actors)
Social	Nation, social groups	National unity, identity	States (nations), migrants, acculturation
Human	Individuals, human race	Survival, the quality of life	State, globalization, nature, terrorism
Ecological	Ecosystems, biosphere	Sustainability of society and the state of the environment	Human race
Gender	Gender relations		Totalitarian institutions, intolerances

Source: Autori koristeći: Møller, 2000; Oswald, 2001; Brauch, 2008

Ecological safety and preservation of the environment are very important for the realization of sustainable development of Serbia. Serbia, as a part of Europe and the Planet, must be a part of the global systemic approach to the Management of Security and Environmental Protection. It must take on the obligations arising from UN and EU documents. In particular, it must develop a systemic approach to national security, an important element of what will be environmental security. Local governments (cities and municipalities) must develop their own environmental safety strategies.

Possible model of security strategy of cities / municipalities with special emphasis on environmental safety

The security strategy of a local community (city or municipality) can be a significant management tool for its leadership. The process of preparing the Security Strategy of cities / municipalities should have:

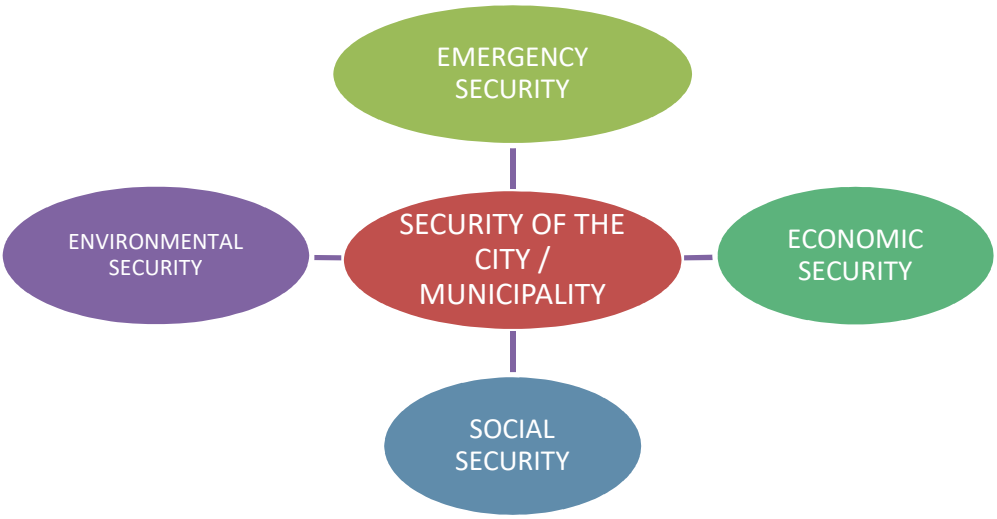
a) Integral and participatory approach,

b) Cross-sectoral cooperation and information exchange, and

c) Involvement of the public, private and civil sectors.

The security strategy at the local level should define the overall security of the city / municipality. It consists of four security components: *1. Economic security, 2. Social security, 3. Environmental security and 4. Emergency Security (Fig. 2).*

Figure 2. Local community security components - city / municipality



Source: own work

Table 4 shows the general and specific goals of the security components of the local community - city / municipality. Meeting the goals will ensure prevention and prevent inconsistencies in the overall development of the local community. This means that sustainable development can be achieved in a planned way without any negative surprises.

Table 4. General and specific objectives of the security components of the local community - city / municipality

	General objective	**Specific objectives**
1. ECONOMIC SECURITY	Increasing the standard of living by creating a favorable business environment, increasing employment, improving the image of the city / municipality and increasing the level of safety at work.	1. Creating a favorable business environment of the city or municipality.
		2. Increasing employment.
		3. Improving the image of the city / municipality.
		4. Increasing the level of safety at work, in the private sector and urban transport.
2. SOCIAL SECURITY	Creating favorable conditions for improving the security of individuals and social groups in the city / municipality through meeting the needs of citizens, protecting their rights, systemic improvement of education, health and social policy, family protection and personal safety.	1. Raising the level of security culture.
		2. Strengthening the mechanism for more efficient work of local self-government, especially in the field of security.
		3. Raising the level of health safety and public awareness and health risk factors.
		4. Raising the level of security in educational institutions.
		5. Poverty reduction and greater care for marginalized social groups.
		6. Strengthening the mechanism for prevention and fight against all forms of crime.
3. ECOLOGICAL SECURITY	Improving the quality of the environment in accordance with the principles of sustainable development.	1. Improving the environmental system and monitoring changes in the environment and informing the public.
		2. Establishment of an integrated waste management system and remediation of landfills.
		3. Establishment of a system of protection, preservation and sustainable use of land, natural resources and biological diversity.
		4. Preservation and sustainable use of water sources, water supply systems and protection of watercourses.
		5. Improving the heating and gasification system, application of energy efficiency principles and use of alternative energy sources.
	Construction of a unique Emergency Management	1. Construction of an integrated emergency management system.

4. SECURITY IN EMERGENCY SITUATIONS	System that contributes to increasing security and reducing the risk of technical-technological, natural and anthropological impacts.	2. Construction of a unique information-communication system for emergency management.
		3. Creating conditions for more effective functioning of the protection and rescue system at the level of the city / municipality.
		4. Improving emergency prevention.
		5. Improving education, training and information.

Source: adapted to the Security Strategy of the City of Nis

The environmental safety system includes a set of legislative, technical, medical and biological measures aimed at maintaining a balance between the biosphere and anthropogenic impacts. The subjects of environmental security are individuals, society, the biosphere and the state. Objects are the vital interests of the subjects of security, law, material and spiritual values, natural resources and the natural environment as the material basis of state and social development.

The area of environmental safety should be observed through the following sub-areas: Atmosphere, Land, Water, Bio-diversity, and Waste. Each sub-area has its own environmental safety indicators, which are systematized in Table 5.

Table 5. Environmental safety indicators

Subareas	**Indicators**
Atmposhere	Concentration of pollutants in the air
	Number of days in the year with exceeded immission of pollutants
	Number of inhabitants connected to district heating
	Percentage of gasification achieved
	Noise level
	Radiation level
Land	Arable land and land under permanent crops
	Percentage of arable land affected by erosion
	Flooded land
	Areas under forests
	Deforestation intensity
	Damage from forest fires
	Urbanized and non-urbanized areas
Water	Availability of controlled drinking water
	The length of the constructed water supply network
	Microbiological safety of drinking water
	Length of the constructed sewerage network
	Amount of treated wastewater
	Surface water quality
Biodiversity	Green urban areas
	Protected areas
	Endangered plant species

	Protected plant species
	Endangered animal species
	Protected animal species
Waste	Amount of waste per household
	The amount of municipal waste that is collected in an organized manner
	Hazardous waste
	Landfill condition
	The amount of recycled waste

Source: adjusted according to the Nis City Security Strategy

By quantifying each indicator of environmental safety at the local community level, significant information is obtained, which local community management can use to make timely and quality decisions related to the environmental safety of the local community. Also, according to the same principle, economic, social and security in emergency situations indicators should be identified and quantified. Thus, a systematic approach can successfully manage the security of the city / municipality.

Conclusion

Environmental security as the absence of threats, damage to the natural environment and population health has no limits and is a global problem. It must be taken care of by the United Nations - the UN, the European Union and the entire developed world, with the obligatory cooperation of national security entities. Only joint efforts can solve the many environmental security challenges we are faced with.

Every country in the world has recognized security in the field of protection and preservation of the environment as a very important factor in its security. Every country is aware that environmental safety does not depend only on man and his activities, but also on natural disasters, but that the main carriers of endangering the environment are people, i.e. their actions or inactions.

Previous research and security challenges at the global, regional and national levels have been examined in detail. Special attention is paid to the local community and its security within the Sustainable Development System.

A Local Community Safety Management Model has been proposed, which includes four sub-areas: Economic Security, Social Security, Environmental Security and Emergency Security.

The sub-area Environmental Security has been elaborated in detail, for which all indicators necessary for quality safety management in the protection and preservation of the environment at the local community level have been identified. According to the same principle, indicators for other sub-areas of city / municipality security should be identified and quantified.

References

BARNETT J. (2001), The Meaning of Environmental Security. Ecological Politics and Policy in the New Security Era. Zed, London–New York.

BRAUCH H. G, (2008), Conceptualising the environmental dimension of human security in the UN. International Social Science Journal, 59(1), p.48,.

BRAUCH H. G. (2003), Security and Environment Linkages in the Mediterranean: Three Phases of Research on Human and Environmental Security and Peace, in: Brauch, Hans Günter; P. H. Liotta, Antonio Marquina, Paul Rogers and Mohammed El-Sayed Selim (Eds.). Security and Environment in the Mediterranean. Conceptualising Security and Environmental Conflicts. Springer, Berlin: 35–143.

BRAUCH H. G.. (2005), Environmental threats, challenges, vulnerabilities and risks, in: Encyclopedia of Life Support Systems. UNESCO, Paris and Eolss Publishers, Oxford.

BROCK, L., (1991), Peace through Parks? The Environment on the Peace Research Agenda. Journal of Peace Research 28, 4 (1991): 407–423.

BUZAN B., OLE W., J. DE WILDE, (1998), Security. A framework for Analysis. Lynne Rienner, Boulder–London .

BUZAN Barry; OLE Wæver., JAAP DE WILDE. Security. A framework for Analysis. Lynne Rienner, Boulder–London 1998.

CARIUS A.& K. Imbusch. Environment and Security in International Politics – An Introduction in: Alexander Carius & Kurt M. Lietzman. (Eds.) (1998), Environmental Change and Security – A European Perspective. Springer, Berlin.

DALBY S. (2002), Security and Ecology in the Age of Globalization, in: Woodrow Wilson International Center for Scholars (Ed.): Environmental Change and Security Project Report 8 (2002 Summer): 95–108.

DYER H. C. (2008), Theoretical Aspects of Environmental Security in: Eileen Petzold-Bradley; Alexander Carius & Arpád Vincze (Eds.) Responding to Environmental Conflicts – Implications for Theory and Practice. Dordrecht: NATO ASI Series, Kluwer Academic Publishers, Dordrecht, Netherlands67–81.

GAĆEŠA, D., (2008), "Bezbjednosni aspekti zaštite životne sredine u Republici Srpskoj-rizici i prijetnje“, Bezbjednost i zaštita u Republici Srpskoj i Bosni i Hercegovini, stanje i perspektive, Zbornik radova, Fakultet za bezbjednost i zaštitu, Banjaluka.

https://odbranaibezbednost.rs/wp-content/uploads/2020/09/fasfsa.png

KEKOVIĆ Z., TODOROVIĆ Z. (2008): Ugrožavanje životne sredine u Republici Srbiji - bezbedonosni aspekt, Nauka bezbednost policija, Kriminalističnopolicijska akademija, Beograd, God. 13, broj 3

MATHEWS J. T., (1989), Redefining Security, Foreign Affairs 68, 2 (1989 Spring): 162– 177.

MATTHEW, R. A. (1997). Rethinking Environmental Security in: Nils-Petter Gleditsch (Ed.) Conflicts and the Environment. Kluwer Academic Publishers, Dordrecht, Netherlands,: 71–90.

МАТИЈАШЕВИЋ-ОБРАДОВИЋ Д.Ј., ОБРАДОВИЋ М.А., (2014), Угрожавање безбедности савременог друштва у светлу угрожавања, Монографска студија, Правни факултет за привреду и правосуђе, Нови Сад,

MØLLER B, (2000), The Concept of Security: The Pros and Cons of Expansion and Contraction. Copenhagen: Copenhagen Peace Research Institute.

MYERS N., (1993), Ultimate Security: The Environmental Basis of Political Stability. New York: Norton,

NEŠKOVIĆ S., (2009). Globalizacija životne sredine i međunarodna saradnja u eko-bezbednosti, I Scientific Conference with international participation Ecologic Safety in Postmodern Environment, Banja Luka, RS, BIH, str. 2, 26-27. jun, 2009.

PIRAGES, D., COUSINS K. (2005), From resource scarcity to ecological security. MIT Press, Cambridge, MA.

ROGERS K. S. (1997), Pre-empting Violent Conflict: Learning from Environmental Cooperation, in Nils-Petter Gleditsch (Ed.) Conflict and the Environment. Kluwer Academic Press: Netherlands, Dordrecht.

RØNNFELDT C. F. (1997), Three Generations of Environment and Security Research, Journal of Peace Research, 34, 4 (1997): 473–482.

Strategija nacionalne bezbednosti Republike Srbije, Sl. glasnik RS, Beograd, 2009.

Strategija bezbednosti grada Niša, Niš, 2010.

ULLMAN R., (1983), Redefining Security. International Security 8, 1 (1983 Summer): 129–153

VRANJEŠ N., (2009), Globalni aspekti ekološke bezbjednosti, Zbornik radova sa 1 International Conference "Ecological safety in post-modern Environment" 26-27. Juny 2009, Panevropski univerzitet "Apeiron" Banja Luka

WESTING H. A., (1989), The Environmental Component of Comprehensive Security. Bulletin of Peace Proposals 20, 2, (1989 June): 129–134.

WFUNA. Millennium Project: Environmental Security Studies. 2008.