

Stručni rad/Professional paper

INCREASE GOVERNMENT AND LOCAL AWARENESS OF DRR, PERSPECTIVE FOR SOCIO – ECONOMIC PROSPERITY OF THE COMMUNITY

Naumovska, G.¹, Glavinov, A.²

¹Protection and Rescue Directorate, Skopje, North Macedonia

²University “Goce Delechev“, Shtip, Military Academy
“General Mihailo Apostolski“, Skopje, North Macedonia

Abstract: Losses of life from natural or anthropogenic disasters are a confirmation of a country's readiness to deal with unpredictable threats that affect socio-economic and security stability of the state.

Macedonia faces a series of weaknesses in the disaster management system. It is especially important to emphasize the influence of party policies in setting up non-professional staff in key positions, requiring skills and abilities to deal with emergencies. Unplanned urbanization, air pollution, victims from floods, a large number of victims of road accidents, problems with hazardous waste, epidemics, epizootics, etc. are the many collected unresolved issues affecting the quality of life in the country. Prevention and preparedness are key phases of disaster management, which are perceived as disaster risk management with a multi-sectoral approach. Each Government up to now, was not adequate dedicate to this burning issue, not taking into account that only a one larger-scale incident, if it has a negative outcome, leaves a negative stamp in the memory of the citizens, in spite of the losses, increasing the psychological aspect of a hopeless situation from bureaucratic policies. The role of the European Union and the harmonization of legislation are of key importance. But the improvement of the disaster management system and understanding the importance of continuous funding in education, training, debates, workshops, etc. with the involvement of scientific institutions and the business community. Support from international organizations and partner countries is particularly precious in times when the state faces with various political and economic instability. Different aspects influence the changing perception of the Government in the approach to the mentioned issues in order to make the right decision.

Keywords: unplanned urbanization, air pollution, hazardous waste, epidemics, epizootics, Disaster Risk Reduction

1. Introduction

In this paper, an attempt will be made to present some of the problems and will offer conceptual solutions that will be used in order to increase the awareness of the Government of the Republic of North Macedonia (RNM), as well as the local self-governments in the approach of understanding and implementation of the risk reduction platform in order to strengthen prevention and preparedness at all levels. The RNM is a phenomenon in adopting regulations, frameworks and offered models, but the biggest problem is the lack of a control mechanism for their alignment and implementation, evaluation and lessons learned and their application for improvement. There is almost no

harmonization of the models between the state administration bodies, and further on the level of local self-governments. Although there are programs and plans, on paper, reality confirms the opposite. With each change of power, the period of the empty period continues. The results are stuck in place, the inability to follow up with new and modern trends is present.

The main goal of this paper is to prove the hypothesis that planning and investing in prevention, through permanent and professional staff, with coordinated approach and transparency in the exchange of data and information, full knowledge of the importance and significance of disaster reduction, is a mechanism through which the greatest blessing is created for the people, whose fruits, although they ripen later on, are beneficial for the government, as well as for all the citizens of the country.

2. Globalization of urban problems

The regulations for spatial arrangement were first introduced at the beginning of the 20th century. The maxima of the height and width of the structures and the configuration of the object inside the demarcated zones were set. The housing, manufacturing and retail facilities that had previously been intermingled now split into different parts of the city, but this has forced the population to travel longer to their jobs, which hampers the infrastructure and trade and limits activities in different periods from day.

The global trend is migrating to the larger industrial capacities in order to make it easier to earn money and a normal life, and on the other hand societies face densely populated areas, inadequate urbanization, the creation of a lot of waste of different character, air pollution, water and soil, for the spread of infectious diseases, etc.

3. Socio-economic vulnerability of poor countries and countries in transition

Mahatma Gandhi once said: "Recall the face of the worst and most helpless person whom you may have seen and ask yourself if the step you contemplate is to be of any use to him. Will he be able to gain anything by it? Will it restore him to control his own life and destiny?"¹²⁴

There is a close correlation between disasters, poverty and the environment. As the poor exploit environmental resources, the risk of survival disasters increases. Unplanned urbanization often increases the risk of destruction of buildings built on unsafe land. The poor live in environmentally vulnerable areas, steep slopes, flooded plains and houses of

¹²⁴(2019, February), <http://www.radixonline.org/humanrights2.htm> (PUTTING FLOORS UNDER THE VULNERABLE': DISASTER REDUCTION AS A STRATEGY TO REDUCE POVERTY, Yasemin AYSAN, Chief, Disaster Reduction and Recovery Programme, Emergency Response Division, UNDP. Presented at the World Bank Consultative Group for Global Disaster Reduction Meeting: June 1-2, 1999, Paris)

poor quality. Unemployment, government instability and inadequate policies, poor economic conditions and the lack of peace and security increase the community's vulnerability to disasters, and poverty is a factor that affects both the choice for a safer environment and the inability to recover. Social and economic pressures make people vulnerable, forcing them to live in dangerous locations, with no resources to protect themselves. The inability of governments to provide adequate infrastructure and public services is at the heart of many urban challenges in developing countries.

3. Planned urbanization, concepts and definitions

Spatial planning deals with "the problem of coordinating or integrating the spatial dimension of sectoral policies through a territorially based strategy (Cullingworth and Nadin, 2006: 91).

Compendium of European Spatial Planning, spatial planning defines it as methods that are largely used by the public sector to influence the future distribution of space activities (European Commission, 1997). The purpose of spatial planning is to create a more rational territorial organization of land use, the requirements for development to comply with environmental protection and to influence social and economic development. Therefore, spatial planning is an important lever to promote sustainable development and improve the quality of life.¹²⁵

Spatial plan, a set of documents that indicate a strategic direction for the development of a given geographical area, state policy, priorities, programs and land allocations and will affect the distribution of people and activities in spaces of different scales. Spatial plans can be developed for urban planning, regional planning, environmental planning, space planning, national spatial plans or spatial planning at the Union level.¹²⁶

Urban planning, design and regulation of the uses of space that focus on the physical form, economic functions, and social impacts of the urban environment and on the location of different activities within it. Because urban planning draws upon engineering, architectural, and social and political concerns, it is variously a technical profession, an endeavor involving political will and public participation, and an academic discipline.¹²⁷

¹²⁵ (2019 March), *Spatial planning* - Key Instrument for Development and Effective Governance with Special Reference to Countries in Transition UNITED NATIONS New York and Geneva (2008 - ECONOMIC COMMISSION FOR EUROPE Geneva)

¹²⁶ (2019 March), <https://inspire.ec.europa.eu/featureconcept/SpatialPlan>

¹²⁷ (2019 March), <https://www.britannica.com/topic/urban-planning>

4. Unplanned urbanization, concept and definitions

“Urbanization is one of the major threats to health in the twenty-first century. Closing the urban equity gap and promoting healthy cities requires urgent action, including the efforts of both rich and poor urban dwellers. To reap the potential benefits from urbanization, we must act collectively”, said Dr. Samlee Plianbangchang.¹²⁸ The general definition of unscheduled urbanization has not been found, ie it refers to failing to establish the planned urbanization. Migration from rural to urban areas is growing. If there is an unplanned construction of buildings and population expansion, poor waste management and sewerage, lack of potable water and electricity, it is an unplanned urbanization. Such overcrowding leads to serious civil disputes and conflicts.

The reasons for unplanned urbanization are the following:

- Lack of plants / facilities - for example, for drinking water, health care, transportation,
- electricity, communication, employment;
- Unhealthy surroundings, untidy space - no greenery, no drainage for rain and snow, problems
- regarding drinking water , simply the residence of the population is unpleasant, it is not healthy;
- Unequal distribution of the population - the space is limited, there is a very big crowd;
- Social disorders - unemployment, lack of health services, transportation, theft, lack of discipline, etc;
- Environmental degradation - inadequate exploitation of land, water, forests, etc.;
- Unfavorable effect on health - poor management of the drainage system, drinking water, road
- transport, etc.;

5. Current situation in RNM

The planned regulation of the spatial aspects of development is carried out in a multidisciplinary activity that is conventionally referred to as the concept of spatial planning.

The notions of planned urbanization are almost fully accepted by the international terminology and EU legislation in the positive legal regulations of Macedonia, where the authors have made a comparative analysis, in order to leave room and pay attention to confirming the hypothesis of this paper, we are addressing the problems and the current state of affairs in the country.

- Legal gaps and uncertainties - we will mention only in the part of urbanism, the non-inclusion of the Law on urban greenery, in the future Law on urbanism. On the other hand, in the creation of the new Law on Urban Planning, the Association of Architects

¹²⁸ (2019, March) Dr. Samlee Plianbangchang, WHO’s Regional Director for South-East Asia. - <http://www.searo.who.int/mediacentre/releases/2010/pr1503/en/>

of Macedonia (AAM) is not included at all. Experts warn that in the proposed Law on urban planning there are many uncertainties, which leave the possibility to be interpreted in one way or another. The possibility to suspend a detailed urban plan (DUP) is in the period of 6 to 12 months, but there is no detail on how many times this DUP can be suspended. Additionally, there is no information on who will take the blame and who will respond and what are the consequences if it is determined that the plan is illegal.

The Law on Spatial and Urban Planning and the Law on the Treatment of Illegally Built Objects, in fact, leaves space for investors, completely legal, to choose which procedure will lead the construction of the facilities. It would have been good if with the Law on illegal buildings, an end to the illegal buildings was announced.¹²⁹

Consequences of unplanned urbanization:

- Bad building habits; - There are almost no urban plans in rural areas;
- Failure to take appropriate measures to the existing landslides, August 4, 2015, after torrential rains, in Tetovo, the whole landfill has pulled out and made a disaster, loss of 6 lives and destroyed several homes.¹³⁰
- Overpopulation in the capital and an unadapted infrastructure;
- Introduction of low-standard second-hand cars;¹³¹ A problem with water supply with clean drinking water, especially in those areas using water from wells, and after floods, there is a possibility of pollution.
- The mixing of wastewater from torrential rains with open sewerage in the urban environment;
- Enormous consumption of water in production - in 2014, of the total water consumed for industrial purposes, 90% belong to surface waters;
- Inadequate treatment of regular and illegal landfills, in Macedonia there are 54 communal landfills, 16 of which are high, 16 with medium 19 with low environmental risk, about 300 illegal dumpsites, over 1500 wild rural waste dumps, while at the same time there are 16 old environmentally polluted industrial sites that pose a serious risk to people living in their vicinity;¹³²
- Insufficient treatment and waste management - in 2014 the largest quantity of waste is generated in the processing industry sector - 89% of the total amount of generated waste, the mining and quarrying sector is 75 198 tons;¹³³

¹²⁹ (2019 March) <https://meta.mk/> (Ivan Arsovski, urban and planning civilian engineer, Martin Panovski, architect engineer)

¹³⁰ Analytical data, Protection and Rescue Directorate, 2015

¹³¹ (2019, April), Association Eco Logic, Skopje

¹³² (2019, April) "Creative Communities of the Center for Contemporary Arts (CSU) - Skopje, supported by the USAID Citizen Participation Project.)

1.1 ¹³³ (2019, April), State Statistical Office, <http://www.stat.gov.mk/>

- In 2013, out of a total of 158 companies that have A and B integrated environmental permits, the total amount of hazardous waste was 14,722.91 tons. The survey identifies that 91% of hazardous waste is temporarily deposited (stored) at the creator's site, and only 9% of hazardous waste is recycled, reused or processed;
- There is no planned and continuous specialized training of employees in handling hazardous waste;
- No refunds on pollutants;¹³⁴
- Effective measures for solving the problem of polluted air in the RSM, especially in the winter period, mostly from CO, NO₂, O₃, suspended particles (PM 10), suspended particles (PM 2.5) and SO₂;^{135, 136}
- According to the European Environment Agency, more than 3,000 people die each year as a result of polluted air in Macedonia;
- -The appearance of infectious diseases and epidemics - the pathogens are transmitted through food, water, air and vectors. From an epidemiological point of view, in our environment more important are diseases, brucellosis and viral hepatitis, as well as measles and seasonal flu for 2018 (767 cases of measles) this year. During the 2018/19 season, a total of 23 flu-related deaths were registered, aged 5 to 86 years;¹³⁷
- Potential hazards and diseases in animals that occur in case of major floods (tetanus, botulism, listeriosis, kidney waves, bacterial diseases of papules and hoofs and injuries, also from salmonellosis, erosionosis or anthrax) or the onset of vector-borne diseases (insects) that distinguish the Swine Fever, as well as zoonoses (tularemia) from which both animals and humans are affected, and is primarily dipping in a large number of wild rodents . The dangers of expanding the African Swine Plague (ASF) require a special prevention and treatment program as the world's biggest threat at the moment;¹³⁸
- Poor life - RSM, it is on the 56th place behind all the Balkan countries, and it is ranked last in relation to the countries in southern Europe, which points to the fact that well-off citizens leave the country in search of a more quality life and well-being;¹³⁹

6. National Platform for Disaster Risk Reduction - a mechanism for consolidated cross-sectoral activity in dealing with unplanned urbanization

The International Strategy for Disaster Risk Reduction has imposed obligations in building a national disaster risk reduction strategy, i.e. a way to build community

¹³⁴ (2019, April) The NGO "Front 21/42", http://see-net.net/en/members/front_21_42

¹³⁵ (2019, April) Report 2012 -2014 "The efficiency of the measures for ensuring the quality of air in the Republic of Macedonia" ,

¹³⁶ (2019, April),<http://air.moepp.gov.mk>

¹³⁷ (2019, April), <http://healthrights.mk>, "Connection of climate change and infectious diseases, manual for health workers" ; <http://www.iph.mk>

¹³⁸ (2019, April) <http://www.fva.gov.mk/>

¹³⁹ (2019, April), www.numbeo.com- Europe: Quality of Life Index by Country 2019

resilience from disasters with a cross-sectoral approach.¹⁴⁰ The result that needs to be achieved besides reducing the loss of life, also emphasizes the reduction of the risks to the environment and the socio-economic aspect. The Hyogo Framework emphasized the guidelines in building national and local policies in the area of disaster risk reduction, through development policies and plans in all spheres of society.¹⁴¹ Through the five priorities for action, it has systematized the problems, from the conduct of policies and the establishment of a national platform, to spatial planning, rural development, integrated health sector policies, education, sustainable development, environmental management, public awareness raising, which are part of most key activities and will lead to greater security and well-being of the citizens.

The overall Hyogo Framework for Action is an important tool for strengthening public and institutional awareness, generating political commitment and focusing on broadband activities at all levels.

The Sendai Framework provides an opportunity to revise the already existing National Platform for Disaster Risk Reduction and adapt new measures and activities to its greater applicability and feasibility of objectives.¹⁴²

The Government of the Republic of North Macedonia has officialized the National Platform for Disaster Risk Reduction in 2009, to which the Republic of North Macedonia acceded in January 2005. The National Disaster Risk Reduction Platform is a nationally owned and led forum and committee composed of several participants. This national mechanism serves as the advocate of the concept of disaster risk reduction at different levels and provides coordination, analysis and advice on priority areas for action. In this sense, the National Platform for Disaster Risk Reduction of the RNM, Macedonia is a nationally designed model that reflects the current state of affairs and perspectives in the area of disaster risk reduction.

Internationally, the national platform should be a formal link between the state and the UN ISDR system.

Initially, the National Platform for Disaster Risk Reduction was the responsibility of the CMC, and then after its revision, between two state administration bodies, i.e. The Crisis Management Center and the Protection and Rescue Directorate, but on the other hand, in 2011, the Government of the RNM opens a new Office of the National Coordinator for Disaster Risk Reduction, in order to undertake all activities in the implementation, monitoring the Hyogo, and later on the Sendai frame. In 2016, a coordinative body or working group was formed, with the intention of becoming a Council for Disaster Risk Reduction, in which representatives from all significant entities in the disaster management system participate, for greater dedication and professionalism in the realization and implementation of this problem in all spheres of the community. The idea

¹⁴⁰ (2019, April), International Strategy for disaster reduction, <https://www.unisdr.org>

¹⁴¹ (2019, April), Hyogo framework of action, <https://www.unisdr.org>

¹⁴² (2019, April) Sendai Framework for Disaster Risk Reduction, <https://www.unisdr.org>

was to implement the Sendai Framework for Action in a revised edition of the national disaster risk reduction platform with the intention of restructuring the concept of operation and adopting and adopting local strategies and a national strategy to reduce disaster risks.

A year ago, with the appointment of a new coordinator of the Office for Disaster Risk Reduction, only an attempt to encroach upon a transformation of the two institutions Center for Crisis Management (CMC) and Protection and Rescue Directorate (PRD), because of the overlapping and interference of competencies. A new working group was formed, with new representatives, who are almost not addressed at all. It is left to the impression that the RSM Government did not recognize the role of the national coordinator, referring to its role, and the introduction of the third "culprit" in the disaster management system, only complicates and creates confusion in the competencies of the other two institutions CMC and PRD. It also complicates the adoption of a National Disaster Risk Assessment, which to date does not exist because of the legal obligation to adopt similar disaster risk assessments, which almost completely or very little follow European standards and manuals.

There are almost no campaigns for greater control and supervision of illegal dumps, hazardous waste, the urban mafia does not stop in major cities in usurping the rest of the green areas. Measures to improve air quality did not bear fruit, especially since industrial facilities were again exempt from investing obligations in filters and purification devices. On the other hand, there is great anxiety among the citizens from immunization and the consequences of it for a long period in the RNM, (non) vaccination is supported, on the one hand, due to the deadlines and declarations of the vaccines, on the other hand, an unconfirmed composition and a dubious producer.

For poverty and raising the standard of citizens in general, there is no concern, there is an unprecedented exodus of the young population of the state, especially solid young people who have just graduated, go to societies where labor and knowledge are valued. The number of adults who leave because of the poor quality of life, poor quality education, health care and safety, as well as the growing mistrust of the citizens in the judiciary and the rule of law are increasing.

For their part, there are state administration bodies that work diligently and have their own results, but without coherence in the approach and sublimated surveys and measures, there can be no good results. A mechanism for joint work programs, actions, control, supervision, evaluation and implementation of lessons learned must be established, not only as financial control and audit. Many documents are being drafted, strategies for action plans, but no one is responsible for their implementation.

At the same time, there is a lack of transparency and exchange of data and exchange of experiences and knowledge. Higher education institutions (Academia and Insituts) are almost not involved, which are the foundation for creating risk dimensions for scientific research purposes and opportunities to apply new methods and techniques or software tools accordingly. Experiences on the other hand indicate that the Steering Committee and the Assessment Group are bodies set up by political officials, wanting to raise the

significance of risks, leaving room for them to be insufficiently understood. Risk management requires professionalism, where professionals will put forward reasoned solutions that will only translate into political management as decisions.

7. Conclusion

The government and international agencies have largely taken over the burden of dealing with disasters on a larger scale, but it is apparent that the poor are not ready to address and localize small-scale risks. Risks associated with unplanned urbanization are interconnected, the key to mitigating them is a comprehensive view and approach. They can affect us all in unpredictable ways, the first step is awareness - so it is necessary to emphasize and discuss the challenge of interconnected risks at a wider level to ensure an adequate level of public awareness. The close contact between businesses, government, communities, city councils and academic institutions is essential for achieving effective solutions, as this will foster an environment in which innovative, public-private partnerships can be developed. The control and accountability mechanism must be placed in the foreground. Bureaucratic omissions and the false sense of security are delayed in triggering the alarm.

The erosion of poverty, the economic stabilization of the state, the strengthening of the rule of law through structural and non-structural measures, networking of the private with the public sector at the national and local level will certainly yield positive results.

Bibliography

1. Annual reports for air pollution, Ministry of environment and spatial planning, RNM, <http://www.air.moepp.gov.mk/>
2. Council Directive 96/61/EC of 24 September 1996 concerning Integrated Pollution Prevention and Control (IPPC). Official Journal L 257. The IPPC Directive has recently been codified (Directive 2008/1/EC). Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control (Codified version) (Text with EEA relevance) No longer in force, Date of end of validity: 06/01/2014; Repealed by 32010L0075, and the valid new document is Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Text with EEA relevance, *OJ L 334, 17.12.2010, p. 17–119, Special edition in Croatian: Chapter 15 Volume 015 P. 159 - 261, in force*, <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:32010L0075>
3. Cross-cutting sector - disaster risk reduction (English). PDNA guidelines volume B : disaster risk reduction. Washington, D.C. : World Bank Group. World Bank. 2017. <http://documents.worldbank.org/curated/en/120541493102189066/Cross-cutting-sector-disaster-risk-reduction>
4. Guidance for practicing evidence-based medicine in influenza, Official Gazette, no. 07-8862/2 , 30 rd November 2013

5. Hazard Assessment in RM of natural and another disasters, Official Gazette, no.117; 01.10.2007
6. Hyogo framework of action , BUILDING THE RESILIENCE OF NATIONS AND COMMUNITIES TO DISASTERS, <https://www.unisdr.org>
7. International Health Regulations 2005, WHO
8. International Strategy for risk reduction, <https://www.unisdr.org>
9. Linkage of climate change and infectious diseases, manual for health professionals
10. Methodology for the content and method of assessing the hazards and planning protection and rescue, Official Gazette, no.76; 23.06.2006
11. National Platform for DRR of the RNM, 3rd revise edition, may 2011;
12. Operational Plan to deal with infections disease (pandemic influenza), no.10-224/1;20.01.2010
13. PUTTING FLOORS UNDER THE VULNERABLE: Disaster reduction as a strategy to reduce poverty, Yasemin Aysan, chief, disaster reduction and recovery programme, emergency response division, undp.presented at the World Bank consultative group for global disaster reduction meeting: june 1-2, 1999, Paris
14. Rulebook on the Detailed Conditions for Hazardous Waste Treatment and the Manner of Packaging and Marking Official Gazette of the Republic of Macedonia No. 15 / 08
15. Spatial planning key instrument for development and effective governance with special reference to countries in transition united nations new york and Geneva, 2008 - economic commission for europe Geneva
16. Act for Ambient air quality, Off.gazz. no.100/2012
17. Act for Crisis Management, Off.gazz. no. 29/05 /04.05.2005
18. Act for Environment, Off.gazz. no 53/05/ 05.07.2005 and amandments
19. Act for Food Safety, Off.gazz. 27.05.2015
20. Act for Protection and Rescue, Official Gazette, (consolidated text) no .93;24.7.2012
21. Act for Protect population from infectious diseases, , Off.gazz. no 37/16
22. Act for spatial and urban planning ,Official Gazette no.51/2005; 55/13; 163/13; 42/14
23. Act for urban greenery, Official Gazette, no.08-371/1, 2018
24. Act of Veterinary Health, Consolidated Text, Official Gazette of the Republic of Macedonia, no. 123 from 22.07.2015
25. Act of waste management, Off.Gaz. no.09/11,2011,
26. <http://app.gov.mk/>
27. <http://healthrights.mk>
28. <https://inspire.ec.europa.eu/featureconcept/SpatialPlan>
29. <https://meta.mk/>

30. <https://www.britannica.com/science/epidemic>
31. <https://www.britannica.com/technology/hazardous-waste-management>
32. <https://www.britannica.com/topic/urban-planning>
33. <https://www.law.cornell.edu/cfr/text/40/261.4>
34. <https://www.epa.gov/>
35. <http://www.fva.gov.mk/>
36. <http://www.igu.gov.mk>
37. <http://www.iph.gov.mk>
38. <https://www.medicinenet.com/>
39. <http://www.moepp.gov.mk>
40. <http://www.numbeo.com>- Europe: Quality of Life Index by Country 2019
41. <http://www.stat.gov.mk/>
42. www.unisdr.org<http://www.radixonline.org/humanrights2.htm>