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HUMAN SECURITY REASONS IN WASTE MANAGEMENT PROJECTS AND STRATEGIES - CASE STUDY: ROMANIA

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ABSTRACT:

WITH THE ADVENT OF THE INDUSTRIAL REVOLUTION, OUR PERCEPTION OF NATURE HAS CHANGED. OUR RELATIONSHIP WITH NATURE HAS ALWAYS BEEN MORE OR LESS SUBCONSCIOUS AND USUALLY ORIENTED TOWARDS NEW POSSIBILITIES OF USING OUR ENVIRONMENT. THE SECOND WORLD WAR CHANGED MANY THINGS, AND OUR PERCEPTION OF THE ENVIRONMENT WAS ONE OF THEM. WE PAY MUCH ATTENTION TO THE PROTECTION INITIATIVES DURING THIS RECENT PERIOD, AS THE ENVIRONMENTAL PROBLEMS ARE BECOMING A REALITY FOR THE CONTEMPORARY SECURITY STUDIES. THE THREATS TO THE ENVIRONMENT ARE CONSTANTLY INCREASING THE ATTENTION/ AWARENESS, NOT ONLY IN THE FIELD OF SECURITY STUDIES, BUT ALSO IN THE FIELD OF INTERNATIONAL RELATIONS.

IF, BY THE END OF THE 1990S, THE STATES FACED VARIOUS THREATS FROM BOTH THE MILITARY AND THE POLITICAL SECTOR, IN THE CURRENT CONTEXT IT IS POSSIBLE TO OBSERVE THE SHIFT OF THE EMPHASIS TOWARDS THE IMPORTANCE OF THE INDIVIDUAL AND OF THE PROBLEMS HE IS FACING. THESE CHANGES ARE BASED ON THE TRANSITION FROM A BIPOLAR TO A MULTIPOLAR INTERNATIONAL SYSTEM. THIS MOMENT IS REALLY THE EXTENSION OF THE CONCEPT OF SECURITY WHEN NEW SECTORS ARE BROUGHT TO THE ATTENTION, OTHER THAN THE TRADITIONAL ONES, NAMELY THE ENVIRONMENTAL, ECONOMIC AND NOT LEAST THE SOCIETAL ONE.

KEY WORDS: HUMAN SECURITY, SECURITIZATION, WASTE MANAGEMENT, CIRCULAR ECONOMY

INTRODUCTION

Often, when we talk about security, we assume we are very knowledgeable/ well informed and understand what security is and what it means. Theoreticians of international studies and security studies have tried to define the main meaning of the term "security". However, in the context of globalization and increasing interdependencies between different fields, the concept of security and its component elements have undergone/ suffered, over time, essential changes, as well as the attitude of the states towards the ways of transposing it into life, in relation to the changes taking place internationally.

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This paper aims to analyze the environmental problems in the light of security studies. Given that the environmental processes are non-military, as a framework of analysis, we will use the Copenhagen School in security studies. We will make a description of the history and evolution of security studies, and then focus mainly on the assumptions of the Copenhagen School, which introduce the framework for the securitization of non-military problems. This framework allowed the political environment to develop discussions and analyzes on the other dimensions of security. Subsequently, we will focus on the evolution of environmental policies and the transformation of environmental problems into potential threats to human and social security.

The main theoretical analysis that we will perform refers to the relevance of environmental processes and their significance for security. In our analysis we will focus on environmental issues at regional and national level. This paper will try to highlight the environmental problems, especially those related to waste issues, selected as/considered threats to human security and health. We will analyze the interconnection, multiplication and side effects that these problems have in relation to the economic and social problems. According to this objective, the character of the paper will be rather deductive and descriptive on the environmental policies, with emphasis on the procedural and impact aspects of the waste management policy. The focus will be on an analysis of the concept of efficient management of waste because this is one of the key points when talking about environmental issues, the evolution towards a circular economy and sustainable development.

The objectives of the paper are summarized in the following research questions: What place do environmental issues take in the extended agenda of security studies? How can the problem of waste management be solved and what are the best solutions for its security and securitization? How could waste issues become threats to human safety and health? What is the technical toolkit that determines sustainable and sustainable? waste management policies in relation to the reference framework, quality standards and procedural standards imposed by the EU?

SECURITY APPROACHES IN THE CONTEMPORARY SOCIETY - THE HUMAN SECURITY DIMENSION

"An important task of a constructive international policy will have to be? to provide a new and more comprehensive understanding of" security "that would be less limited to purely military issues. Our survival depends not only on the military balance, but also on the global balance achieved through cooperation to ensure a sustainable biological environment based on equitably shared resources".² From this perspective, it becomes clear that the concept of "security" had to be largely extended due to the impact that globalization has had on international relations and on international security. The notion of human security was one of the most influential concepts, contributing to the reconceptualization of security. It advocates a "human-centered, universalist and non-military approach that takes into account threats to human life, such as underdevelopment, poverty and poverty".³

According to Mary Kaldor, human security is synonymous with the security of individuals and implicitly the communities they belong to, rather representing a mix of human rights and human development.⁴ In other words, the needs of the individual end up

² Independent Commission on International Development Issues, Willy Brandt (1980), "North-South, a Programme for Survival: Report of the Independent Commission on International Development Issues" 124.

³ Mark Beeson and Nick Bisley, "Issues in 21st Century World Politic"s second edition, 2013, 143.

⁴ Mary Kaldor, *Human security*, (Cluj-Napoca: CA Puishing, 2010), 214.

taking precedence over the main actor so far, namely the state. It should also be noted that we cannot talk about human security without talking about the development of the human being, here referring exclusively to raising the standard of living. In essence, it aspires to more than a decent living or to normal condition of existence. Also in the book "Human Security", it is also specified that victims are not only the persons affected by the violence of wars, it must be taken into account that the majority suffer from other causes generated largely by the vulnerabilities of the state of which they are part: poverty, lack of access to education or medical and support services, corruption and others.⁵

This concept of human security was first defined in 1994 in the Report on Human Development of the United Nations as: "protection against permanent threats such as hunger, disease and repression"⁶, but also as protection against events designed to totally unbalances the normality of the things that make up the daily life of each person.⁷ Another defining feature that we find in the 1994 report is the importance of human individuality, the focus being exclusively and implicitly on its freedom of expression or access to certain services of a social nature. At the same time, it is mentioned the importance of human development, which is largely generated by the ability of people to ensure optimal living conditions.⁸ Also in the Human Development Report, seven possible components that make up human security were outlined:

- Economic security;
- Food security;
- Environmental security;
- Health security;
- Personal security;
- Political security;
- Community security.⁹

According to Sabina Alkire, the main objective of human security is to protect on long term and in accordance with the rights and freedoms of each individual, the vital nucleus of all persons in the face of numerous threats. Also, it is specified that it is known that the state institutions fail to fully ensure the well-being of each citizen, but as mentioned above the protection of the vital nucleus is mandatory.¹⁰ Moreover, within this paper it is taken into account that this approach to security from a human perspective urges the institutions not only to provide people with episodic protection, but also to consider certain preventive actions.¹¹

SECURITIZATION, MANIFESTATION FRAMEWORK AND DIRECTIONS OF ACTION

Frank Möller said that "language is only one, the most central means by which meaning is communicated".¹² In securitization theory, the speech act constitutes the

⁵ Mary Kaldor, *Human security...*, 214-216.

⁶ UNDP, Human Development Report, Oxford University Press, 1994.

⁷ Cătălina-Daniela Răducu, Bogdan Ștefanachi, *Human Security. Contemporary challenges*, (București: Pro Universitaria, 2015), 73-74.

⁸ UNDP, Human Development Report 1994.

⁹ UNDP, Human Development Report 1994

¹⁰ Sabina Alkire, *A Conceptual Framework for Human Security*, WORKING PAPER 2, 2014, 3.

¹¹ Sabina Alkire, *A Conceptual Framework for Human Security...*, 2-3.

¹² Frank Möller, "Photographic Interventions in Post-9/11 Security Policy", *2007 Security Dialogue* nr.38 ed.2: 179-96.

securitization movement. For the Copenhagen School, problems become threats through language, that is, through language certain actors or specific problems can be positioned as existential threats to a certain political community, thus allowing securitization.

Ole Waever introduced the concept of securitization on the agenda of international relations in his 1998 book "Security: a new framework for analysis". In the initial analyzes of the concept, Waever defined security as a "speech act", securitization referring to that form of linguistic representation that identifies or places a special problem as an existential threat. The issue was resumed a little later, when the authors began to place a greater emphasis on the role of the constituencies and especially of the elected representatives in support of speech acts. Thus, speech acts were defined as "securitization movements" that became securitizations through public consent (representativeness). Therefore, they have changed from speech acts as productive products of security to speech acts as a component of the cross-sectoral construction of security. Finally, and despite subtle differences in emphasis and even content, securitization can be defined as positioning through speech acts (usually by a political leader) a particular issue as a threat to survival, which in turn (with representative public consent) it allows emergency measures to be taken and the suspension of "normal policy" in addressing a particular problem.¹³

An exclusive focus on language is problematic in the sense that it can exclude forms of bureaucratic practices or physical actions that are not only limited to the securitization of "speech acts", but are part of the process through which the senses of security are communicated and security is built. An individual, as well as a group, may be a "securitizing" actor, but individuals do not usually act on their personal behalf, but represent something associated with them. A government is represented by a variety of officials who can be considered "securitizing" actors. Buzan proposes to identify the securitizing actors through adaptation and external point of view. While the state is, in principle, the privileged actor of securitization, it is nevertheless one of the other "competing actors" in the security area.¹⁴

Paul Roe argues that, in addition to the standard audience of the general public, the movements of government securitization are, in many cases, addressed to national representatives of parliament. If only one of the public can be convinced, this partial securitization process is enshrined as "rhetorical securitization", while classical securitization, with full approval of the threat, as well as emergency measures, represents "active securitization".¹⁵ To contrast the two possibilities for dealing with political issues, Buzan defines issues as politicized if they are part of public policies or debates and if government action is needed. Problems are defined as securitized if they are imagined and accepted as representing an existential threat that requires emergency measures, as well as measures that fall outside the ordinary or even legal norms. The special nature of security threats justifies the use of extraordinary measures to manage them. While the politicization of a problem involves an intense debate and a fight for arguments, the same thing does not happen with securitization. Often, by trying to securitize an issue, the securitizing actor intends to exclude it from the public debate to describe planned measures without an alternative area.¹⁶

¹³ Buzan B., Waever O., de Wilde J. *Security: a New Framework for Analysis*, 1998, 25-26.

¹⁴ Buzan B., Waever O., de Wilde J. *Security: a New Framework for Analysis...*, 123.

¹⁵ Roe Paul. "Actor, Audience(s) and Emergency Measures: Securitization and the UK's Decision to Invade Iraq. *Security Dialogue*", 2008, 633.

¹⁶ Buzan B., Waever O., de Wilde J. *Security: a New Framework for Analysis...*, 29.

At the same time, the issues that are securitized are seen as more important and more urgent, giving them maximum priority, following the logic of existential threats, any other problems losing their importance if not solved with priority.¹⁷

Environmental problems have become part of security studies through the securitization process, which we know from the Copenhagen school theory. We can find these aspects as a relevant part of the security literature and of the environmental issues, these being understood as a discipline of security studies. If we look at this concept more closely, we can see that these threats are often related to the concept of human security. This is due to the specificity of the environmental problems. These threats present different radical risks, being nonlinear, there is a significant unpredictability of extreme events.

GOVERNANCE OF ENVIRONMENTAL POLICIES IN THE EU

The official action of the European Union on the environment dates from the Paris Summit of 1972. This summit, held as a modern environmental movement, was a continuation of the United Nations Conference on the Human Environment in Stockholm, Sweden, at the beginning of the same year. The Stockholm Conference called for political, scientific and technical cooperation on environmental issues such as industrial, maritime and land pollution. The Paris Summit initiated the practice of developing environmental action programs in which EU bodies and Member States, with the contribution of civil society, set agendas and identify areas for targeted actions. Many laws related to environmental issues in the 1970s and 1980s were arbitrarily adopted, responding to specific conditions and changing the political and economic context, rather than as part of a visible or systematic strategy.

EU legislation combines primary legislation (treaties) with secondary legislation (laws specific to a particular issue). EU bodies adopt three types of secondary legislation. First, the regulations, which lay down rules that Member States must apply uniformly, up to a deadline agreed upon. Then, the most commonly used are the directives, adopted by the Council and the Parliament, which provide for certain objectives while also offering flexibility to achieve these objectives depending on the national conditions. Last but not least, the decisions issued by the Council or the Commission are binding acts requiring the authorities or persons of the Member States to act, to stop doing something or to grant them specific rights. Moreover, since the mid-1990s, formal political, economic and legal criteria for EU accession include stable democratic institutions based on the rule of law that protect human rights, the functioning market economy and the adoption of all EU law. This is based on the conditionality in which candidate countries are rewarded for adhering to EU principles, standards and policies. The full framework of EU law is divided into thematic "chapters" during the negotiations. Currently, the 35 chapters include a chapter on the environment, as well as others with significant content on environmental issues in areas such as agriculture and rural development, food security, veterinary and phytosanitary policy, transport and energy. Negotiations on each chapter are closed when the candidate country has changed all relevant national laws and rules, and does not grant EU membership until all the chapters are closed.

With regard to environmental agreements falling under the "mixed agreements" category, Commission officials and representatives of the Member States negotiate and debate together on issues where the Union has the power to act under existing legislation, and Member States on rest. Joint agreements must be ratified by both the EU and each Member State. In terms of global environmental governance, EU leadership is documented in relation

¹⁷ Buzan B., Waever O., de Wilde J. *Security: a New Framework for Analysis*..., 24.

to climate change, chemicals and hazardous waste, mercury reduction, marine pollution and biodiversity, being part of over 55 global and regional environmental treaties.

The European Union often plays an essential role in establishing roles, supporting relatively strict mandates and supporting institutional development through various means, such as investing financial and human resources in scientific and technical evaluations, organizing seminars and awareness-raising conferences, and building and improving implementation capacity. Moreover, an attempt is being made to globalize Union standards based on a combination of environmental concerns and the interests of the political economy to create a level playing field for international markets.

At the same time, environmental standards with relatively high standards are used to export standards through market mechanisms, because foreign countries and companies wishing to gain access to the European market must comply with them, as well as through the deliberate dissemination of policies through EU bodies, Member States, lobby groups or through various non-governmental organizations. The results-based regional assessments, developed by the European Environment Agency, disseminate environmental scientific and technical data that are used to build policies and awareness within and outside the EU. Based on a unique conditionality and the "more for more" principle, countries receive more financial grants, loans and other benefits if they meet EU expectations. Most topics on the agenda include climate change, resource and waste management, and hazardous chemicals issues. Relations with more distant countries such as China, India and Brazil cover a wide range of political and economic issues, but environmental issues are often part of policy debates and initiatives and can facilitate cooperation with the EU, often providing financial support. The EU's trade agenda goes beyond trade liberalization based on lowering tariffs and other barriers, including the adoption of rules on economic, labor and environmental issues that are or should be in line with intra-EU rules.¹⁸

In conclusion, EU has set policies and standards on a number of environmental issues, with regional assessments and national data showing the improvement of ecological and human aspects with positive trends in terms of health conditions, with Europeans enjoying a relatively safe and clean environment. Environmental policy formation is guided by several principles, starting with the "polluter pays" principle, continuing with the precautionary principle (lack of full scientific certainty should not be used as a reason to delay cost-effective measures to prevent environmental degradation). Major efforts at the EU level have led to progressive environmental policies. Awareness of environmental issues, as well as the extent of a potential impact on other dimensions of security, was also reflected in the Lisbon Strategy, by expanding its environmental dimension. These policies concern not only traditional areas of ecological interest, such as combating pollution and protecting natural resources, but also increasingly important issues such as greenhouse gas emissions and climate change affecting daily production and consumption models. As in all policy areas within the EU, environmental policy making is based on the cooperation of many policy actors with EU institutions, national authorities and interest groups, all with very different agendas. Studying how the dynamics of these political actors lead to specific environmental policies reveals much about the wider dynamics of the EU as a whole.

Efforts to implement broader and stricter measures in the field of environmental protection have resulted in the elaboration of "environmental action programs". The

¹⁸ Gavin B, Sindzingre A. EU Trade Relations With Emerging Asia: Identifying the Issues. *Asia Europe Journal* 7, 2009: 9-22.

European Commission, as the EU's main administrative authority, has developed these programs to serve as a basis for all future environmental activities. To date, the Commission has developed and presented seven such programs.

The first of these environmental action programs published in the Official Journal of the European Communities, covering the 1973-1976 period, contributed to the integration of individual environmental policies, as well as to the introduction, for the first time, of the "polluter pays" principle.¹⁹ Also, this program established the interdependence between economic prosperity and environmental protection, and its implementation was supported by the idea that environmental protection is an essential task of the European community. As a key element used in sustainable development, reference was made to reducing the amount of exploitation of natural resources and to making society more responsible for environmental protection (development of "environmental awareness"). The second environmental action program covering the period 1977-1981 was mainly an extension of the first program.²⁰

The third environmental action program, from 1982-1986, led to the elaboration of the common environmental protection strategy in order to reduce pollution.²¹ It stimulated the modeling of the strategies and of the generalized activities of the environment, emphasizing the prevention of the damages caused to the environment, while highlighting the risks and the potential benefits of the environmental policies regarding the internal market and the problematic relation between the environmental policy and the internal market, this becoming a key factor for the programs and the actions of the European Community.

The option to take on clear responsibilities at Community level and a horizontal approach to environmental issues has become much clearer with the fourth action program that was developed to apply the provisions of the Single Act. "Sectorial approaches" were created by analyzing the impact of strategic economic sectors on the environment.²² Specifically, incentive-based instruments such as tax cuts or subsidies have been established for the first time. The new approach sets strict environmental standards as an imperative and emphasizes broader public participation in solving environmental problems. The fundamental contribution of the program for the evolution of the Community environmental policy and the evolution of the European integration model, was the argument that "environmental protection does not cross conflict with the economic objectives, but rather can be an instrument to improve economic performance and competitiveness, essential precondition for growth and development".²³ As a result of this program, environmental policy was no longer perceived as an additive policy, but rather as an integral part of the economic decision-making process.

"Towards sustainability" was the title of the fifth environmental action program, as it differs from the other programs due to the long period for which it was established, 1992-2000, of its objectives and because of its focus on a more global approach.²⁴ It mainly aimed integrating the environmental dimension into all major policy areas, as well as sharing responsibility for environmental decisions between governments, industry and the public. The environment is one of the three pillars for sustainable development and is particularly important for the poor, who are more vulnerable to pollution and ecological disasters, and the

¹⁹ Official Journal of the European Communities, C 112 Volume 16, 20 December 1973.

²⁰ Official Journal of the European Communities, C 139 Volume 20, 13 June 1977.

²¹ Official Journal of the European Communities, C 46 Volume 26, 17 February 1983:1-17.

²² Official Journal of the European Communities, C 328, 7 December 1987.

²³ S.Baker, "The Politics of Sustainable Development. Theory, Policy and Practice Within the European Union", Routledge Londra, New York, 1997, 15.

²⁴ Official Journal of the European Communities, C 138, Volume 36, 17 May 1993.

cooperation between economic growth and social inclusion with respect for the environment, is the argument for the environment as a crucial pillar of sustainable development.²⁵ It also introduces the integration of environmental considerations into sectorial policies, through a long-term strategic approach, promoting the interdependence between environmental protection and economic and social objectives.

The sixth environmental action program took into account all the shortcomings of the previously approved programs. In other words, addressing climate change issues and increasing greenhouse gas emissions, limiting biodiversity loss, sustainable use of natural resources and more efficient waste management have been set as strategic environmental goals that must be tackled so jointly. policy makers, as well as industry.²⁶ In this way, the Sixth Environment Action Program, together with the Kyoto Protocol and the Lisbon Strategy, has become the key instrument in implementing the EU's environmental policy. The enlargement of the EU since 2004 meant a new change in the circumstances for the implementation of environmental policy. The environmental policy had to be adapted to find solutions to the serious problems of the new Member States. Environmental concerns have been integrated into guidance guides. The first three-year cycle of the guides expired in 2008 and therefore they had to be renewed for the next cycle. As the first three guides helped Member States address environmental challenges, in the new period, 2008-2010, the issues became even more important. This is a consequence of the enlargement of the EU in 2007, when Bulgaria and Romania, which had accession problems due to the environmental acquis, became EU member states.

Europe 2020, considered to be a comprehensive strategy that includes all EU policies to create a smart, sustainable and inclusive social environment, has been an important starting point in the development of the 7th Environment Action Program entitled 'Living well, within the limits of our planet'.²⁷ The development of this program took into account the existence of an uncertain economic and political climate in which many EU countries are making efforts to cope with the economic-financial crisis. The program identifies three priority areas, which are interdependent and reinforce each other. Thus, more action is needed to protect nature and to enhance ecological resilience, to stimulate efficient growth of resources, with low carbon emissions and to reduce the threats to the health and well-being of the population related to pollution and the impact of climate change. In order to achieve these goals, Europe needs to find new ways to change the main societal systems that put pressure on the climate, the environment and health. The ones mentioned above are some of the conclusions generated by the Agency European environment through the SOER 2020 report. This report summarizes past and present objectives, predicting the possibility to achieve the future objectives that were assumed in the Eighth Environmental Plan, in correlation with the Green Deal²⁸.

On 11 December 2019, the European Commission gave a strong first response to these challenges by adopting the Green Pact. This pact has an agenda with ambitious goal of making Europe the first neutral continent in terms of climatic view until 2050. The plan also provides for protection, conservation and enhancement of natural capital, and to ensure the health and well-being of citizens. The plan envisages the transformation of the economy in a sustainable way, without some Member States falling behind in the face of the wave of

²⁵ I.R. Tomescu, "Environmental security of the European Union", 13th International Multidisciplinary Scientific Geoconference (SGEM) 2013, 681.

²⁶ Official Journal of the European Union, L 242, Volume 45, 10 September 2002:1-15.

²⁷ Official Journal of the European Union, L 354, Volume 56, 28 December 2013: 171-200.

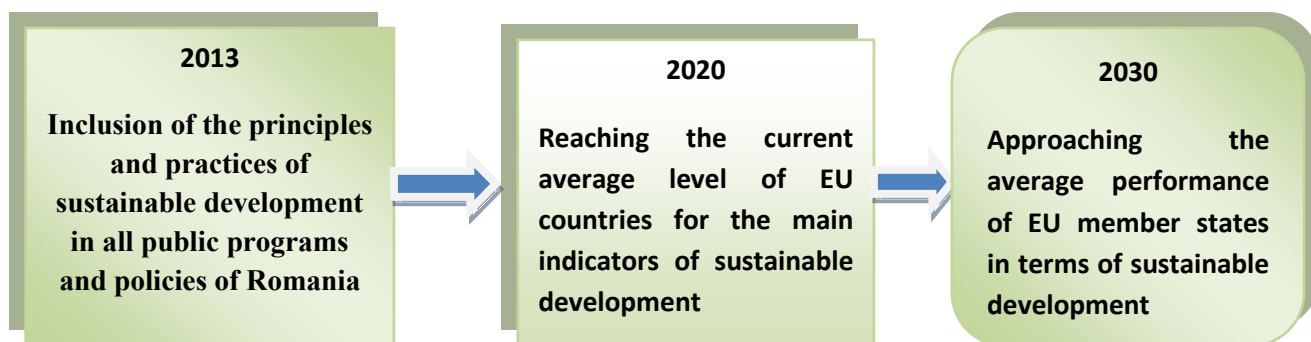
²⁸ The European Environment - state and outlook 2020.

reforms. This lays the foundations for a new set of policies, which in addition to find solutions for certain environmental issues, also strengthens the European Union's position on the global stage.

WASTE MANAGEMENT POLICIES IN ROMANIA

Romania's national sustainable development strategy aims to connect to a new development philosophy, adopted by the European Union and widely shared at global development level.²⁹ This vision, in conjunction with the EU strategy and action plans, sets specific objectives for the evolution, in a reasonable and realistic timeframe, towards a new development model capable of generating added value, motivated by the interest for knowledge and innovation aimed at continuous improvement of the quality of life and human relations in harmony with the natural environment.

Figure 1 The main objectives of the SUSTAINABLE NATIONAL DEVELOPMENT STRATEGY ROMANIA



Source: National Strategy for Sustainable Development of Romania horizon 2013-2020- 2030

According to the National Strategy for Sustainable Development of Romania, the main national objective by 2020 is to reach the current average EU level for the main indicators that describe the responsible management of natural resources. Integrated waste management will gradually transfer from the current practice of non-selective landfilling to the selective collection and increased use of recyclable waste that can be recycled, including converting organic waste into compost and exclusive use of environmentally friendly waste disposal. The installation of integrated waste management systems in rural areas will be followed.

Improper collection and disposal of waste leads to environmental pollution and the emergence of risks to public health. Health risks increase due to air pollution, but also due to poor sanitation and uncontrolled leachate that contaminates the surface and groundwater.

Moreover, discarded waste often blocks drainage systems leading to flooding. In addition, waste in landfills and landfills contribute to greenhouse gas emissions. For example, in high-income countries, the main concern regarding infectious health waste is the possibility of HIV transmission, which causes AIDS or hepatitis A and B.

The United States has reported a number of workers who have been infected with HIV through contaminated puncture wounds as a result of solid waste segregation. On the other hand, in developing countries, waste collectors earn their living by sorting and

²⁹ NATIONAL SUSTAINABLE DEVELOPMENT STRATEGY ROMANIA 2013-2020-2030.

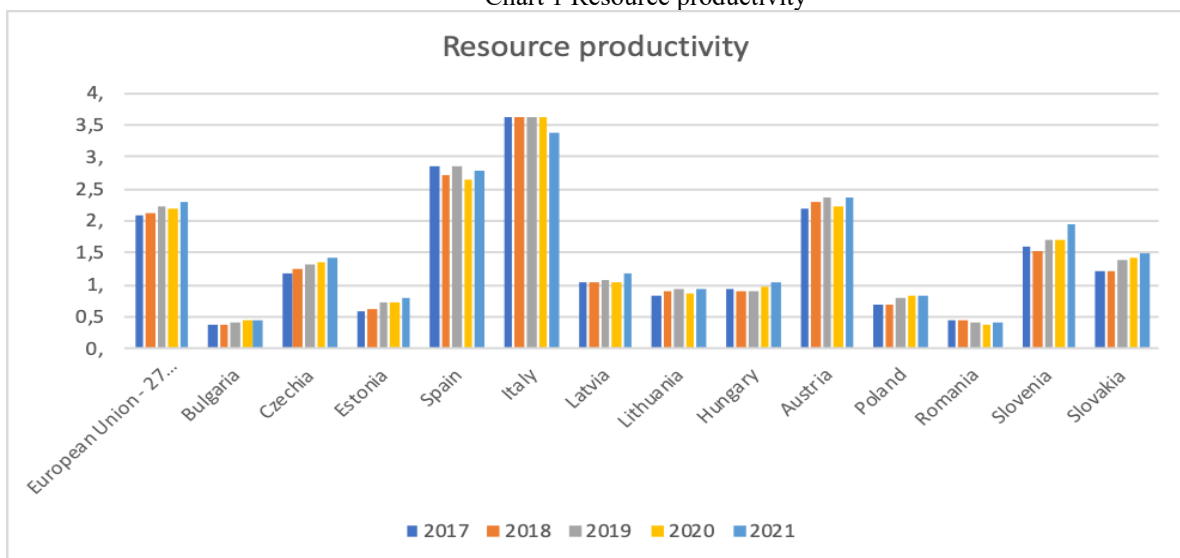
recycling secondary materials. They are exposed to workplace health risks, including the risk of contact with human faeces, papers soaked with toxic materials, bottles with chemical residues, metal containers with pesticide and solvent residues, needles and bandages (containing pathogenic organisms) from hospitals and batteries, all of which contribute to workplace health problems. Although the risk to health is very high, in developing countries, people are still interested in this sector because it can bring them higher incomes than other informal jobs. It should also be noted that waste management always refers to total health care expenditures. Based on World Health Organization (WHO) estimates, the waste management budget is estimated to be 5% of the annual per capita budget. Consequently, waste management should be incorporated and be part of the Community's health policy.

People working in waste management and waste disposal facilities are exposed to health risks and environmental accidents that relate to emissions from solid waste. These risks are managed in developed countries, but this is handled inappropriately in most developing countries. External financial assistance is needed to support low-income communities in their environmental and health efforts to move towards a green economy. Solid waste management involves risks at every stage of the process, from the point of generation and handling of waste at home to the final disposal point. The impact on health can lead to birth defects and infant mortality, diseases caused by air pollution, diseases caused by direct contact with waste or diseases due to water contamination.

The National Strategy for Waste Management from January 2013 is based on the first priority to prevent the generation of waste, followed in order of reuse, recycling, energy recovery and, finally, storage. For the implementation of this strategy, the National Waste Management Plan has been elaborated, which contains details regarding the actions that must be taken to fulfill the objectives of the Strategy, how to carry out these actions, including targets, deadlines and responsibilities for implementation.

This strategy applies to all types of waste regulated by law, starting from municipal and assimilable waste from trade industry, institutions, including separate collected fractions to specific waste streams (packaging waste, construction and demolition waste, end-of-life vehicles, waste electrical and electronic equipment, spent batteries and accumulators, waste oils, used tires, PCB / PCT-containing wastes, asbestos-containing wastes, wastes from human health activities and related activities).

Chart 1 Resource productivity

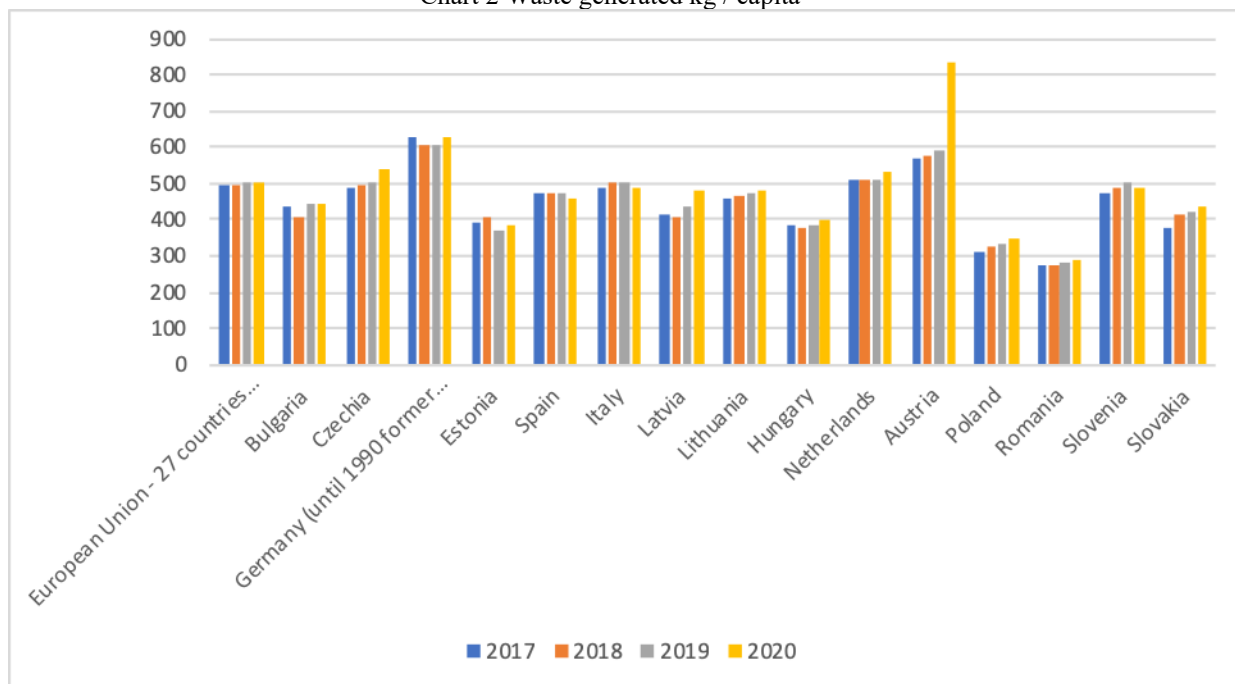


Source: Eurostat

As can be seen from the analysis chart, the productivity of resources in Romania has a very low value in all the analyzed years, being at the value of 0,432EUR / kg compared to the EU average which has a value of 2,29 EUR / kg, which means that the efficient use of resources is low and the circular economy remains poorly developed. We can say that the economy of our country is less efficient in terms of resource utilization. This is due to both the low level of competitiveness and the lack of efficient management of the available resources, both creating problems for the sustainable development of Romania.

The potential reduction of waste could generate substantial gains for the economy and for human health. A circular economy tries to reduce the "flow" of new resources, especially non-renewable resources, to use, reuse and capitalize on the resources of the economy as much as possible and to minimize the "flow" of emissions and waste. Maintaining the resources, already exploited, in use would reduce not only the dependence on raw materials (extracted or imported), but also increase the competitiveness, while reducing the pressures on the environment. Preventing waste generation, recycling and better waste management are generally crucial to minimize flows into and out of the economy. However, closing the material loop is not sufficient to prevent the subsequent environmental impact of human health and well-being. The objectives of the circular economy must go beyond waste management and facilitate the transition to the green economy. For example, economic sustainability is achieved when the waste sector generates secondary materials in a cost-effective way, contributes to the establishment of new businesses, offers more jobs, provides energy that is affordable in terms of costs and carbon emissions and minimizes the quantity of waste disposal or eliminated.

Chart 2 Waste generated kg / capita



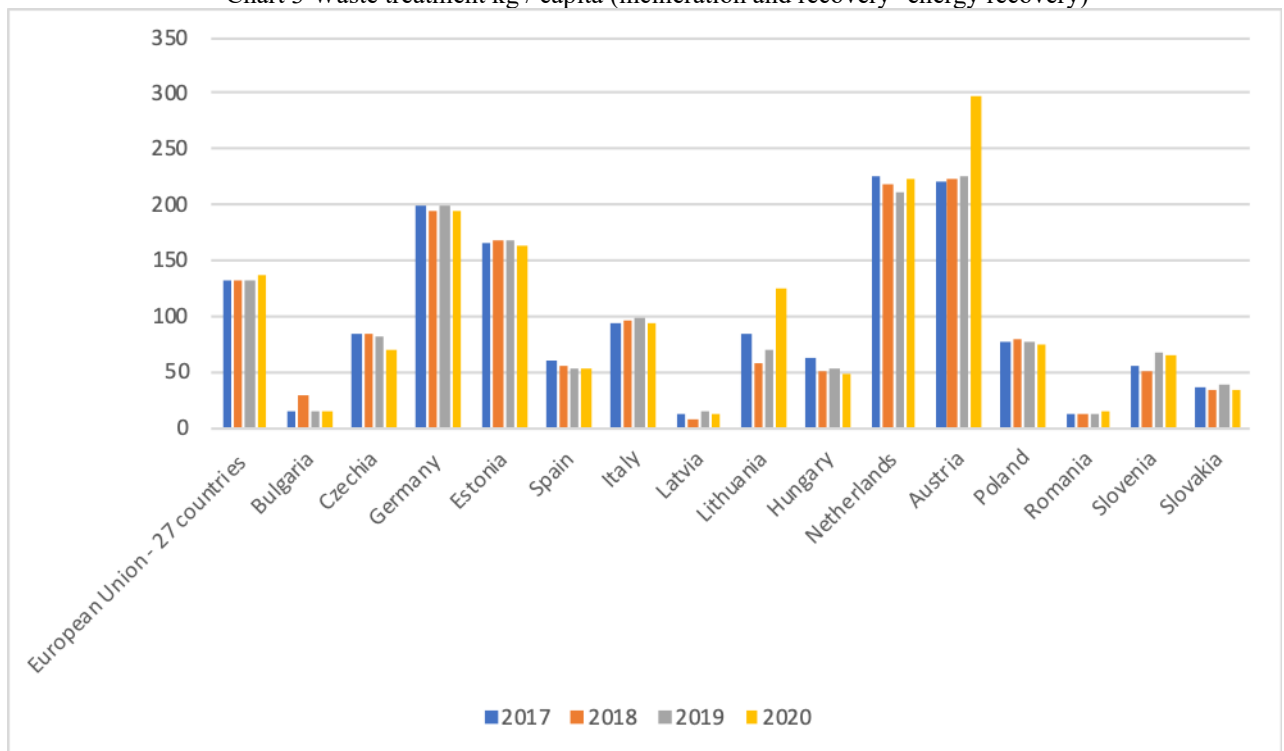
Source: author's representation with data from Eurostat

Analyzing the evolution for 2017 – 2020 period, it can be seen, either a slight increase or a maintenance of the quantity of waste generated both as an average of the EU and for Romania. Regarding the indicators of municipal waste generation, according to Eurostat data, at the level of 2020 for Romania the quantity generated was on average 287 kg / inhabitant /

year, lower than the European average (505 kg / inhabitant / year). However, as can be seen from the graphs below, which represent the ways of treating waste, our country is at a very low level in terms of waste recycling and reuse, the main way of eliminating waste is still represented by disposal and storage.

Waste can be both a problem and a resource, depending on what we do with them. This is a problem because it can affect people's health and the environment. For example, landfills are an important source of methane emissions, which are a powerful greenhouse effect that contributes to climate change. Infiltration from landfills can contaminate groundwater and soil, which can then enter the food chain. Waste from landfills represents a substantial loss of materials, along with all other inputs used in production and distribution. The whole chain has an impact on the environment and often the impact of the chain is greater than the impact of the final waste itself. If we can recycle and reuse what we have, we avoid some of the loss as well as the impact of the chain.³⁰

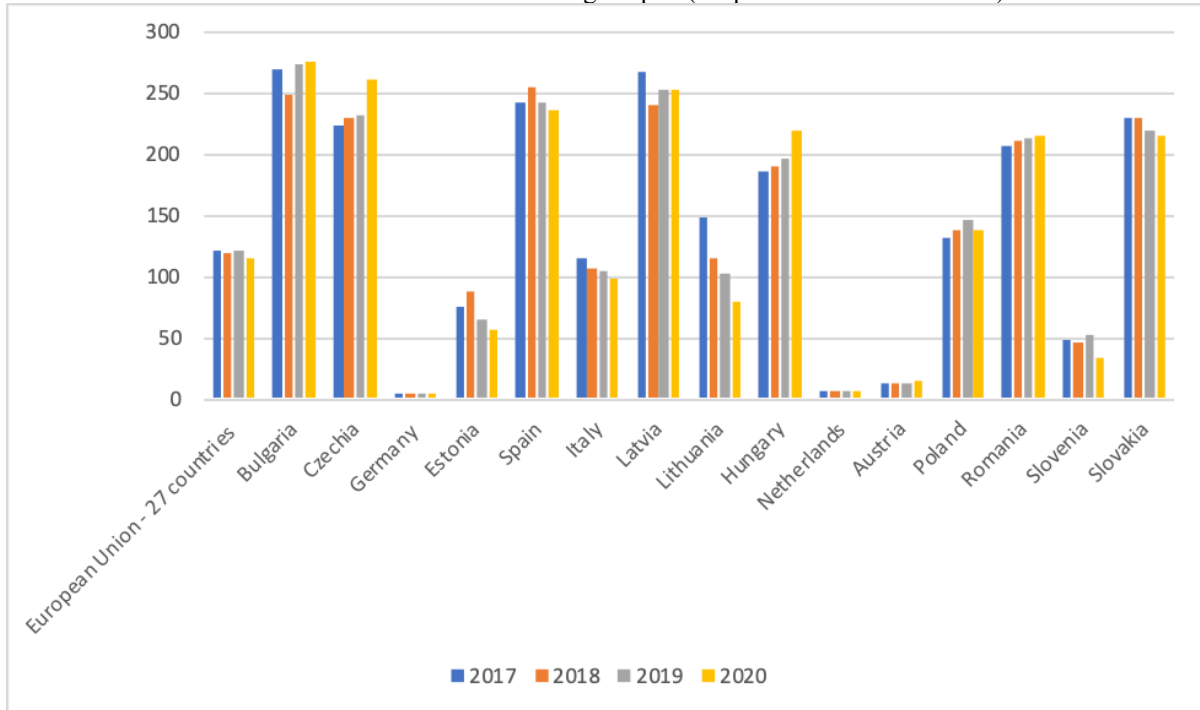
Chart 3 Waste treatment kg / capita (incineration and recovery- energy recovery)



Source: author's representation with data from Eurostat

³⁰ EEA Newsletter, Agency Issue 2014/1 17 March 2014

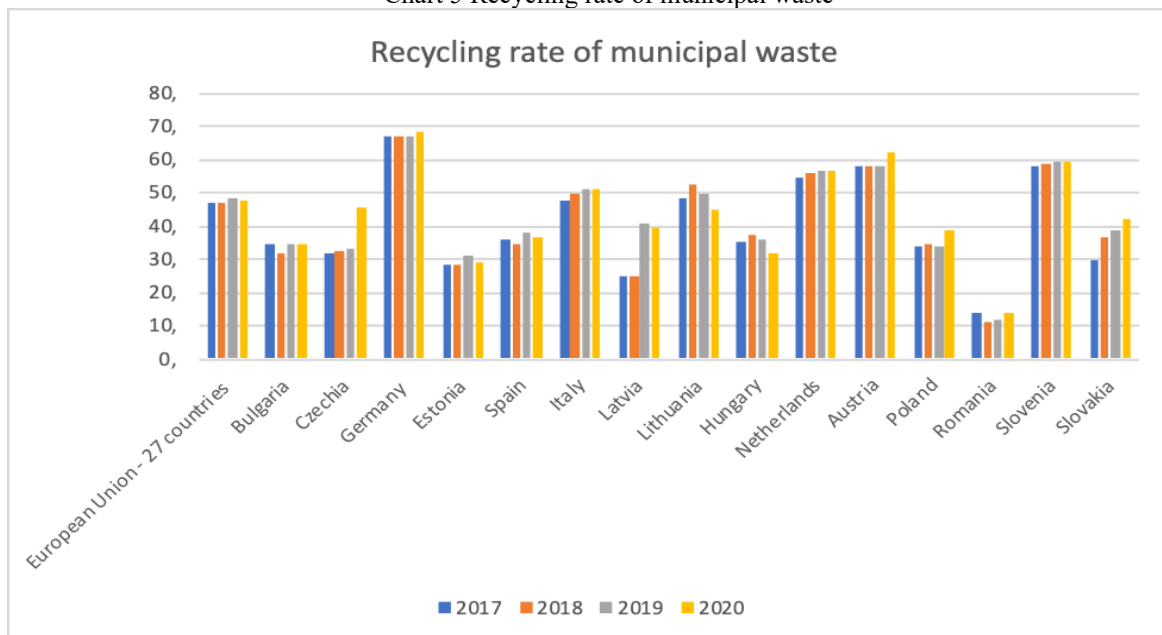
Chart 4 Waste treatment kg / capita (Disposal - landfill and other)



Source: author's representation with data from Eurostat

The country's performance is characterized by the extremely low recycling rate and the high rate of waste disposal, contrary to the waste hierarchy and recycling targets set at EU level. Thus, Romania will have to make huge efforts to intensify recycling and reduce waste disposal. The waste management industry is complex because it involves a multitude of scientific, technical, economic and social factors. Due to the complexity of the situation, a good waste management will require the cooperation between the government, industry and society working as partners, rather than opponents, to find a long-term solution.

Chart 5 Recycling rate of municipal waste



Source: author's representation with data from Eurostat

In close correlation with the National Waste Management Plan, the County Waste Management Plans were elaborated, which represent a planning document with a key role in the development for a sustainable waste management. Its main purpose is to present waste streams and their management options. Waste management plans are important tools that contribute to the implementation of policies and the achievement of targets set in the field of waste management, the establishment of the necessary capacities for waste management, the control of technological measures and the establishment of economic and investment requirements (Waste Management Plan for Cluj County). The plan represents the link between regional and national targets and the possibilities and options for achieving these targets at the local level. The aim is to establish the framework for ensuring a sustainable waste management system that ensures the objectives and targets are met as a starting point for setting the financial requirements for the operation of waste collection, recycling, treatment and disposal schemes.

CONCLUSIONS

EU law requires Member States to implement waste management strategies and plans that comply with EU directives.

Unmanaged environmental issues are affecting society. These can have larger societal effects, for example by undermining the society's infrastructure, leading to degradation of living conditions and standards of living. Continuous changes in our environment pose serious risks, creating a greater burden on the health system. Environmental problems through their influence on the political and economic environment, the degradation of the infrastructure and the increased pressure on the regional economy, can act as a trigger for social disturbances and, as a result, they can escalate conflicts.

Like other environmental elements, waste does not follow national or regional boundaries. The effects of poor urban sanitation and waste management on the well-being of city dwellers are often expressed in terms of health and the environment. Equally important, which requires the attention of urban planners and other urban analysts, is related to the social consequences of poor sanitation. As mentioned above, we have acknowledged the serious health and environmental consequences of sanitation, as well as their direct and indirect links with social consequences.

The development of the collection infrastructures must comply with the market requirements, so that the materials can be recovered in order to cover the processing and transport costs. When it is possible to determine the location and size of the deposits, the main objective could be to maximize the life of the warehouse and minimize the quantities stored.

Environmental protection in general, but especially its waste management component, is a major problem, of public interest, outlining responsibilities and objectives based on the fundamental principles of environmental law: the principle of conservation, the principle of prevention, the precautionary principle and the principle "the polluter pays." Therefore, in order to become proactive and to determine the prevention of waste production, it must be ensured that their management is committed to continuously improving the three factors of social responsibility: economic, social and environmental.

Finally, environmental assessment of waste management systems is only one of the three components of sustainable development. A study of social and economic issues should bring a more comprehensive perspective on the issue of waste management.

REFERENCES

1. **Audroné Minelgaitèa, Genovaitè Liobikienè**, „Waste problem in European Union and its Influence on waste management behaviours”, *Science of The Total Environment*, Volum 667, Iunie 2019 available at <https://www.sciencedirect.com/science/article/abs/pii/S0048969719308162> accessed on 20.09.2020;
2. **Barry Buzan**, “People, States, and Fear, 2nd ed.: An Agenda for International Security in the Post-Cold War Era” 1991;
3. **Buzan B., Waever O., de Wilde J.** “Security: a New Framework for Analysis” 1998;
4. Benjamin Miller “The Concept of Security: Should it be Redefined?”, *The Journal of Strategic Studies* Vol. 24, No. 2, 2001 pp.13-42;
5. **Burns C.**, Routledge - *Environmental Policy in the EU - Actors, institutions and processes*, 3rd Edition, edited by AJ Jordan, C Adele, 2013 pp. 132-151;
6. **Cătălina-Daniela Răducu, Bogdan Ștefanachi**, *Human Security. Contemporary challenges*, Pro Universitaria, București, 2015, pp. 73-74;
7. **CIA report 2000**, available at: <https://www.google.ro/#q=cia+report+2000+environmental+issues> accessed on 12.05.2017;
8. COUNCIL OF THE EUROPEAN UNION, Brussels, 26 June 2006 RENEWED EU SUSTAINABLE DEVELOPMENT STRATEGY available at: https://www.nachhaltigkeitsrat.de/fileadmin/_migrated/media/Renewed_SDS_June_2006_english_01.pdf, accessed on 10.06.2017;
9. European Environment Agency available at: <https://www.eea.europa.eu/articles/europe2019s-objective-recycle-more-waste> accessed on 05.05.2017;
10. EEA Nwnewsletter, Agency Issue 2014/1 17 March 2014, available at: <http://createsend.com/t/d-E2C5F820D8033D4B>, accessed on 07.11.2019;
11. **Frank Möller**, “*Photographic Interventions in Post-9/11 Security Policy*”, 2007 *Security Dialogue* nr.38 ed.2 pp: 179-96, Sage Publications, Ltd;
12. **Gavin B, Sindzingre A.**, 2009, *EU Trade Relations With Emerging Asia: Identifying the Issues*. *Asia Europe Journal* 7: 9-22;
13. **Gupta, M.C.** “Environmental management and its impact on the operations function”, *International Journal of Operations and Production Management*, Vol. 15. No. 8, 1995 pp. 34-51;
14. Independent Commission on International Development Issues, Willy Brandt (1980), “North-South, a Programme for Survival: Report of the Independent Commission on International Development Issues” p.124;
15. **I.R. Tomescu**, *Environmental security of the European Union*, 13th International Multidisciplinary Scientific Geoconference (SGEM) 2013;
16. **Mark Beeson and Nick Bisley** *Issues in 21st Century World Politics* second edition 2013;
17. **Mary Kaldor**, *Human security*, CA Publishing, Cluj-Napoca, 2010;
18. National environmental action plan available at: <http://www.anpm.ro/ro/planul-national-de-actiune-pentru-protectia-mediului>, accessed on 07.05.2017;
19. National Waste Management Plan available at: http://www.mmediu.ro/app/webroot/uploads/files/2017-04-27_PNGD_versiunea_1.pdf accessed on 19.06.2017;
20. National Waste Management Strategy, available at: <http://www.mmediu.ro/beta/wp-content/uploads/2013/01/2013-01-11-DGDSP-SNGD.pdf>, accessed on 05.05.2017;
21. NATO 2014 <https://climateandsecurity.org/2014/09/05/nato-summit-declares-climate-change-will-shape-future-security-environment/>, accessed on 08.05.2017;
22. Opinion of the European Economic and Social Committee on the Proposal for a Decision of the European Parliament and of the Council on a general EU Environmental Action until 2020 "A good life within our planet" COM (2012) 710 final - 2012/0337 (COD), Brussels, 20 March 2013, pp. 1-2;
23. **P. Morsetto, F. Biermann, P. Pattberg**, „Governing by targets: reductio ad unum and evolution of the two-degree climate target”, *International Environment Agreement*, 2017 available at: https://ideas.repec.org/a/spr/ieaple/v17y2017i5d10.1007_s10784-016-9336-7.html, accessed on 05.06.2021;
24. **Peter Hough**, *Understanding Global Security* New York: Routledge. 2004.
25. **Pires, A., & Martinho, G.** (2019). *Waste hierarchy index for circular economy in waste*

- management. *Waste Management*, 95, 298-305. <https://doi.org/10.1016/j.wasman.2019.06.014>
26. **Sabina Alkire**, A Conceptual Framework for Human Security, WORKING PAPER 2, 2014, p.3, available at: https://www.researchgate.net/publication/242201569_A_Conceptual_Framework_for_Human_Security, accessed on 05.04.2019;
 27. **S.Baker**, *The Politics of Sustainable Development. Theory, Policy and Practice Within the European Union*, Routledge 1997
 28. *The European environment —state and outlook 2020 Knowledge for transition to a sustainable Europe*, available at: <https://www.eea.europa.eu/publications/soer-2020>, accessed on 01.08.2021
 29. UNDP, *Human Development Report 1994*, Oxford University Press, 1994, available at: http://hdr.undp.org/sites/default/files/reports/255/hdr_1994_en_complete_nostats.pdf
http://www.un.org/esa/dsd/dsd_aofw_ni/ni_pdfs/NationalReports/romania/Romania.pdf accessed on 04.05.2017
 30. **Waever O., B. Buzan, Kelstrup M., Lemaitre P.** “Identity, Migration and the New Security Agenda in Europe” 1993.