# Programs, Theories and Principles – The Trinom of Sustainable Development

Irina Geanina Harja "Ștefan cel Mare" University of Suceava, Romania harjageanina@yahoo.com

## Abstract

The European Union's environmental policy is one of the most complex Community policies, which through horizontal strategies aims to promote sustainable development and create a sustainable and globally competitive European economy. The European Environment Strategy combines the internal dimension of sustainable development with the international one, thus forming the core that will support the continuous increase of the quality of life and will permanently promote environmental protection, cohesion and economic and social prosperity. The general aim of the paper is to highlight the role of the trinomial of sustainable development, consisting of programs, theories and principles, in developing the most appropriate solutions to environmental problems facing countries around the world. In addition, addressing this issue aims to raise public awareness of the importance of knowing this trinomial, as ignoring it can create pressure and negative effects on all economies.

**Key words**: sustainable development, environmental policy, principles, theories, European Union **J.E.L. classification**: Q01, O44

#### 1. Introduction

The Paris European Council (1972) adopted European environmental policy following the identification of intense manifestations related to the need for a Community environmental policy to accompany economic expansion. The Single European Act (1987) introduced a new "Environment" challenge, which will be the legal basis for a common environmental policy for European states, a policy which through integrated programs in horizontal strategies will pursue the conservation of environmental quality and the rational use of natural resources.

The Treaty of Amsterdam (1999) introduced, with the help of sectoral policies, the obligation to integrate environmental protection and the promotion of sustainable development among the main objectives set at European level.

The Lisbon Treaty (2009) brought with it new changes that complemented the EU's environmental objectives, namely: a first specific objective is to combat climate change, and a second objective is the sustainable development of relations with third countries.

Debates on sustainable development have been the subject of numerous doctrinal discussions over time. The solutions that have been offered to solve the various problems (economic, social and environmental) that humanity faces have been, in most cases, in the background of the so-called register of socialist or social-democratic thinking. Sustainable development policies are under the imprint of statism, outsourcing / dispersing the attributions and responsibilities of social and economic life, from national, European and global level. This requires the implementation and promotion of reforms aimed at ensuring the sustainability and sustainable development of all world economies (Pohoață, 2016).

#### 2. Literature review

Sustainable development must become, both for each individual and for the whole society, a state of mind, a philosophy that channels the whole process towards ensuring long-term sustainability, respectively towards awareness of the problems raised by economic growth (Pohoață, 2016). The concept of eco-development has the role of creating a state of equilibrium and developing a process through which environmental issues will be included in the theory of economic development (UN Conference, 1972).

Problems related to sustainable development and the state of national economies and the environment, which influence society as a whole, are the result of economic relations between states of the world or between different geographical regions. Theoretical debates on sustainable development and understanding theories of economic growth offer, on the one hand, new perspectives on ensuring long-term sustainability, and, on the other hand, will be the key to achieving this sustainability (Bretschger, 1999).

In the early '50s, theories of dependence and modernization, known as the dominant theories of sustainable development, had the role of providing developing states with solutions to achieve certain levels of economic, social and environmental development (Pisani, 2007).

According to the theory of modernization, which started with liberal values, these countries, along the path of sustainable development, should pursue the Western mental model - rationalization of resource use, a model that has continuously supported the development of societies by opening markets, using technologies advanced, export and privatization of economies. Within the theory of dependence, which starts from the Marxist analysis, the connections between the two worlds, of the developed countries and of the developing states, are conceptualized and seen as economic relations that are not related to development. This is also supported by the fact that this theory emphasizes the economic domination of the capitalist system, which, through the nuclei of Western power, retains control over less developed countries. Both theories, the theory of development and the theory of modernization, have undergone changes in order to adapt them to the changes that have occurred worldwide (Peet, 1999).

The neoclassical economy aimed to maximize welfare, an objective that was the starting point of neo-liberal policies (Varian Hal, 1990). The neoclassical theory of development considered increasing production a viable solution in the fight against poverty eradication, so a path to progress and development (Dragulanescu, 2013).

At the same time, the neoclassical approach started from the idea that technical progress and the self-regulatory capacity of the free market (considered the core or source of economic efficiency and human well-being) have the possibility to ensure, on the one hand, unlimited substitution between forms of capital, which determines the decrease of the constraints resulting from the lack of resources, and, on the other hand, a sustainable growth (Tietenberg, 2006).

At the center of this theoretical thinking can be placed as the first reference element Solow's model (Solow, 1956). In this model, economic development is characterized by a consumption that does not decrease over time (consumption), and sustainability is shaped in the form of limitations related to the use of resources, presented by the Hartwick-Solow rule (Solow, 1974). At the foundation of these models is the ability to achieve a perfect substitutability between natural capital (renewable and non-renewable resources) and other categories of capital, which includes both man-made capital and physical capital (Hartwick, 1977).

According to classical economists (Marx, Malthus, Mill and Ricardo), the entire economic activity will be permanently under the auspices of the environment (conditioned by the environment), and the market will continue to be the foundation of economic growth (Dragulanescu, 2013).

On the other hand, traditional neoclassical economists, unlike classical economists, view the economic system as a closed and linear system and do not see the importance of a connection between the two systems (economic and environmental). From their point of view, the environment exists to be transformed, and resources are used to ensure market balance (Turner, Pearce, & Bateman, 2003).

The relationship between economic growth, the use of resources and the capacity to assimilate waste by the environment has led to an idea that sustainable development can be achieved only if economic growth and population tends to zero or if manages to reach a state of equilibrium (Daly, 1990).

Economic science must respect the laws of nature and the damage done to the environment must be kept to a minimum, so that there are no negative effects on the environment and no loss of wellbeing and quality of human life.

Sustainable development is a constantly changing process in which the exploitation of resources, the orientation of technological developments, investment management and institutional change must be in deep harmony, in order to intensify the degree to which current and future capacities will meet human needs. Thus, following the accelerated degradation of the biosphere, but also as a result of global pressures, appropriate environmental protection measures are required. The principles of sustainable development encompass a unique set of strategies that lead to a clearer understanding of society's interaction with the natural environment. Any principle of sustainability (Table 1) is a factor underlying the foundation of strategic and integrated management of sustainable development.

Principles of sustainable development	Content
The principle of ensuring equal opportunities for future generations	<ul> <li>Expression of the collective property right</li> <li>The collective right must be a priority, over the personal property rights</li> </ul>
The principle of economic and social inequality policy	<ul> <li>Expression of the right to ensure the present and future generations the necessities of a life: Healthy Safe Productive Fulfilled</li> </ul>
The principle of diversity of biological and spiritual - cultural life	<ul> <li>Expression of respect and maintenance of development potential</li> <li>Expression of our participation in the evolutionary process</li> </ul>
The principle of population sovereignty	<ul> <li>Expression of people's right to decide about the use of available resources</li> <li>The consequences of decisions to be borne by those who made them</li> </ul>
The principle of mutual responsibility	<ul> <li>To those who have the ecological resources, to manage them in the interest of future generations</li> <li>To those who possess special knowledge, to share it with those who could benefit from it</li> </ul>

Table no. 1 Principles of sustainable development

*Source:* Author's processing after: https://www.studocu.com/en/document/academia-de-studii-economice-din-bucuresti/ economice-economics/lecture-notes/capitolul-15-crestere-economica-si-dezvoltare-durabila/2301092/

Therefore, the basic principles of sustainable development make possible the interaction and harmonization of different sectoral and development strategies with the horizontal sustainable development strategy and at the same time provide a general type of guidance for: setting strategy priorities, setting goals and tasks defined in - a more specific way, the framework and the means of application. The basic principles have been formulated and adopted by the relevant bodies of the UN, respectively of the EU. Environmental policy is considered an integral part of economic development strategies. In the early 1970s, political actors and civil societies turned their attention to the environment through public reactions to that carefree well-being (McCormick, 2006).

In this respect, these years have been the starting point for the presentation of environmental objectives and principles which have subsequently been developed through the Environmental Action Programs. The MAPs (Table 2) are a combination of programs developed in the medium

term and aim at a certain verticality in addressing the problems encountered. The activities, regarding the environmental policy, within the European Union are carried out based on some scenarios, established by the program, paying, preferentially, attention to the problems that have been identified (Petrescu-Mag, 2011).

The EU's environmental policy is based on the Environment Action Programs, which have been adopted by the European Council and the European Parliament.

Table no. 2 Environmental action programs         Environmental       Period       Characteristics		
action program	renou	Characteristics
EAP 1	1973-1977	Sectoral approach to combating pollution
		<ul> <li>Promotes the need for water and air protection</li> </ul>
EAP 2	1977-1983	+ Tromotes the need for water and an protection
EAP 3 198	1983-1986	↓ It reflects the evolution of Environmental
		Community objectives should be
		♣ Development of the internal  correlated with those
		market of the market
		Environmental protection must
		be a component of all – Single European Act
		Community policies
EAP 4	1987-1992	4 It reflects the evolution of Environmental
		Community policies objectives to be
		4 Development of the internal correlated with
		market those of the market
		Environmental protection must
		be a component of all Single European Act
		Community policies
		Promotes the integrated approach to environmental policy
		Introduces the concept of sustainable development
EAP 5 1993-2	1993-2000	WFP 5 also called Towards sustainable development
		Sustainable development is transformed into an environmental
		policy strategy
		↓ Integrating the environmental dimension into all other
		Community policies Changing the direction of environmental policy towards a
		Changing the direction of environmental policy towards a consensus-based policy
		<ul> <li>Moving from a control-based to a prevention-based approach</li> </ul>
		<ul> <li>Use of economic and fiscal instruments</li> </ul>
EAP 6	2002-2012	<ul> <li>WFP 6 also called Our Choice, our future</li> </ul>
	2002 2012	Set environmental priorities
		He identified     Conservation of natural
		four priority resources and waste
		areas management
		Climate change and global warming
		Nature protection and
		biodiversity
		Health in relation to the environment
		↓ It provides for Air quality
		the Soil protection
		development The use of pesticides in the context of
		of 7 thematic sustainable development
		strategies Protection and conservation of the
		marine environment
		Recycling and waste prevention
		Urban area
		Continuous use of natural resources
		<b>4</b> Adapting environmental instruments to market principles and
		mechanisms

Table no. 2 Environmental action programs

Source: Author's processing after: http://www.editura.bioflux.com.ro/docs/Petrescu-Mag.pdf

The Seventh Agenda supports the implementation of the results and commitments made at the 2012 United Nations Conference on Sustainable Development (Rio + 20), namely the transformation of the global economy into a green economy in the context of sustainable development. This program is a point of support for the implementation of environmental actions, while promoting investments related to the environment and climate. The coherent and integrated development of environment and climate policy will be the basis for ensuring an economy, but also for a well-prepared Union society that will be able to meet current and future environmental challenges. Through an efficient and rational use of resources, the existing pressure on natural capital until then will be reduced. Action at EU level to reduce and adapt to climate change will increase society's resilience and stimulate innovation to ensure the necessary conditions for the protection of natural resources.

### 3. Research methodology

For the realization of this paper, the analysis of secondary data was used as research methodology. Thus, data were collected and reports prepared by the European institutions were studied, as well as research papers and articles published in international journals. Throughout the article, we used descriptive and explanatory methods to render the information gathered as clearly as possible. Also, deductive methods have been used based on which future research topics can be outlined. The research method used is qualitative in nature, being useful in exploring information on sustainable development.

# 4. Findings

Population growth, production and consumption have led to an irrational and uncontrolled use of natural resources. These increases were also accompanied by the appearance of large amounts of waste, which influenced the rupture of the primary balance and the spontaneous cycle in the natural environment (Carson, 1962; Commoner, 1971). Also, the traditional economy must be considered as part of a larger economy, an economy that manages, on the one hand, to support the global structure of life and, on the other hand, to support the interdependence between the economic system and medium (Turner, 2003).

European environment policy is guided by environmental action programs that have been designed to support, both within the Union and internationally, the achievement of environmental and climate change goals. Through the MAPs, the Union has succeeded in developing a fairly complex system of horizontal laws, developed the principles and tools for action and made the transition from a sectoral to an integrated approach.

Implementing the concept of sustainable development is an opportunity for a cleaner environment and a much better quality of human life. Sustainable development, viewed from a theoretical point of view, once again highlights the need to conserve capital for future generations, an objective that can be ensured through efficient economic management of natural resources, resource recirculation and maintaining ecological balance (Raszkowski, 2019).

# 5. Conclusions

Today, the EU can be said to be the world's largest provider of long-term development assistance. The European Union's policy is based on economic, social and environmental principles, as well as on fundamental policies aimed at the sustainable development and sustainability of society as a whole. The increase of the productivity of the consumed resources will be a factor that will lead, on the one hand, to the decrease of the depletion rate to the most important categories of raw materials, and, on the other hand, to the increase of competitiveness and ensuring long-term sustainability. Also, in order to achieve the objectives of sustainable development, it is necessary to implement appropriate combinations of coherent macroeconomic policies through which to ensure the sustainability of resources used for growth and environmental protection, which are considered complementary and mutually dependent strategies.

### 6. Acknowledgement

This work is supported by project POCU 125040, entitled "Development of the tertiary university education to support the economic growth - PROGRESSIO", co-financed by the European Social Fund under the Human Capital Operational Program 2014 -2020.

#### 7. References

- Bretschger, L., 1999. *Growth Theory and Sustainable Development*, Books, Edward Elgar Publishing, [online] Available at: <a href="https://www.e-elgar.com/shop/gbp/growth-theory-and-sustainable">https://www.e-elgar.com/shop/gbp/growth-theory-and-sustainable</a> development-978184 0641356.html> [Accessed 11 May 2020].
- Carson, R., 1962. *Silent spring. New York, Houghton Mifflin*, [online] Available at: <<u>https://books.google.ro/books?id=3IcIBAAAQBAJ&pg=PA183&dq=Carson,+R.,+(1962).+Silent+s</u>pring.+New+York,+Houghton+Mifflin> [Accessed 15 May 2020].
- Commoner, B., 1971. *The Closing Circle*, New York, [online] Available at: <https://digitalrepository. unm.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=3273&context =nrj> [Accessed 11 May 2020].
- Daly, H., 1990. *Toward some operational principles of sustainable development*, Ecological Economics, [online] Available at: <a href="https://econpapers.repec.org/scripts/search.pf?ft=">https://econpapers.repec.org/scripts/search.pf?ft=</a> Daly%2CH.E.%2C+1990.+Toward+Some+Operational+Principles+of+Sustainable+Development> [Accessed 12 May 2020].
- Dragulanescu, I.V., Dragulanescu N., 2013. *Some theories of ecological sustainability*, [online] Available at:<http://www. revistadestatistica.ro/wp-content/uploads/2014/04/RRS\_12\_2013\_A1\_ro. pdf> [Accessed 12 May 2020].
- Hartwick J., 1977. *Intergenerational Equity and the Investing of Rents from Exhaustible Resources*, [online] Available at:<http://lib.cufe.edu.cn/upload\_files/other/4\_20140527033434\_50\_hartwick. pdf> [Accessed 10 May 2020].
- McCormick, J., 2006. *Let's understand the European Union. A concise introduction*, CODECS Publishing House, Bucharest
- Peet, R., Hartwich, E., 1999. *Theories of development*, The Guilford Press, New York, [online] Available at:<https://books.google.ro/books?hl=en&lr=&id=sI39CAAAQBAJ&oi=fnd&pg=PP1&o ts=P4Hse5jtEA&sig=L4WYKHIcCrwxMPIrw0MI5REiw4A&redir\_esc=y#v=onepage&q&f=false> [Accessed 14 May 2020].
- Petrescu Mag, R.M., 2011. Environmental protection in the context of sustainable development. Legislation and institutions, Bioflux Publishing House, Cluj-Napoca, [online] Available at:< http:// www.editura.bioflux.com.ro/docs /Petrescu-Mag.pdf> [Accessed 10 May 2020].
- Pissani, J., 2007. *Sustainable development historical roots of the concept*, [online] Available at: <a href="https://www.tandfonline.com/doi/full/10.1080/15693430600688831">https://www.tandfonline.com/doi/full/10.1080/15693430600688831</a> [Accessed 10 May].
- Pohoață, I., 2016. *European strategies and policies for sustainable development*, [online] Available at: <a href="http://www.cse.uaic.ro/\_fisiere/Documentare/Suporturi\_curs/II\_Strategii\_si\_politici\_europene\_de\_dezvoltare\_durabila.pdf">http://www.cse.uaic.ro/\_fisiere/Documentare/Suporturi\_curs/II\_Strategii\_si\_politici\_europene\_de\_dezvoltare\_durabila.pdf</a>> [Accessed 10 May 2020].
- Raszkowski, A., Bartniczak, B., 2019. Sustainable Development in the Central and Eastern European Countries (CEECs): Challenges and Opportunities, [online] Available at:< https://www.mdpi.com/2071-1050/11/4/1180/htm> [Accessed 10 May 2020]
- Solow, R.M., 1974. *Intergenerational Equity and exhaustible Resources*, [online] Available at:< https://academic.oup.com/restud/article-abstract/41/5/29/1522050?redirectedFrom=fulltext> [Accessed 10 May 2020]
- Solow R.M., 1956. A Contribution to the Theory of Economic Growth, [on line] Available at: <a href="http://faculty.smu.edu/tosang/pdf/Solow\_1956.pdf">http://faculty.smu.edu/tosang/pdf/Solow\_1956.pdf</a>> [Accessed 10 May 2020].
- Tietenberg T., 2006. *Economia dell'Ambiente*, [on line] Available at:<books.google.ro/books?id=4n Y7Eo AeBWkC&pg=PA237&lpg=PA237&dq=Tietenberg+T.,+2006.+Economia+dell'Ambiente> [Accessed 12 May 2020].
- Turner, R.K., Pearce, D.W. and Bateman, I. 2003. *Economia Ambientale*, [online] Available at:< https://econpapers.repec.org/article/kapenreec/v\_3a32\_3ay\_3a2005\_3ai\_3a4\_3ap\_3a443-444.htm> [Accessed 14 May 2020].
- Varian Hal, R., 1990. *Microeconomics*, Cafoscarina Publishing House, Venezia

- *Economic Growth AND Sustainable Development*, [online] Available at:<https://www.studocu.com/en/document/academia-de-studii-economice-din-bucuresti/economie-economics/lecture
  - notes/capitolul-15-crestere-economica-si-dezvoltare-durabila/2301092/> [Accessed 12 May 2020].
- *Environmental policy*, [online] Available at:<https://www.mae.ro/node/35846> [Accessed 15 May 2020].
- Fact sheets on the European Union, Environmental policy: general principles and basic framework, [online] Available at:<https://www.europarl.europa.eu/factsheets/ro/sheet/71/politica-de-mediuprincipii-generale-si-cadrul -de-baza> [Accessed 20 May 2020].
- *National Strategy for Sustainable Development of Romania Horizons 2013 2020 2030*, Government of Romania Ministry of Environment and Sustainable Development, [online] Available at:<<a href="http://www.insse.ro/cms/files/IDDT2012/StategiaDD.pdf">http://www.insse.ro/cms/files/IDDT2012/StategiaDD.pdf</a>> [Accessed 20 May 2020].
- *Report on the implementation of the Seventh Environment Action Program*, [online] Availale at:< https://www.europarl.europa.eu/doceo/document/A-8-2018-0059\_RO.html> [Accessed 2 June 2020]