

## **Symmetries and Asymmetries in the Sustainable Development of European Union versus Romania**

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**Abstract:** Sustainable development is an extremely important topic, both theoretically and practically, so as: for theory it supplies the principal concepts of maximum importance for developing the present society, under sustainability conditions, and also pragmatic, as it bases the coordinates which the present behaviour of mankind has to center upon, in order to leave viable legacy – a green planet – for the future generations. It is exactly for these considerations our objective is to analyze this problem from an social-economical point of view, together with the help of statistical instruments, both as for the European Union level, and also for groups of countries, with a run down on Romania, and this is our research hypothesis. We consider appropriate this kind of approach, using as research method – qualitative method, survey and observation, that are our workable instruments for this study, in order to determine the Romania's place in this problem, but also to establish a series of priorities in order to reduce the disparities that differentiate our country of others, inside European Union. We consider suitable this way of approaching of the subject, as per Joseph Schumpeter said: „the economical aspects could be studied by the economical theory, statistical-mathematics, and history”. (Schumpeter, p. 4) So, such a modelling brings rigor and social understanding of mankind's problems. Besides these aspects, this theme also imposes a morality connotation, showing a thematic generosity, and even a pragmatic one, being a pure dot that our generation leaves for the future ones. The gathering of the data for this study was made having as basis the data from Eurostat, and the main results are ment to point out the disparities between Romania and European Union in this problem of sustainable development, as well as the necessity of eradicate them.

**Keywords:** Sustainable Development, Globalization, Environment Policy.

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## 1. Introduction

Freedom, peace, development, environment are universally goals for mankind. But what we really do for this? Are we aware of the fact that development is strongly linked to the other desideratum? Many forums, conferences, organizations, governments and people are discussing and trying to do everything they know and can, in order to make all of us aware about these necessity - sustainable development.

The earliest mentioning of the sustainability term was used by Hans Carl von Carlowitz in *Silvicultura Oeconomica* (1713, pp. 105-106) year when the concept meant the ensuring the forestry sustainability achieved by early cutting regrown timber in order to maintain the soil fertility. His approach "Nachhaltigkeit" (German term for "sustainability" influenced the Austrian Forestry Law. As for the environmental term - it was first mentioned in 1962, but as being in an initial stage, the term was not enough described in the literature, at that time (Carlson, 1962). The concern for the economic growth versus its finite resources supplies, commissioned by the Club of Rome, was mentioned even around the 1970's as the report named "The Limits to Growth" concluded: "If the present growing tendencies of the world population, industrialization, global pollution, food production and the exploiting of the resources will continue without any changes, then the limits of growth on this planet will be reached in the following hundreds of years" (Meadows and Meadows, 1972).

## 2. Literature Review

The sustainable development concept was firstly issued in 1980, in the World Conservation Strategy for Conservation of Nature and Natural Resources, presented by United Nations Environment Program, the World Wildlife Fund and the International Fund. This concept proposed three factors - social, ecologic and economic - which have been developed until today (Mannan M.S. and al, 2012). The Social-Politic Dictionary ascertains that the achievement of the sustainable development supposes the integrating of the points of view from those three above mentioned areas (Pop, L.M., coordinator, 2002). The social aspect lies in standard of leaving, equity, social dialog, together with the protecting of cultural inheritance, as ecologic aspects means: preserving natural resources, bio-diversity, avoiding pollution; the economic factor is referring to efficiency, growth, and stability. Thus, the development is sustainable only when is based on these all aspects. E. Inskeep: in part four of his 1991's book discussed the environmental and socio-economic concerns, from the perspective of tourism planning, for an integrated and sustainable development.

The first organized discussions about this topic began with report entitled “Our Common Future”, or also known as Brundtland Report<sup>1</sup>, after the name of the prime-minister of that time Norway (Gro Harlem Brundtland, 1987) and it popularized the concept of the sustainable development, being published by World Commission of Environment and Development in 1987 (Azapagic et al, 2004). The most used definition of sustainable development is that given by Lester Brown, (the founder of the Worldwatch Institute): "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brown, 1987, pp. 20-37). (WCED, 1987). This was downloaded by the Report of the Brundtland Commission, that above mentioned. Then, this was adopted as an overarching objective by the governments at the Earth Summit of 1992 in Rio de Janeiro, together with a set of Rio Principles and a global action plan and Agenda 21, that includes many goals and targets, some of them being informed the Millennium Development Goals a decade later on. In the 1997 year at Kyoto a number of 61 countries accepted the agreement named Protocol of Kyoto that settled the means of controlling the gas emissions with green-house effect. It established the quantitative limits and compulsory reductions, among the most important are the carbon dioxide (CO<sub>2</sub>), which derives from fossil fuel, methanol (CH<sub>4</sub>) and the nitrous oxide (N<sub>2</sub>O).

Wolfgang Sachs's opinion is that “the new concept is so pushed, in a subtle way, the geometric place of the sustainability from nature to development” (2002). A sustainable development supposes a way of developing society, preserving the natural resources for the future generations, so as A.D. Xenopol named in “long series” (1908), thus taking into account measures that could be applied for a long time and also with effects on the long run (Ștefănescu, 2003, p. 32). Naz Onel and Avinandan Mukherjee (2015, pp. 2-16) underlined the importance of the environment factors upon the people's health, and pointed out that the health of the environment also depends on the health of the planet inhabitants. Besides, even the World Health Organization highlighted that environmental health contains “those aspects of the human health and disease, that are determined by factors in the environment” (WHO 2011)<sup>2</sup>. So, the relationship between development and environment became a relationship between present and future (Pop, 2013, pp. 136–141).

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<sup>1</sup> *Report of the World Commission on Environment and Development: Our Common Future* (1987)

<sup>2</sup> World Health Organization – published its annual report - World Health Statistics 2011, Progress on the health-related Millennium Development Goals (MDGs), Fact sheet N°290.

### **3. European Strategy of Sustainable Development – Some Important Aspects**

The essential characteristics of the sustainable development are: equity, long term approach and systemic thinking. The European thinking about this topic is that this is a main objective, whose scope is to continue improve the quality of life and welfare for the present and future generations. This could be achieved by an integrated approach between the environment protection, economic development and social justice that is meeting all these requirements together. The sustainable development became a sized objective of the European Union when in 1992 year was adopted Program 5 of Action for Environment 33, having as object to promote the sustainable development, by including the concern for environment in other political fields and transforming the models of economic growth in E.U. Later, in 1997 year these objects were introduced in the Maastricht Treaty. Then, it was adopted the Sustainable Development Strategy in 2001 (at Goteborg), succeeded by adding the external dimension in 2002 and finally it was adopted the Revised Strategy of European Union for Sustainable Development. The essential stages of building up this strategy consist of: identifying the specific challenges for the sustainable development and then the issuing those measures to respond to those identified problems and, after that, the establishing of the assessing indicators and, finally, the evaluation and from time to time adjusting the politics. This European Union strategy is based on 7 priority axes, as follows: climate and energy changing, sustainable development, preserving and managing the natural resources, sustainable production and consume, social inclusion together with demography and migration, public healthy and global poverty together with the challenges of the sustainable development.

There are not only achievements, but also set-backs - one significant being that of groundless of the Kyoto Protocol in the road transportation; thus, the transport sector of European Union is depending on fossil fuel at a rate of 98% and on oil products at a rate of 96%. Another rate of 90% of the rising of gas emission of carbon dioxide between 1990-2010 was due to transport sector. The motors with internal combustion will represent the main available technology in 2030, so that will preponderantly use liquid and renewable fossil fuels.

Beyond the apparently incompatibilities between the three dimensions of the sustainable development there scored some theoretical and practical progresses for integrating the environment aspects in the economic aspects. As for the environment, beyond the long term impact, the European Union adopted some higher standards than all the rest countries in the world, and thus bringing along a minus of competitiveness. Inside the European Commission, there is the General Directorate for Enterprises (DGE) that sustains the integrating of the sustainable development in the companies strategies and it presents opinions regarding conceiving and

implementing the instruments of the environmental policy, so that this could boost the entrepreneurial and the innovation, which are key-factors in rising the competitiveness.

At the European Union level, the environmental protection pass through from a sectoral policy, to a horizontal principle of all sectors, this for the success of the sustainable development strategy.

#### **4. Sustainable Development in Romania**

Romania, as a member of European Union, had to follow the same line when issuing the environmental policy, this being a key aspect for elaborating the National Strategy for Sustainable Development. It is accordingly to the global and European priorities of the United Nations Organization and, respectively, the European Union. Sustainable Development Strategy renewed concerns over Europe and therefore proposes ways to improve cooperation with the government and other stakeholders, NGOs and citizens, entities must join efforts for sustainable development. Cooperation for sustainable development should be a concern for both the EU and Member States. Community sustainable development policy should be complementary policies implemented by the Member States.

Regional Operational Program is a strategic document programming, which has the overall objective of supporting and promoting economic and social development of the regions of Romania, with a focus on supporting sustainable development of cities, potential urban growth poles, improvement of infrastructure and the environment business that support economic growth, to make Romanian regions, especially those lagging behind, more attractive places to live, visit, invest and work. The overall objective of the Regional Program will be achieved through a differentiated financial allocation by region, depending on the degree of their development and through close coordination with the actions implemented by other Operational Program.

Balanced development of all country's regions will be achieved through an integrated approach, based on a combination of public investments in local infrastructure, active policies to stimulate business activities and supporting local resources capitalize on the priority axes.

The Regional Operational Program strategy is to mobilize and activate local potential that can have the most direct influence on regional and local development. The vital activities for a country are: knowledge, research, improvement and development of rural area, so the size of the rural area, expressed by area owned, and the population occupied in productive activities, social services and cultural activities, habitat and tourism. The report on the European Charter in the countryside, agriculture and rural development committee of the Council of Europe, considers that Europe's rural areas

represent 85% of its total area and affects, directly or indirectly, more than half of the European population.

The problem of rural development and settlement is one of the most complex themes of contemporaneity because, in essence, require a balance between the requirement of preserving the countryside economic, ecological and socio-cultural of the country, on the one hand and tendency to modernize rural life, on the other hand. Meanwhile, rural development and planning is at the confluence of the tendency of urban expansion, aggressive development of the industry at the expense of the rural area and the requirement to maintain as much as possible areas to its current size. Finally, the development and planning of rural tending to modernize, to Europeanize in scope, in each country, has as main objective the maintenance and preservation of the national character of the space and rural culture and where there have been serious damage (physical or socio-cultural) local, regional or national (such as ex-communist countries and in some areas super-industrialized Western Europe) was proposed solution reconstruction or possibly restore these areas, meaning placing at standards of rurality.

A milestone for scientific research on rural development was the International Conference in Europe entitled Cork Countryside - prospects for the future, which aimed to establish the fundamental guidelines of Community Europe's rural policies after 2000, gathering over 500 specialists, people scientists and politicians from EU countries, PECO countries, USA, Japan, Canada Conference in Cork has been described as the largest demonstration on rural development organized ever in Europe must respond to the great challenges: globalization of the economy, including agriculture; the introduction of the single European currency; enlargement of the European Union.

The Conference in Cork, theorized a broad practical application of rural development issues in EU countries and in other participating countries. The final declaration of the 10 points conference's which is placed in the center of rural preference based on sustainable development as a fundamental principle of European rural policy. Sustainable rural development is defined coordinate very precise stabilization of population in rural areas by eliminating or reducing rural exodus, eradication (combat) poverty by stimulating and increasing employment, promoting equality for all rural residents, increasing quality of life and the general welfare by conserving, protecting and enhancing the environment and countryside.

Rural development is a concept and an integrated action that requires a methodical approach multidisciplinary, cross-sectoral and territorial (regional). All guidelines contained in the new CAP reform and found correspondence in the funding mechanism of Agriculture and Rural Development, included in the new European agricultural model defined by Agenda 2000, as agreed in Berlin in March 1999. Through this document, the new common agricultural policy balances system of

allocating EU structural funds on the two pillars of (1) and of agricultural markets (2) rural development. There emerges the need for comprehensive programs to counter desertification – which is another weak point of our country. If that will not interfere with vigorous measures to eliminate the negative factors, desertification will install or irreversible ecological huge costs of rebalancing. Desertification is both a physical phenomenon (naturally) and a social and economic phenomenon. Economic and social desertification is a complex phenomenon that is installed, usually in peripheral regions with smaller population and poor development. Social desertification must be studied in order to establish economic and financial policies of deterrence. These localities through a drastic reduction in economic activity, no longer self-administration and potential economic development. A first question that rises in this case is to identify areas (regions) lagging behind. The second issue relates to the now thoroughly researched insider knowledge of land for the causes underdevelopment. And, finally, on this basis, preparing the reorientation of food products, expansion of SMEs complementary upstream and downstream agriculture or agriculture, non-agricultural economy or complementary expansion of agriculture. The State, through fiscal and financial policies, has the opportunity to support rural development in these regions.

For Romania, in an economic reform, restructuring dynamics sectoral, regional, zonal and local is more pronounced. Reconversion programs and restructuring have some characteristics determined by the transition from a guy occupational to another, from one branch to another (or others), the transition from one activity relative specializes in multiple activities, from one activity concentrated at others disparate territorial and so on. Also re-restructuring programs are medium and long-term programs with durations of 3-15 years.

The period 2013-2025 will represent Romania's developments trajectories of sustainable growth, similar to those of countries with high level of development, the main effects of EU integration, as of hating our own efforts to be estimated by the absolute reducing disparities and relative to the average level of the European Union. For the time horizon, the setting of targets in qualitative terms, especially quantitative, will be possible in a relatively small number of indicators. What seems important for the future is not so prospective numerical scale of our development and, especially, qualitative sense of evolution and the speed with which we will cross the path of scientific progress and technological world. There are also a number of quantitative estimates in physical expression and value of certain indicators to predict with regard to possible levels achieved for certain parametric economic, social, technological and environmental, as well as the necessary financial resources that have to allocate.

In the long-term, macroeconomic projects, our representations regarding the prospective level of GDP per capita in Romania compared to the EU average in 2025 takes on a strategic importance. It is evidenced in the evolution of this indicator

dynamics necessary to achieve 60-80% of the EU average and how they can reach such a performance, citing a series of macroeconomic balances and correlations, creating a series of equilibria and macroeconomic correlations, achieving a number of objectives were, concrete. Alternative baseline scenario and the macroeconomic evolution in the period 2005-2025. Romania's major strategic objective is to reduce long-term social and economic disparities compared to developed countries.

Romania's macroeconomic evolution scenarios, developed under the strategy, we propose two possible variants (the baseline scenario and the alternative scenario) mitigation of these gaps, taking into account long-term developments on the labor resources, namely: working age population will decrease by about 12% in 2025 from the level recorded in 2003 and unemployment will translate to the level considered "normal", naturally in a market economy, or around 4.5-5%.

Baseline scenario outlines a path to future economic development, given that the results are boosted mainly by stimulating domestic factors. Alternative baseline scenario and the macroeconomic evolution in the period 2005-2025. Romania's major strategic objective is to reduce long-term social and economic disparities compared to developed countries. It remains to see up to which level it will be succeeded to achieve.

## 5. Conclusions

Real and nominal convergence of Romanian economy countries members of the European Union is already a real phenomenon and the sustainable development process will accelerate in the years ahead speed near the Romanian economy Community standards. In recent years, real convergence of Romania to the EU economy improved significantly. In perspective, by 2025 no prerequisites, highlighted by the two development scenarios, to achieve a degree of real convergence, equivalent to that of other new Member States of the European Union.

Sustainable development of Romania is not a result that is obtained in an easy way. On the contrary, it requires an ongoing efforts and conjugated supported by every member of our society who, directly or indirectly, can make its contribution. Awareness of this goal of sustainable development of Romania must expand and harden in the spirit of national solidarity and social expectations regardless of politico- ideological conjunctures more or less favorable. Our common mission for Sustainable Development will have to take into account a number of factors constraining narrowly nature objective/subjective, that we will strike. The "hardest" constraints internally are determined by: the limited natural resources (especially energy and the deteriorating quality of soil); demographic decline (declining birth rate, aging, migration); social-economic existence of significant gaps (productivity, standard of living, technological level, degree of culture, education, differences



between rural and urban areas, high population share of agriculture); natural disasters and extreme weather caused, among others and the general deterioration of the balance of eco-systems and the quality of environment; existence of significant gaps (productivity, standard of living, technological level, degree of culture, education, differences between rural and urban areas, high population share of agriculture); natural disasters and extreme weather caused, among others, and the general deterioration of the balance of eco-systems and the quality of the environment.

Economic objectives of sustainable development is to reduce economic gaps separating Romania from developed countries. This objective is in reality a means to human development, improving living standards and reducing social inequities.

The future is industrial–agricultural type, promoting green technologies, which are not environmentally destructive. Since the environment is one of the factors that act globally, we are compelled to build strategies correlated and consistent with those developed in other countries and worldwide.

## 6. References

- Azapagic, A. et al. (2004). Developing a framework for sustainable development indicators for the mining and minerals industry. *Journal of cleaner production*, Elsevier.
- Brown, L.R. (1987). *Analyzing the demographic trap*, published in State of the world: a Worldwatch Institute report on progress toward a sustainable society. New York: W.W. Norton, pp. 20-37.
- Carlson, R. (1962). Silent Spring, published in *Catalog of Copyright Entries. Third Series: 1962: July-December*.
- von Carlowitz, H.C. (1713). *Silvicultura Oeconomica*, von Carlowitz 1713, pp. 105-106.
- Inskip, E. (1991). *Tourism Planning: An Integrated and Sustainable Development Approach*. New York, Van Nostrand Reinhold. Johnson et al.
- Mannan, M.S. (2012). Trevor Kletz's Impact on Process Safety and a Plea for Good Science – An Academic and Research Perspective. *Process Safety and Environmental Protection*, vol. 90, no. 5, September 2012, pp. 343-348.
- Meadows, D.H. and Meadows, D.L. (1972). *The Limits of Growth: A report for the Club of Rome's Project on the Predicament of Mankind*, a Potomac Associates book, New York: published in the United States of America in 1972 by Universe Books.
- Onel, N. & Mukherjee, A. (2015). Understanding environmentally sensitive consumer behaviour: an integrative research perspective. *World Journal of Entrepreneurship, Management and Sustainable Development*, Vol. 11 Issue 1, pp. 2-16.
- Pop, I. (2013). The Role of Tourism in the Economies of BRICS Countries. *Knowledge Horizons - Economics* Volume 6, No. 2, pp. 136-141.
- Pop, L. M. (coordinator). (2002). *Dicționar de politici sociale/Dictionnary of social policies*. Bucharest: Editura Expert.

Sachs, W. (2002). The Jo'burg Memo: Fairness in a Fragile World. Memorandum for the World Summit on Sustainable Development, Berlin: Heinrich Böll Foundation. *World Summit papers*.

Schumpeter, J. (1954). *History of economic analysis*. London: Allen & Unwin, Edited from a manuscript by Elizabeth Boody Schumpeter, page 4

Ștefănescu, F. (2003). Youth civic education from the perspective of European integration, published in the *Annals of University of Oradea, Series Pedagogy (volume Proceedings Education for All and for Life, International Scientific Conference, May 29 -th - June 1 -th 2003)*, page 32.

Xenopol, A.D. (1908). *La théorie de l'histoire/The theory of history*. Paris: E. Leroux, Full catalog record MARCXML.

*Report of the World Commission on Environment and Development: Our Common Future* (1987).

The Sustainable Development Strategy of Romania – Horizon 2025.

(2011). World Health Organization – published its annual report - World Health Statistics 2011, *Progress on the health-related Millennium Development Goals (MDGs)*, Fact sheet N°290.

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