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THE PROMOTION OF THE SUSTAINABLE DEVELOPMENT, STRATEGICAL OBJECTIVE FOR THE WHOLE HUMANITY

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ABSTRACT

Nowadays, the human society battles with global issues, the environmental ones having a special place among them. To these global issues must be found global solutions, reason for which it is necessary for these to be approached firstly responsible, to a national scale, also from a global view. The writing represents an argument in favour of the promotion of the sustainable development as a response of the human society to the surrounding crisis. Thus, not only the actual generations as well those that will follow, having the support of the universities, must create sustainable communities that will be able to accomplish the objectives of the sustainable development settled within the Sustainable Development Strategy. Given the fact that the fossil fuel resources are limited and they pollute the environment by burning them, humanity must reduce their usage and improve the renewable energy sources using them, in future, in the best combination.

KEYWORDS: *sustainable development, environmental protection, sustainable communities, strategy of sustainable development, renewable energies.*

JEL CLASSIFICATION: *Q01, Q20*

1. INTRODUCTION

Starting from the fact that, nowadays, humanity battles a series of global problems, the environmental ones being imperative, the writing puts forth the idea of stressing the fact that the resolution of them cannot be made only by finding global solutions. The process is a difficult one to be made, as these problems must be approached firstly responsible, not only to a national scale, but also to a global one and it suggests the existence of material resources that some countries (barely developed, or on their way to developing) don't have.

The sustainable development that gathers together on an equal whole the economical growth, the environmental protection, the social justice and democracy represents the response of human society to the actual environmental crisis, generated by overpopulation, exhausting of resources and pollution.

The necessity of implementation of the sustainable development was issued first in the year of 1972 within the first report of the Club of Rome, named "The Limit of Growth". The definitions given to the sustainable development are numerous, the most representative one being rendered in the year of 1987 by the World Committee of Environment and Development, in the report named "Our Common Future" also known as The Brundtland Report.

Going forward, there has been made a listing of the global main events that stressed the importance of promoting the sustainable development as a solution to harmoniously combine the economical development and the environmental protection to solving the problems that humanity faces at this point.

Thus, the main contributions were given: The United Nations Conference for Environment and Development from Rio de Janeiro dated 1992, The World Summit for Environment and Development dated 2002 in Johannesburg, as well as The Earth Summit in Rio de Janeiro dated 2012.

The writing stresses the necessity to create sustainable communities, that, in view of assuring the prosperity, the environmental protection and social cohesion, not only for the actual generation, but also for the future ones, to efficiently manage the limited resources that the planet has and to exploit the potential of economical and social innovation of the economy.

On going, the Strategy of sustainable development is given (with illustration of E.U. and Romania) as a way through which the sustainable communities to accomplish their general objective, that is the promotion of actions that allow the achieving of the activities to grow the quality of life, not only for the actual generations, but also for the future ones.

Although the sustainable development faces challenges like: demographical constraint; technical constraint; the fairness and compensation among and between generations; efficiency; environmental economy, etc., the E.U. tries to overcome them.

For this purpose, within the E.U.'s Strategy of sustainable development are being followed as fundamental objectives: the environmental protection; the fairness and social cohesion; the economical prosperity; the accomplishment of its international responsibilities.

The writing draws the attention over the fact that it is necessary that the universities make themselves as basis of sustainable development in the communities they serve, this way having to interact with the business environment, the local communities, the civil society, the government, etc.

Romania, as an E.U. member, adopted in 2008, the Horizons 2013-2020-2030 Romania's National Strategy for Sustainable Development that targets a series of objectives appropriate for each area of activity and time horizon.

The accomplishment of these objectives depends, on medium and long term, the insurance of an economical growth "The Polluter Pays", the correction of the cracks within the owning rights over the natural resources, mainly, the initiation and promotion of the eco-industries and clean technologies.

In the present writing there are briefly rendered the objectives settled by our country over the given time horizons previously named, with examples, to the 2020 time horizon of the objectives of the strategy in the weather changing and energetical area.

Humanity needs electrical energy in all the activity areas, thermal energy necessary to the industrial processes and to heating homes and, mainly, fuels required for transportations. In this regard, it uses the fossil fuel resources, that, are limited and that pollute the environment by their usage, reason for which it must reduce their consumption and to exploit the renewable energy sources (of the wind, solar, geothermal, energy from tides, water energy, biomass, etc.). Regarding Romania, it has all the types of renewable energies resources that is able to take advantage of in the area where the geographical specifications allows them to be rewarding economically speaking.

On going, it is made a presentation of the potential of these renewable resources per geographical areas of Romania and it is given, based on the example of the district of Prahova, few openings in the domain of their uses.

All the energetical alternatives must be considered open, meaning, in the future, the renewable energies will be used along with the conventional ones, in the best different combination, considering the local conditions.

Regarding the used methodology, the writing draws the attention to the positive approach that lays the matters “as they are”, but also to the law aspect, that allows the issuing of few judgments of value about “how it should be” some of the given aspects.

2. THE SUSTAINABLE DEVELOPMENT - WAY OF SOLVING, ON A LONG TERM, HUMANITY’S PROBLEMS

Nowadays, human society faces global problems like: overpopulation, shortage of food, pollution, weather changes, exhausting of resources, economical lability, extinction of species, illiteracy, social and political liability, improper sanitary system, the danger of a nuclear war, delinquency growth, etc. that Rojanschi & Bran (2002, pp.97) presents them in their work named “Environmental Politics and Strategies”. To these types of global problems global solutions need to be found, to which some countries cannot concur, because of lack of material. Within the global problems of humanity, a special place is given to the environmental issues, that appear on the following levels: global and transnational level (weather changes, decrease of the ozone layer, etc.), the level of the natural habitat (deforest, protection of the ecosystems), the level of the environmental factors (soil, water, air), the level of fitting out of premises (urban, industrial), as the already named authors indicate in the same work.

The sustainable development represents the reponse of the human society to the actual environmental crisis that has as basis constituents: overpopulation, exhausting of resources and pollution. It gathers in an equal whole the economical growth, the protection of the environment, the social justice and democracy.

Regarding the term sustainable (lasting) that comes from Latin “subtenir” meaning “to hold up/retain” or “back up”, Muscoe (1995) claims that not only the present generations, but also the future ones, must rightfully manage the resources and to improve the ecological and social inovation potential of economy to assure the prosperity, environment protection and social cohesion, thus making sustainable communities.

The neccesity of applying sustainable development was introduced in the year 1972 within the report of the Club of Rome, named “The Limit of Growth” made under the indications of professor Dennis Meadows.

It represents a study of the global system, that analyses five factors that limits the economical growth, being the basis of the unsettlement between the economical and social development of the world's states and its impact over the the natural resources and, implicitly, over the environment.

This way, the authors note that in the world system two of these represent positive reversed connection loops which are: the extraordinary growth of the population and of the industrial production, and three represent negative loops: pollution, exhausting of natural resources and starvation.

If the evolution of the first two factors will be settled right it is possible to be established on a long term, an environmental and economical stability, this way being avoided a suddenly and uncontrollable downfall. On the first United Nations' Conference regading the environment in Stockholm in 1972, the participating nations stressed the neccesity of reducing the pollution and of the prevention of exhaustion of resources.

The World's Committee for Environment and Development, the year of 1987, in the report named “Our Common Future”, also known as the Brundtland Report and published by WCED (1987, pp.43) defined the sustainable development as being “the development that corresponds

to the necessities of the present, without compromising the possibility of future generations to satisfy their own needs”.

We find the message of this report within “The 3rd Principle” from the Rio Declaration on Environment and Development (June 3rd - 14th 1992), which states that “the right to development must be performed so to equally satisfy the needs of development and of environment of present and future generations”, as it is stressed in Ionescu (2000, pp.31).

Along the time a series of events (conferences and meetings) at world level, that highlighted the importance of sustainable development in view of solving the issues that humanity faces. Within the debates in the Conference of the United Nations for Environment and Development from Rio de Janeiro in 1992 it was claimed the necessity of applying the sustainable development as a way to harmoniously combine the economical development and environmental protection.

On this occasion there were drawn promotion strategies of human development through economical growth based on the main natural resources sustainable management.

To this reunion there haven been adopted documents like: “Rio Declaration on Environment and Development” (“The Book of Terra”) having 7 principles; “Agenda 21”; “The Convention On Biological Diversity”; “The United Nations Framework Convention on Climate Changes”; “The Statement of Forest Principles”; “The Declaration Regarding Deforesting”.

In the year of 2002 at Johannesburg (South Africa) took place the world summit regarding sustainable development in which it was analysed the way there were fulfilled the objectives settled at the conference in Rio de Janeiro in 1992.

The international conference regarding the funding for development from Monterey (2002) and the Ministerial Conference of the Commerce World Organization from Doha (2008) represents marking points within the international steps of promoting the sustainable development.

In June 2012 at Rio de Janeiro took place the last Summit of the Earth in which there were stated the objectives of the global development (that come along the millenium's development objectives of which due term represented the year of 2015), there were adopted the main lines for the politics of a green economy, next to the 10 years programmes reagarding the consumption and sustainable production.

Sustainable development means assuring an equilibrium between the economical activity and environmental protection so to produce goods and services that we now need and, on the same time, to keep the Earth's capacity to self-regenerate for the next generations to live in good conditions. Romania's admision to E.U. enforces that, within the economical activities which are made in the economy, to be kept in mind obtaining the ecological efficiency located at the main front with the economical and social efficiency that has in its view the ecological component as the basis of economical decisions because the environmental problems are inseparable of those of wellbeing and of the economical processes, in general.

3. THE STRATEGY OF THE SUSTAINABLE DEVELOPMENT. THE ASSUMPTION OF SUSTAINABLE COMMUNITIES

In 1997 the sustainable development became a political objective of the European Union as part of the Maastricht Treaty.

This problem was touched in the year of 2000 on the occasion of special session of the U.N.'s General Assembly and then took place the embracement in Sweden (at Friibergh) of the millenium's objectives within the Declaration regarding the Statement of Sustainable Science.

In the view of promoting the sustainable development there were made global level actions programmes (Agenda 21) and local level (Local Agenda 21).

The European Union's Sustainable Development Strategy was adopted in the year of 2001 by the Göteborg European Council and in 2002 to be added an external (international) dimension in Barcelona gathering concerns approached in the Sustainable Development World Conference in Johannesburg in 2002.

Following the publication of a critical evaluation of the progresses made after the implementation of the E.U.'s Sustainable Development Strategy in Göteborg in 2001, the European Committee started, at the end of 2005, a review in its process.

This way, in the year of 2006, the European Union's Committee adopted the renewed for an extended Europe Sustainable Development Strategy having, as general purpose, the promotion of actions made to allow E.U. the accomplishment of activities to grow the quality of life, not only for the actual generations, but also for the future ones, by creating sustainable communities.

The responsibility of implementing such strategy belongs not only to the E.U. but also straight to the state members, yet being necessary in addition the alliance with the civic society, social partners, local communities and citizens.

The fundamental objectives of this strategy are: environmental protection; equality and social cohesion; economical prosperity; the accomplishment of the E.U.'s international responsibilities.

Building up a strategy for sustainable development there are necessary few stages like: identification of the problems that the sustainable development must answer to and; in this regard, the setting up of a package of measures that will render in solving them.

Moreover, it is necessary the establishment of sustainable development evaluations' parameters; but also the recurring adaptation to public politics in the actual context.

The strategical components of the sustainable development are given in Figure 1 (being placed in the corners of the triangle), as well the actions that need to be taken to efficiently pass from a stage to another (the stages are mentioned on the laterals of the triangle):

The strategy of the European Union for sustainable development reviewed in 2006 points 7 main axes: weather and energetical changes; sustainable transportation; the preservation and the management of natural resources; consumption and sustainable production; public health; social inclusion; demography and migration; global poverty and challenges of sustainable development.

The sustainable communities must apply the objectives of the sustainable development that are part of the sustainable development strategy. In this regard, they have to use rationally and efficiently the resources they have, chasing the growth of the quality of life, the environmental protection and assuring the social cohesion.

The economical efficiency given from the terms of the sustainable development supposes that not only now, but also in the future, the stress will be moved from taking into consideration only of the financial or of the profitability signs that make the prerogative of classical economical efficiency, to a new way of looking at things, represented by the eco-efficiency that defines the benefits, as well the costs in a wider view that includes the revenue and costs of environment, as it states Cristu (2008, pp.243-263).

Romania's accession to E.U. enforces, that in the frame of the economical activities are displaying in the economy, to be kept in mind gaining environmental efficiency located in the interface with the economical and social efficiency, that targets the environmental component

in the foundation of the economical decisions because the the environmental problems are inseparable from those of wellbeing and of economical processes, in general.

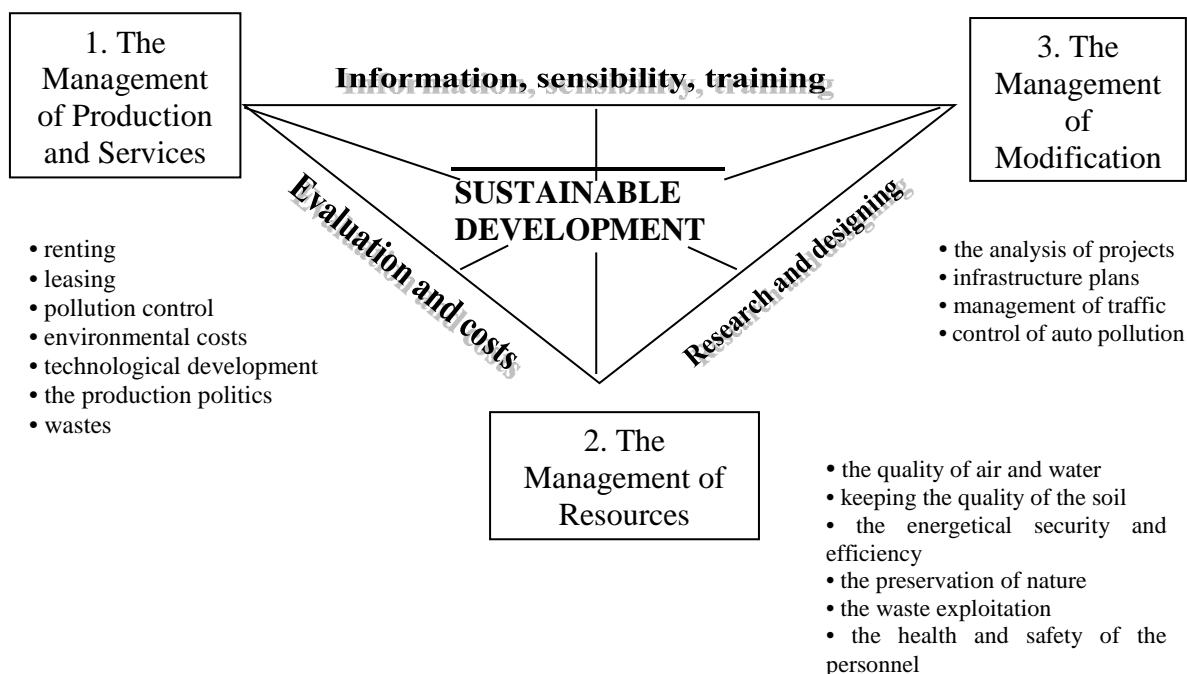


Figure. 1. The strategic components of the sustainable development

Source: Rojanschi, Bran & Grigore (2004, pp.70)

The universities must become models of sustainable development in the communities they serve through teaching and research, through proper management of the campuses, as employers and suppliers of specialists, etc. Thus, their leaders play an essential role in backing up the transition towards the sustainable development, in this regard, they have to interact between the institutions they lead and the external holders of interest (business areas, local communities, civil society, the government, etc.) with the benefit of backing up, one another, and of acting efficiently.

The universities have the capability to develop the intellectual frame needed to sustain the practical applications regarding the concept of sustainable development by organizing conferences and academical exchanges in which to stress all its dimensions (economical, social, environmental and cultural). They can establish the needed academical subjects to solve the big problems that human society battles, they can gather resources, they can create impulses and programmes in view of developing abilities and can lead by example through institutionalised politics and practice that are environmentally sure, diminishing their own impact over the environment.

The sustainable development, being an international challenge, the universities must learn from the experience of other countries and sectors, also growing their good-name.

Romania, as an E.U. member, adopted in 2008, in conformity with the assumed commitments at a community level, the Horizons 2013-2020-2030 Romania's National Strategy for Sustainable Development. At the level of horizon 2013 Romania settled to organically

incorporate the principles and practices of sustainable development in the whole of its programmes and public politics.

At the level of horizon 2020 our country settled that, regarding the main pointers of the sustainable development, to reach the medium level of the actual countries of the E.U. This way, the objectives of the 2020 strategy, in view of the weather and energetical changes are highlighted: the decrease of the greenhouse gas by 20% to the levels registered in 1990 (or, in good conditions, even by 30%); the growth of the share of renewable source of energy up to 20%; the growth of energetical efficiency by 20%, as it stated E.C. (2010, pp.9).

At the level of horizon 2030, Romania targets, in point of sustainable development, to get significantly close to the medium level of that year of the countries members of the E. U.

The accomplishing of these strategical objectives supposes a series of main directions for action that aims the acquirement and applicability of the sustainable development, typical for each sector of activity and time horizon, that on medium and long term will assure a high economical growth, decreasing the economical-social downshifts between Romania and the other members of the E.U.

4. THE RENEWABLE ENERGIES IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

The fossil fuel resources rendered by oil, natural gas, coal are limited and they pollute the environment by their burning, so the humanity must draw its attention, more and more, to the renewable sources of energy such as: wind energy, solar, geothermal, from tides, from water, biomass, etc. These can be used to generate electrical energy in all the activity sectors, of heat energy necessary for industrial processes and heating the houses and, mainly, fuels needed in transportation.

The most important users of renewable energies around the world, as per the site (viewed online on July 12th 2016) https://ro.wikipedia.org/wiki/Sursă_de_energie are:

- for wind energy (the U.S.A., Germany, Denmark and India);
- for solar energy (the Dominican Republic, Sri Lanka and Zimbabwe);
- for geothermal energy (Iceland, the U.S.A., the Philipines, Indonezia, Mexico, Italy and New Zealand);
- for the energy of tides (the biggest station is on the river Rance, that makes most of the energy that Bretagne uses, as well other areas, but experimental plants are found in Canada, Russia and P.R. China);
- for the hydroenergy (Norway, Brazil, the U.S.A., Canada, P.R. China and Russia).

Using the energy in an effective way and exploiting the renewable sources of energy on a large scale we can reduce the energy consumption and the primary energetical resources, having positive effects over the economical and social development. Altogether, we can concur to the conservation of the natural resources and reduce the impact of the economical activities over the environment by decreasing the greenhouse gas.

In E. C. (2015) it is shown that the share of the energy that comes from renewable sources represented 15.3% from the final gross consumption in the E.U. in 2014. Regarding Romania, as per the report, the share that the renewable energies, in the final gross consumption of energy was of 23.9%, in 2013, the objective for the year of 2020 being of 24%. Moreover, there are countries that have reached their objectives for the year of 2020: Sweden (52.1%), Lithuania (23%) and Estonia (25.6%), values registered in 2013.

Regarding Romania it has all the types of renewable resources of energy (their potential being of: 65% for the biomass, that includes biodiesel, bioethanol, biogas; 17% for the wind energy; 12% for the solar energy; 4% for the microhydro-plants and 2% by chemical and geothermal), that can be stressed where the specific of the geographical area allows them to be valuable economically speaking, as Toti states. So, as for:

- biomass (Moldavia, the SubCarpathians, the Romanian Plain);
- wind energy (the Dobrogea, Moldavia);
- solar energy (the Danubes' Delta, the Dobrogea, the Romanian Plain);
- hydroelectrical energy (Moldavia, the Carpathians, Transylvania, the SubCarpathians);
- geothermal energy (the West Plain, the Romanian Plain).

The district of Prahova is known as one of the most industrialized districts of the country, with tradition in the extraction and processing of oil, being, in the same time, a leader in the domain of (green) renewable energies in Romania. This way, considering the data given by Agerpres (2014) the first wind plant in the country was initially settled at “Crangul lui Bot” (near Ploiesti) in the year of 2004. Moreover, in the same Prahova, for a first, the Cityhall from Floresti got the license of a manufacturer of electrical energy by using solar panels, but also green certificates, the step being targeted the reduction of invoices for the electrical energy.

Prahova is of the first place in the country regarding the usage of the hydroenergetical potential economically possible, this being used in 100%, by the hydroplants on rivers Prahova, Doftana and Teleajen (the majority of them belonging to private investors). Regarding the solar projects, Prahova is among the first places having optimum conditions for this type of investments. Prahova is the district with the biggest density of projects regarding the green energies, now, there are projects that are on-going and that sum 105 MW on the hydroenergy, 223MW out of solar energy, 63 MW from wind energy and 8 MW from biomass.

For future, the renewable energies will be used along with the conventional ones in the best different combination considering the local conditions. All the energetical options must be considered open, each of them being under a grade of uncertainty, fact for which we cannot spare any. In the same time, all types of energy have a potential impact over the environment, on different scales, in all the stages of their cycle of use.

5. CONCLUSIONS

At the beginning of the millenium human society battles with global issues like: overpopulation, shortage of food, pollution, weather changes, exhaustion of resources, etc. To these global problems there has to be found global solutions.

Finding of such global solutions became the objective of major events like: the Conference of the United Nations for Environment and Development from Rio de Janeiro in 1992, The World Summit for Environment and Development dated 2002 in Johannesburg, as well as The Earth Summit in Rio de Janeiro dated 2012. These laid the basis for a global partnership over the sustainable development that is to grow the assistance in development and access on market for the countries on their way to progress, good government and a better environment.

The answer of humanity for the actual environmental crisis whose leading components are overpopulation, exhaustion of resources and pollution is given by the sustainable development that brings together as a complete whole the economical growth, environmental protection, social justice and democracy.

Regarding the concept of sustainable development there is a large number of definitions and theoretical debates that creates limits and confusions, but on a short term, the impossibility of bringing close theory with practice. That is why it is needed the study of the sustainable development concept within the systems of learning, the universities turning themselves into models of sustainable development in the communities they serve. Thus, the business areas, local communities, the social society, the government, etc. can take over and use this concept in a right way.

The strategy of sustainable development wants to find the most accurate criteria to enrich the needs-resources report, the targets to reach and the necessary means, based on their reciprocal competibilities, in time and space.

The pattern for sustainable development is the one that humanity needs to adopt, not only now, but also in future and supposes the making of investments to promote the renewable sources of energy.

The integration of the sustainable development's objectives in the actual economic activities supposes the taking in of some consumption programmes and sustainable production, as it is stated in the last Earth Summit from 2012 in Rio de Janeiro.

Nowadays, the most appreciate and used are the economical-financial indicators already known, the actual indicators for sustainable development being stated unclear, incomplete or lacking altogether, which makes impossible the measurement of the level reached by the sustainable development at the level of company, area or national economy. That is why it is needed the building of a system of indicators of sustainable development that will take aside these deficiencies.

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