SUSTAINABLE DEVELOPMENT AND LIFE QUALITY

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Abstract:
Sustainable development is in the same time the condition and purpose of life quality, and the expression of a level of consciousness of the need for setting-up equity in and between generations. Romania, although it did remain behind, compared to the majority of the EU nations, in the charts that show sustainable development, gets more aware of its situation and more preoccupied with this problem. The road that Romania took, voluntarily or because of the duty it assumed as a member of EU, is difficult due to the nature of priorities that Romanians have, the conceptions inherited which are difficult to change, as well as the unstable and precarious culture concerning sustainability. These conclusions derive from studies that were conducted on European, national and local scale.

Key words*: development, sustainability, life quality, Romania, the protection of the environment.*

JEL classification: *O18 - Regional, Urban, and Rural Analyses Q01 - Sustainable Development*

It appears that the notion of sustainability derives from sylviculture being used for the first time by Hans Carl von Carlowitz in Silvicultura Oeconomica in 1713, and indicates the way of exploring a forest during tree growth, so that the forest will not be deforested, on the contrary it will regenerate itself. The reason why the notion of sustainability first appeared nearly 300 years ago in sylviculture-and in the centuries that followed acquired in this domain a particular importance- was a need of wood, especially in central Europe in mountain ranges. This increasing need of wood was hindered by the slow regeneration of forests and the slow growing of forest areas, which meant a serious threat to economical development. Thus it was inevitable to think in 'long term periods'.

The rediscovering of 'sustainability' in the middle of the 20th century is due to the authors of 'Growth Limits', the petrol crisis in the '70s, also as the militarizing 'Greens', the sustainable development being defined as 'the improving quality of human life taking into consideration the capacity of the ecosystem support in which we live' (Ştefănescu Florica, 2005, p.41).

Life quality is one of the sustainable development dimensions, but also one of its goals. Understood as that type of development which assures mass satisfaction, but also equitable for human needs, protecting, in the same time the environment and assuring a social and cultural growth, sustainable development creates the premises for a higher life quality. We say this because today life quality needs to be taken up in its full complexity and not reduced to the comfort and satisfaction determined by economical and technological development. In the absence of a clean, healthy, beautiful environment, and also in the absence of harmonious relationships between humans, of a variety of cultures, of a proper education, life quality would alienate some of its most important components. Of course, this fact implies the reconsideration of life quality indicators through realizing a balance between economical indicators, those social and environmental indicators, and also between objective and subjective indicators of measuring and appreciating life quality.

The life quality concept was introduced in the '60s by the North American society, society which will notice that any economic increasing has to be found in increase of the living level of people.

I. Mărginean defines life quality as being "an ensemble of elements which refers to the physical, economical, social, cultural, political, health situation etc., in which people live, the content and nature of activities that they carry on, the relation characteristics and social procedures in which they participate, the services and goods to which they have access, the pattern of adopted consumption, the way and manner of life, the evaluation of circumstances and the results of the activities which correspond with the population's expectations, and also the subjective state of satisfaction/dissatisfaction, happiness, frustration" (I. Mărginean, 2004, p.134)

He identifies a minimal set of indicators of life quality concerning: the person (health, safety, fears), the population (vital statistics), the natural environment (pollution factors, affected areas, achieved standards), human settlements, housing, social environment (trust between people, social pathology), family, employment, labour, macro economical resources(PIB value/ inhabitant, fund consumption population), revenue, (sources, level, structure) consumption, services, household, education (access, quality), health care, culture, insurance and social work, leisure time, political environment, public order, general satisfaction with life. The highlight of life quality is realized by means of complex indicators one of which the best known and most frequently used is the Human Development Index (HDI) which gathers information of three indicators: life expectancy at birth, the level of education and the level of the national income/inhabitant.

The index of human development for Romania in the period 1994-2000

Year	1994	1995	1996	1997	1998	1999	2000
IDU	0,733	0,759	0,762	0,761	0,762	0,759	0,765

Source: The National Report of Human Development-Romania 1999 and 2001-2002

More recently we have calculated The Sustainable Society Index (SSI) which is a new index, which manages to integrate for the first time the most important aspects of life quality and of the sustainability of national society. The main structure of the Sustainable Society Index consists of 22 indicators, grouped in 5 categories, the score of the categories being the average of the indicators scores in each category (all indicators having the same percent). For Romania 5 additional indicators were included covering some specific aspects of sustainability policy in Romania (Gross Domestic Product, the rate of poverty, research- development, transport, ecological agriculture) but these do not enter into the calculation of the table below.

The index of sustainable development in Europe 37

Indicators categories	**Romania score**	**Romania place**	**Max. score**	**State**	**Min. score**	**State**
ISS-Romania-2008	***5 ,7***	***23***	***7,0***	***Norway***	***4,3***	***Malta***
Categories						
I. Personal development	8,0	36	9,7	Norway	7,6	Moldova
II. A Clean environment	4,3	35	8,1	Norway	3,9	Latvia
III. A balanced society	6,9	11	7,6	Ukraine	3,6	Macedonia
IV. The sustainable utilization of resources	4,1	24	8,0	Iceland	0,2	Malta
V. A sustainable world	6,2	7	7,2	Albania	3,8	Iceland
Indicators						
I.1. Healthy life	7,2	32	8,9	Sweden	6,5	Ukraine
I.2. Sufficient food	10,0	1	10,0	Romania	8,9	Moldova
I.3. Sufficient drinkable water	5,7	37	10,0	Denmark	5,7	Romania
I.4. Appropriate salubrity services	9,4	30	10,0	Denmark	6,8	Moldova
I.5 Education opportunities	7,7	32	10,0	Denmark	6,9	Albania

I.6 Sex equality	8,1	32	9,6	Iceland	7,0	Moldova
II.7 Air quality	6,0	11	9,9	Moldova	3,7	Malta
II.8 The quality of surface waters	2,9	37	9,1	Norway	2,9	Romania
II.9 Soil quality	3,9	30	9,8	Ireland	1,7	Albania
III.10 Good government	5,2	30	8,8	Finland	2,9	Belarus
III.11 Unemployment	5,4	15	8,8	Iceland	0,1	Bosnia-H
III.12 The increase of population	8,3	6	9,3	Ukraine	5,7	Ireland
III.13 Income distribution	7,4	16	9,3	Czech Rep.	0,1	Malta
III.14 Public debts	8,3	5	8,7	Belarus	0,1	Latvia
IV.15 Waste recycling	2,1	24	9,1	Switzerland	0,0	Belarus
IV.16 The utilization of renewable water resources	8,9	18	10,0	Iceland	0,0	Malta
IV.17 The energy consumption from renewable sources	1,3	11	7,3	Iceland	0,0	Malta
V.18 Forest condition	7,0	35	10,0	Iceland	6,9	Bosnia
V.19 The conservation of biodiversity	4,2	22	5,9	Italia	1,1	Bosnia
V.20 Carbon dioxide emissions	5,5	7	8,7	Albania	0,0	Estonia
V.21 Ecological imprint	6,0	6	7,8	Moldova	0,0	Estonia
V.22 International cooperation	8,3	28	10,0	Norway	6,8	Bosnia-H

Source: Romania towards a sustainable development. The index of a sustainable society ISS-Romania -2008

As you can see, the overall score obtained by Romania within the Sustainable Society Index is 5.7 (compared to 5.5 recorded in 2006) on a scale of 0 to 10, a score that placed our country on the 23rd place of 37. For three of the categories (personal development, clean environment and the sustainable use of resources) Romania is in the second half of the ranking and only at two of them (a sustainable world and a balanced society) are in first half. The increase of the overall score compared to 2006 is due mainly to the improvement of the Salubrity services indicator corresponding, where, although we are on a bad position (30), we still have a very good score (9.4). There have also been recorded improvements in the indicators: Opportunities for education, Gender equality, Good governance, Population growth, Income distribution and the Use of renewable water resources, while the indicator Carbon dioxide emissions recorded a decrease.

The best scores were recorded by Romania in the following indicators: enough food, adequate salubrity services, the utilization of renewable water resources, population growth, public debt, international cooperation and equality between the sexes.

- *The enough food* indicator (place 1st) is calculated as the percentage of the malnourished of the total population (0.4%, cf.FAO, 2004), but because malnutrition is mainly due to poverty and lack of food, we added the poverty rate indicator.
- *The proper salubrity services* indicator (place 30th) is calculated as a percentage of the total population of those who have access to better salubrity services, highlights the progress made in terms of rehabilitation and extension of collective or individual sewerage systems in recent years. However, the place 30 indicates that the rest of the countries whose level of civilization we tend to have this problem much better resolved.
- *The use of renewable water resources* indicator (place 18th) indicates the annual consumption of water as percentage of the total renewable water resources and shows that Romania has sufficient renewable water, an important intake due to the Danube. If we refer to the structure of water consumption and water resources, Romania faces some problems in the sense that we still consume water from underground, and the demand of water for industry and agriculture declined in the period of transition as a result of the recorded economic decline.

- *The Population growth* indicator (place 6th). Considering the fact that global population growth is a negative indicator of sustainability, the decrease of population (up to a limit) is a positive factor. The Human Development Report in 2007 predicts an evolution of -0.50%, per year during 2005 - 2015, which, for Romania is to become a major disadvantage considering the deterioration of the age population and consequently the share of the population capable of work.
- *The Public Duty* indicator (place 5th) expresses the country level of financial independence and as far as this aspect is concerned, Romania does not conform to the convergence criteria established at EU level of 60% from PIB, but it is situated more under this level and more under the registered level by other states, inclusively the ones from South- East Europe.
- *The International Cooperation* indicator (place 20th) measures the participation within the framework of 14 treaties and international agreements as regards human rights, nature and environment protection. The score obtained by Romania at this indicator is high (8,3), but not maximum because, although it signed all 14 treaties, there are some remains behind with the implementation of some of them , and others are unwind.
- *The Equality between sexes* indicator (place 32nd) also has a good score, but a laggard place, that means the others states are more advanced regarding life hope at birth, gross rate at school, in primary to tertiary education, estimated income from current activity and teaching the adult population aged over 15. If in Romania, equality between sexes is legislatively correctly regulated, there still continue to persist inequalities concerning the income, management jobs, family relations.

The lowest scores are registered at Energy consumption from renewable sources, Waste recycling, Surface water quality, Ground quality and Conserving biodiversity.

- *The Energy Consumption from renewable sources* indicator (place 11th) is calculated as the energy consumption from renewable sources from the total energy consumption. Although it exceeds the score obtained by neighbour countries(Hungary 0,4, Bulgaria 0,6, Moldova 0,2, Ukraine 0,1, Serbia 0,9), with a score of 1,3, Romania is far away from the European maximum of 7,3. Energy consumption from renewable sources was only 13,2 in 2005, predicting that this will grow until 2020 to 24 % from the total of energy consumption (Romania to a sustainable society, The Index of Sustainable Society ISS, p. 84).
- *The Waste products recycling* indicator (place 24th) has one of the lower scores (2,1), the proof of major difficulty as concerns regenerating, collecting, transportation, store and waste products recycling, in the period 1997- 2003, were recycled only 21 % from total of waste collected products, situation generally valid for East European countries. The main causes remain the improper infrastructure of a waste product management quality and also the defective education as concerns waste products recycling and selective collection.
- *The Quality of surface water* indicator (place 37th) situates Romania on the last place. It is calculated in function of the dissolved oxygen concentration, the electric conductivity, the phosphorus concentration and the solid matter concentration in suspension, which in Romania represents a chronic disease, due to industrial activities like wood processing and exploitation, chemical industry, mining, metallurgy, energy production as well as improperly deposited domestic or industrial waste products, without functional authorization.
- *The Soil Quality* indicator (place 30th) is calculated as the percent of deteriorate fields from the total of cultivated and modified fields. The low score indicates its deteriorate level, poverty, chemical pollution, salinity growth, acid rains, the

erosion caused by water, human activities and drought. The climatic changes and the lack of water contribute to a great extent to Romania's low score at this indicator.

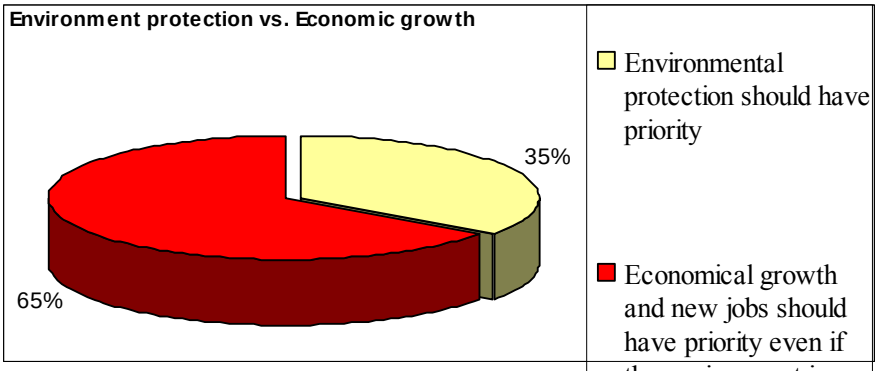
- *The Biodiversity Conservation* indicator (place 22nd), with a very low score (4,6) in spite of a large diversity of terrestrial and aquatic ecosystem stands out that Romania could not put to account this wealth, the preoccupation for the inventory and management of protected areas are quite timid and poorly financed. 'Romania owns about 375 types of different habitats out of which 199corresponded to the criteria of the Programme Nature 2000. In 2003 there were only 3 Nature 2000 sites with management plans, whose number was due to increase to 240 until 2015. In addition, none of the Nature 2000 sites had preservation measures in 2003. Until 2015 this number should represent 60% of the Nature 2000 sites (*Source: INS, 2006; National Strategic Frame, 2007 – 2013, POS – Environment*). In Romania there have been identified 3700 plant species. 23 of them being declared nature monuments, 74 about to disappear, and 171 considered vulnerable and 256 considered as rare species. In Romania a lot of animal species can be found. According to the latest statistics, in Romania there were over 5600 bears (Ursus Arctos). This means that the bears in Romania represent 60% of the total number of bears in Europe. The wolf (Canis Lupus) can be also found in Romania, in approximate number of 3000, which represents approximately 40% of the total wolves in Europe (Romania to a Sustainable Society. The Index of Sustainable Society ISS-Romania-2008, p.89).

Conclusions:

1. We have noticed that Romania registers into the first places and high scores at the indicators that either hide painful realities (the poverty in the case of Sufficient food, incapable investments regarding the Public debt), or affect us unfavourably (the reduction of population regarding the demographic indicator) or favour us through natural facts (regarding the indicator of the Use of renewable resources of water)
2. A lot of the high scores are associated with last positions in the European hierarchy (adequate salubrity measures: score 9, 4, place 30th; education opportunities, score 7, 7, place 32nd; sex equality: score 8, 1, place 32nd; forest condition: score 7, 0, place 35th; international cooperation: score 8, 3, place 28th). This reflects the fact that the areas we've formerly mentioned are imperative for democracy and civilization, the scores for other countries being close to the maximum, while Romania still experiments regarding the valuable legacies of the old regime (education, forests, sex equality) with the desire to improve them. Only regarding the salubrity services we can say there have been made considerable efforts, far away from being enough, and of course in the political action in the area of international cooperation, but only on a formal level, of signing some documents and less regarding their appliance.
3. The last scores and places have been identified at the environment indicator (The Energy consumption from renewable resources, Recycling, the Quality of surface waters, the Ground quality, the Conservation of biodiversity). There can be numerous explanations: environment problems do not represent priorities of the Romanian population or political elite; the chaotic support of the industrialization process from the communism time, the fast accumulation of capital and a superficial process of privatization, transition attributes that didn't allow the development of an environment culture of protection, of a mentality oriented towards this area. We are, in a major way still a society of the moment, of seizing the day, losing sight of "what will happen after", as C. Zamfir said.

Part of these conclusions can be found in a study developed by us in 2007 in Bihor county. By virtue of needing a change in values and priorities, specific to the transition towards a durable society, the subject of the research have been put in the

situation of making some assessments, regarding the priority of these 2 aspects: environment protection and economic increase. We wanted to observe the individuals' orientation: on long term or contrarily, regarding a close future, that concerns them directly, without manifesting any interest for the following generations. There are a lot of elements that generate attitudes, in a direction or another. Self-interest, selfishness, the desire of immediate earning, without the following implications, are just some of the aspects that stand at the origin of short term objectives.



Unfortunately we have to mention the population's propensity towards short term objectives, 65% stating that the economical development and the creation of new jobs should be a priority even if they are destructive to the environment.

This happens in circumstances in which to the question if environment protection is a hurdle of favourable economical performance or a motivation for innovation, almost two thirds of the Europeans consider that the protection of the environment is more an incentive for innovation (63%) than an obstacle for economic performance. The same percent of European citizens (64%) consider that the protection of the environment should be more important than economic competition while 18% believe that competition should come first. More than two thirds of the Europeans are convinced that the individual progress of the countries should be measured using social, economical environment indicators while a minority (15%) believe that progress should be mainly based on monetary and economical indicators (*Euro-barometer, March 13, 2008)*.

Coming back to our study, the largest percent (38,79%) of the ones who give priority to the environment, according to age is in the category 35-55 years old. The other age categories are situated too at minimum differences. Men seem to be the ones who are mostly preoccupied by the environment problem, answering in its favour in a percent of 38,82%, as compared to women, with only 33,25%. These two aspects are dealt with differently according to education, university and high-school graduates considering in a percent of 42,91% that the environment deserves all the attention, in comparison to only 27,32% of the ones with a more precarious education. The residence environment illustrates unexpected aspects, small towns being the most open ones to the protection of the environment in a percent of 45% in comparison to 23% from large cities and 30% from villages. The pressure of the economical factors from the large cities becomes obvious once again.

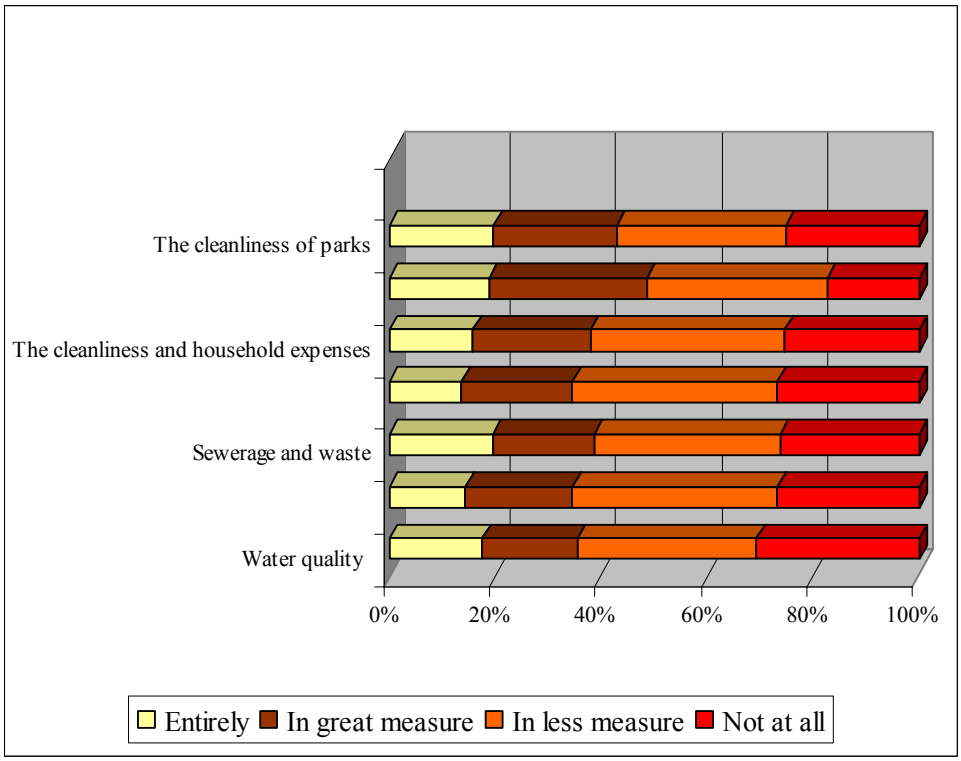
Thus we confront with a mostly superficial population concerning the problem of environment protection. The concerns related to the next day and the whole range of problems the population is confronted with are partly responsible for such an attitude. Another aspect that argues the individuals' perception towards this problem derives from the desire to imitate role models imposed by the persons that belong to the economical elite, desire constructed on accumulated frustrations generated by the increasing precipice that has opened between this elite and the large mass. The tension

of capital accumulation generates the individuals' orientation on short term, but also attitudes that accompany negative feelings such as: irresponsibility, shallowness, selfishness. The model of "wild capitalism" (C. Zamfir, 1994), specific to the transition Romanian society has unfortunately imposed itself at the level of collective consciousness. Another explanation for such an attitude is the lack of culture in the area of environment protection.

The image of public spaces and goods is by far a reflection of the local authority's activity, but also of the citizens' attitude towards these aspects. A more refractory attitude towards everything that assumes the environment idea is also obvious from the way in which individuals value different aspects from the local community, public or other goods that are not the object of individual direct property. However, the preceding image towards the environment priority considers an embodiment of these directions. We could notice that more than 50% of individuals do not consider any of these aspects a serious problem for the community.

Obviously, Bihor county doesn't withdraw, as the subjects' answers leave an apparent impression, from the environment problems that become a serious world priority, but we confront with an acute lack of their acknowledgement and an even higher lack of education in this area and a shallow attitude.

In what measure the following aspects are a serious problem:



In this context, when the list of priorities does not include environment dimensions, can we still talk about its protection, about the development of a sustainable environment?

More than 30% of those who realise the seriousness of these problems confirm the fact that the situation can be changed. On the basis of the state and NGOs efforts, through different programs in this area, we could change people's attitude and their involvement in this problem.

Pollution is one of the greatest problems of our society. In order to establish the way in which subjects would get involved in the problems concerning environment

protection, they were required to express their agreement/disagreement towards more statements. These present different levels of involvement in the reduction of pollution.

As far as environment protection is concerned in what measure do you agree with the following statements	Entirely	In great measure	In less measure	Not at all
a. I would give a part of my income if I were certain that these money would be used in order to prevent pollution	15,8%	24,8%	28 %	**29,3%**
b. I would agree with a tax increase if the resulted money were used to prevent pollution	9,6%	22,2%	31,8%	**33,6%**
c. The government should reduce environmental pollution but this shouldn't cost me anything	**60,5%**	14%	13,7%	9,9%

*the values up to 100% are non-response

We can notice by far the subjects' aversion of direct involvement in the fight against pollution. The firm rejection of these hypotheses is generated by the image of income reduction that already is the area of general dissatisfaction. Even if the problem of pollution is acknowledged, it is considered a governmental problem that does not imply the subjects' direct involvement. Once again we refer to those 95% European citizens who believe that it is important to protect the environment and to other 80% who think that this improves their life quality and who consider getting involved in its protection (*Euro-barometer*, 13 March 2008).

The management of the complexity of environmental phenomena needs not only an economical support. The approach of environmental issues doesn't always reside in the possibility of financial assessment. Together with labour and capital, the environment represents in economical analysis a production factor of major importance. Besides its generative aspect of basic inputs, it also represents the "recipient" for waste products resulted from production and consumption processes that require absorption. On the other hand, the environment has also an "administrative" role of life on Earth.

Sustainable development is a modern concept, a new life philosophy. It approaches the concept of life quality in its entire complexity under an economical, social and environmental aspect, thus promoting the idea of balance among economical development, social equity, efficient utilisation and the protection of the environment. The principles it supports take into consideration a long term development vision, but also a systematic thinking that marks the interconnection among environment, economy and society.

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