

ROMANIA'S TRANSITION FOR SUSTAINABLE DEVELOPMENT

Mariana Sorlescu
Emilia Gabroveanu*

Abstract

The paper aims to analyze the progress made by Romania during the period after the European Union accession through the evolution of the main indicators of sustainable development and in comparison with the average of the EU member states. The indicators focuses on several primordial sub-domains: economic development, sustainable consumption and production, public health, demographic issues, natural resources and sustainable tourism, climate change and energy, sustainable transport, etc.

Key words: sustainable development, sustainable tourism

JEL Classification: O10; Q01

Introduction

Sustainable development is perceived as a new type of economic growth, radically opposed to the current type, which dominated the nineteenth and twentieth centuries' economy, circumscribed to the *"use of planet's natural resources, of conventional and unconventional forms of energy, while protecting and preserving the environment"*¹.

Thus, sustainability as concept has appeared in conjunction to renewable resources and was embraced by ecological movement. The concept allude to the existance of ecological conditions needed to support human life at a certain level of well-being also for future generations, and this is ecological sustainability not sustainable development, in S.M. Lele² opinion.

All theorists believe that the starting point in formulating the concept of sustainable development is the World Commission on Environment and Development Report of ONU, known as the Brundtland Report, where arises the idea that *"umanity has the capacity to achieve sustainable development - to ensure that current necessities are met without compromising the ability of future generations to meet their own needs"*.

It is widely acknowledged that *sustainable development is a multidimensional concept*. Apart from the economic aspect, equally important are *social, political, cultural,*

* Mariana Sorlescu and Emilia Gabroveanu are at the Romanian American University in Bucharest.

¹ Câmpean, V. (2009), *Dezvoltarea durabilă si managementul mediului*, București, Editura Pro Universitaria, p. 5.

² Lele, Sharachchandra M., *Sustainable development: A critical review*, *World Development* 19 (6): 607-621, 1991.<http://public.wsu.edu/~susdev/Lele91.html>

environmental, scientific, human, etc. At the same time, and unanimously, it is acknowledged that *development necessarily integrates growth and economic progress*³.

The concept of sustainable development comes together with a new set of values that will underpin the future model of economic and social progress, values that focus on individual and his current and future necessities to ensure a better quality of life for all inhabitants of the planet, the natural environment - protecting and preserving it, as well as diminishing the current deterioration of ecosystems.

According to M. Tocan and S.G. Duduman “sustainable development is a continuous integration process of ecological, economic, equity and ethical considerations for current and future generations of humans and other living beings without jeopardizing the systems which sustain the life of the planet, of which, ultimately, all life depends”⁴.

Comparative analysis of sustainable development indicators in Romania from the accession to the European Union

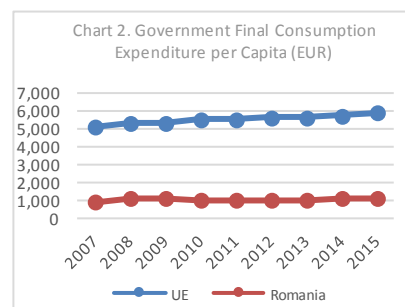
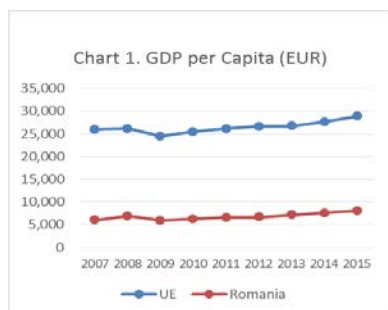
The monitoring of trends and progress in implementing sustainable development is measured based on several sets of indicators.

More than 130 indicators were introduced into the structure proposed by Eurostat, of which ten were identified as headline indicators. They are intended to provide an overview of the European Union and to monitor progress towards sustainable development in terms of objectives and targets defined in the strategy.

Socio-economic development. This headline indicator is pursued by several indicators that measure the country's economic and social performance; the most relevant for analysis in this paper are: Gross Domestic Product per Capita and Government Final Consumption Expenditure per Capita.

At domestic level, the socio-economic dynamics reflected through macroeconomic indicators highlights a clear discrepancy between the evolution of GDP and the index of human development. In the last 15 years, the national GDP has increased by 4 times, GDP per capita by 2.3 times, and the human development index has increased only by 12.2%.

The analysis starts with 2007, the year of Romania's accession to the European Union.



Source: Eurostat, 2016, <http://ec.europa.eu/eurostat/web/sdi/indicators/socioeconomic-development>

³ Pohoată, I. (2012), *Strategii și politici europene de dezvoltare durabilă*, Centrul de Studii Europene, Universitatea AI Cuza, Iași, p. 4.

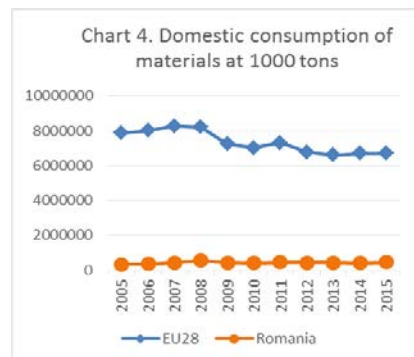
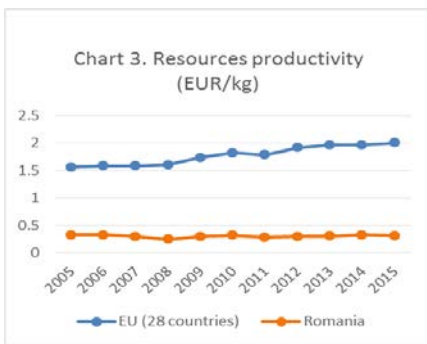
⁴ Mădălina Tocan, Ștefan-Gabriel Duduman, *Sustainable development- strategic goal of the knowledge based economy*, IDEAS Working Paper Series from RePEC, 2010.

Analyzing the evolution of real GDP per capita, is noticed a rising trend from 6000 euros in 2007 up to 8100 in 2015, with a small fall in 2009, which shows 35% increase in GDP per capita from Romania's accession to the Union.

The second graph analyzes the evolution of Government Final Consumption Expenditure per Capita in Romania vs the EU, these being somewhat constant at 1100 euros almost the whole period, with the average of the Union growing by 18%.

Consumption and sustainable production. The EU's Sustainable Development Strategy also sets out the objective of promoting sustainable consumption and production patterns. Addressing social and economic development within the supporting capability of ecosystems and segregating economic growth from environmental degradation is an essential requirement for sustainable development. Unfortunately, recent developments at international level seem to deny the optimism of the past few years.

The positive trends observed in sustainable production and consumption have favorably developed on the long term. Since 2002, considerable improvement has been observed in resource productivity. This long-term efficiency gain was registered due to the fact that GDP has grown faster than domestic consumption of materials (DCM), especially before the economic crisis. Since 2008, the use of EU resources has fallen sharply, putting DCM below levels noticed a decade ago.



Source: Eurostat, 2016, <http://ec.europa.eu/eurostat/web/sdi/indicators/sustainable-consumption-and-production>

Can be see the reduced productivity of resources used in Romania compared to the average of the countries of the Union, where is approximately five times higher. Unfortunately, over the entire analyzed period, before accession, until today, it has failed to grow, the chart being almost a straight line.

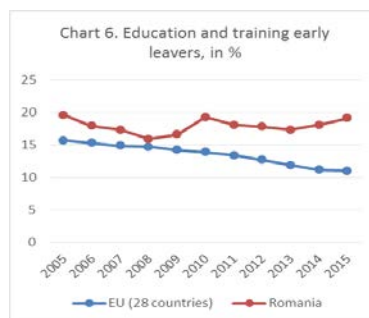
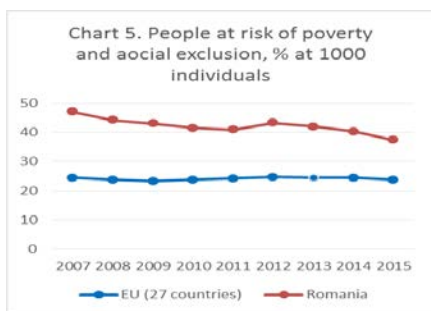
The Domestic Consumption of Material (DCM) indicator is defined as the total quantity of materials directly used in an economy, DCM is equal to materials made domestically (MMD) minus exports. These had a slightly increasing trend from 2005 to 2015, compared to the average of the countries in the Union in which has registered a decline in the use of domestic manufactured materials.

Social Inclusion. The Sustainable Development Strategy sets out the objective of creating a society favorable to social inclusion by taking into account intergenerational

solidarity and ensuring improvement in citizens' quality of life as a prerequisite lasting welfare.

Trends observed in social inclusion are mixed: progress in subtopics such as “poverty and living conditions” and “access to the labor market” are missing, the evolution of education indicators is positive.

The number of people at risk of poverty has fallen steadily between 2005 and 2009, but has risen again with the economic crisis⁵. In 2012, the number of people at risk of poverty or social exclusion in the EU-28 peaked at more than 124 million before dropping again by more than one million in 2013. In Romania, the number of people at risk poverty and social exclusion decreased after joining the Union, from 47 % in 2007 to 37.4 % in 2015 (see Chart 5). Income disparity has hardly changed between 2008 and 2013. In 2013, the richest 20% of the population earned about five times more than the poorest 20% of the population.

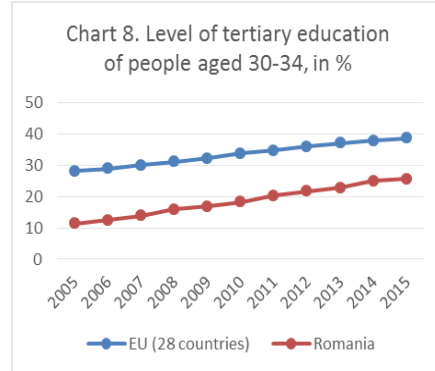
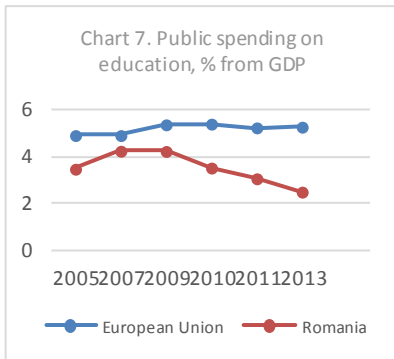


Source: Eurostat, <http://ec.europa.eu/eurostat/web/sdi/indicators/social-inclusion>

The share of early leavers from education and training has decreased steadily since 2003, reaching 11.1% in 2015 in EU member countries, while in Romania there have been fluctuations between these years but the starting point in 2005 is the same with the end of 2015, ie 19.1%, the lowest percentage being registered in 2008 of 15.9% (see Chart 6).

Public spending on education was well below the average of EU Member States, closeness being in the maximum point for Romania of 4.25% of GDP in 2007, since then this important area of sustainable development being treated with fewer funds, in 2013 reaching an embarrassing minimum of 2.5% of GDP, while the Union average revolves around 5% (see Chart 7).

⁵ Sorlescu M., Gabrovanu E., *Analiza indicatorilor de dezvoltare durabilă ai României*, in vol. *Experiențe și provocări pentru România și Republica Moldova în contextul proceselor de integrare europeană*, în cadrul proiectului Responsabilitatea socială a guvernărilor publice – componentă majoră a relațiilor dintre România și Moldova, UEFISCDI.



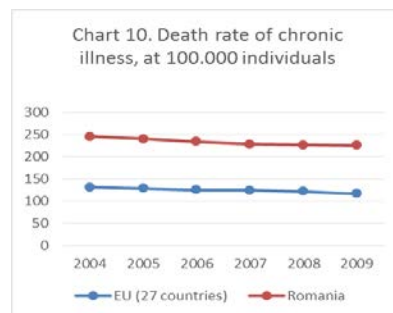
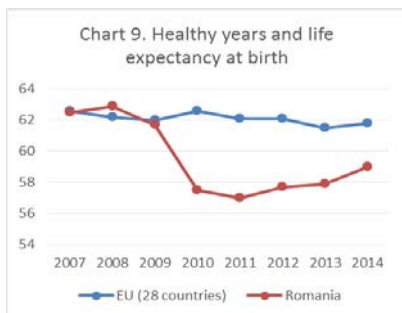
Source: Eurostat, <http://ec.europa.eu/eurostat/web/sdi/indicators/social-inclusion>

Moreover, the share of the population of the age of 30 and 34 with tertiary education has been increasing steadily since 2005 in the EU, reaching 38.7% in 2015, the trend being approximately the same in Romania, but in 2005 was only 11.5% and rose to 25.6% in 2015 (see Chart 8). Participation in lifelong learning has increased steadily in the Union and reached 10.7% of people aged 25-64 years in 2015, while in Romania the level is only of 1.5%⁶.

Public health. Trends observed in the European Union and implicitly in Romania in public health generally show a mixed picture.

There is an improvement in life expectancy for both sexes, but the changes are minor throughout the period from 2004 until today (see graph 9). In Romania, in 2007-2008, the figures were identical to the European average, but they worsened in the following period, from 2012 the evolution is positive and in 2014 it is only at a difference of 2.8 times the EU average.

Health inequalities between social groups persist, but figures suggest that disproportionate health problems in different groups decreased between 2004 and 2015.

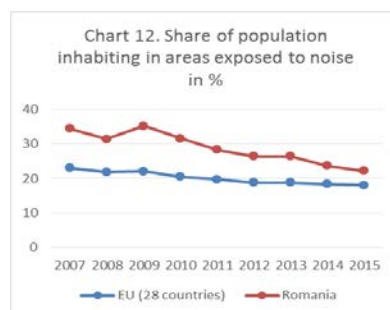
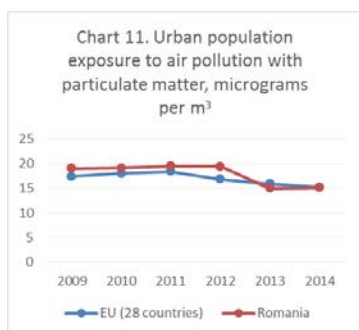


Source: Eurostat, <http://ec.europa.eu/eurostat/web/sdi/indicators/public-health>

⁶ Source: Eurostat, <http://ec.europa.eu/eurostat/web/sdi/indicators/social-inclusion>

Of every 100,000 people in the EU, 129.9 died of chronic illness before the age of 65, in 2012, this decreasing by 21.0% compared to 2002⁷. Such premature deaths due to chronic illnesses vary widely throughout the EU, especially for men. For this indicator Romania has the highest number of deaths, only Hungary has more than 200 of all Member States. Progress has been registered with Romania's entry into the EU, these figures decreasing slightly from 247 individuals in 2004 to 225 in 2010 (see Chart 10).

A report issued by European Commission on health inequalities in the EU shows that any indicator of socio-economic status is considered - education, income or material shortcomings - reporting problems of poor general health and long-term health problems tend to be less frequent for individuals from most advantaged group and increasingly present in the ones disadvantaged.⁸ Of these, the strongest association is between material and health deprivation, and between education and health. For example, although women are more likely to report, being in a worse health than men, when we discuss about education, at reporting rates, they are decreasing. This suggests that socio-economic disadvantages faced by women are also largely due to differences in general health between men and women.



Source: Eurostat, <http://ec.europa.eu/eurostat/web/sdi/indicators/public-health>

Analyzing the statistics, it appears that in EU there was an increase in air pollution with very fine particulate matter (PM2.5) - the most dangerous for human health - from 14.3 micrograms per cubic meter in 2000 to 16.9 in 2012. Romania recorded values very little over the Union average in the period immediately following the accession but in 2014 recorded the same parameter (see Chart 11). Despite the increase in PM2.5, total exposure to air pollution by particulate matter (PM10) decreased by 3.6 micrograms per cubic meter over the same period, with PM10 concentrations reaching 24.9 micrograms per cubic meter in 2012.

The global urban exposure to air pollution by ozone increased by 550 micrograms per cubic meter between 2000 and 2012, reaching 3502 micrograms per cubic meter in

⁷ http://ec.europa.eu/eurostat/statistics-explained/index.php/Sustainable_development_-_public_health

⁸ European Commission, *Health inequalities in the EU — Final report of a consortium*, December 2013. http://ec.europa.eu/health/sites/health/files/social_determinants/docs/healthinequalitiesineu_2013_en.pdf

2012⁹. However, the trend was volatile due to the influence of weather on ozone levels. There has been a decrease in the share of population inhabiting in areas exposed to noise, from 21.9% in 2008 to 19% in 2013 in the EU, the trend being the same in Romania, but on higher figures from 34.4% in 2007 to 22.2% in 2015 (see Chart 12).

Conclusions

Sustainable development imposes a new set of values that underlie the future model of economic and social progress; values that primarily targets the individual and his present and future necessities to ensure a better quality of life for all inhabitants of the planet, in a protected and preserved natural environment.

Implementing European legislation, Romania has also started the process of monitoring the indicators that measure sustainable development progress, so we can trace and analyze registered progress. The above analysis of the indicators compared to those registered in the European Union helps us to conclude:

- Romania's GDP has increased by 35% since its accession to the European Union, but it is well below its average, which makes impossible to compare the living standards, the level of public spending on education, health, infrastructure, environmental protection, etc.;
- At domestic level, the socio-economic dynamics reflected through macroeconomic indicators infer a clear discrepancy between GDP evolution and human development index. In the last 15 years, the domestic GDP has increased 4 times, GDP per capita by 2.3 times, and the human development index has increased only by 12.2%;
- In Romania, the number of people at risk of poverty and social exclusion decreased after joining the Union, from 47 % in 2007 to 37.4 % in 2015;
- The percentage of early leavers from education and training has decreased steadily since 2003, reaching 11.1% in 2015 in EU member countries, while in Romania there have been fluctuations between these years but the starting point in 2005 is the same with the end of 2015, i.e. 19.1%, the lowest percentage being in 2008 of 15.9%;
- improving life expectancy for both sexes in Romania at a difference of 2.8 years compared to the EU average;
- The global urban exposure to air pollution by ozone increased between 2000 and 2014 and there was a decrease in the share of the population living in areas exposed to noise, from 34.4% in 2007 in Romania to 22.2% in 2015.

Although Romania faces many problems that need to be addressed on short term, most of them related to the socio-economic area, their solving must not ignore the needs of future generations and environment protection. We can not endlessly exploit the natural, economic and human resources without regenerating them and rationalizing their use, their efficient management being inevitable.

⁹ Eurostat, http://ec.europa.eu/eurostat/statistics-explained/index.php/Sustainable_development_-_public_health

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