### STUDY ON SUSTAINABLE DEVELOPMENT IN SOUTH-MUNTENIA REGION

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#### **Abstract**

This paper enhances the role of the sustainable development concept and shows the impact of it on human society in the new economic, social and ecological challenges. It is known that sustainable development contributes to solve many issues such as biodiversity conservation, climate changes, limiting the use of chemicals. Starting from 1997, sustainable development concept is an important objective of EU. Romania as member of EU adopted National Strategy for Sustainable Development. In this order, the paper contains an analysis of the main indicators in South-Muntenia Region. The indicators are approached in order to emphasize the sustainable level development in this Region. This study is based on the National Institute of Statistics database.

Keywords: GDP ,sustainable development, South-Muntenia Region

JEL classification: O1; O18; Q01

#### Introduction

This scientific study highlights a representative theme regarding the development at regional level, passed for the directions of the European Union.

The concept of sustainable development is a multidimensional one, which appeared 30 years ago, when there were intensified some problems of resources reduction and environment (Pohoată, I., 2000, p.9).

A representative definition for sustainable development was given by the World Commission on the Environment and Development in the paper "Our common future". In this report, the concept of sustainable development represents that way of development which permanently aims to comply with the present necessities, without endangering the chances of future generations concerning the satisfaction of own needs (www.mmediu.ro).

Sustainable development involves many aspects, but the most important ones are, as follows: reasonable and balanced development; social cohesion and inclusion; a high degree of employment; environmental protection and a rational usage of natural resources; the enhancement of international cooperation in order to promote world sustainable development; a coherent policy that directly lends to the organization of an open politic system (www.oirposdru-vest.ro).

It is important to take into account an essential aspect represented by the fact that the sustainable development will become a constant image of social and economic policies in every member state (Pohoață, I., 2000, p.10).

Nowadays, there can be found series of specific indicators for sustainable development which pursue the aims established in the National Strategy for Sustainable Development.

South- Muntenia Region is the central point of this analysis and according to the hierarchy realized by the European Community, it comes under the category of underdeveloped regions, from the economical point of view. This framing was possible because within this region there was obtained a GDP per capita lower than 75% in comparison with the average of the European Union (www.adrmuntenia.ro).

# Methodology and data sources

In order to realize this study, there were used data of the National Statistical Institute and Romanian Prognosis Commission. A significant contribution for writing this paper was represented

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by consulting some specialty books and recent studies. Taking into account the level of sustainable development from a certain area, one could evaluate it on the basis of some indicators, including: gross domestic product; gross domestic product per capita; employment rate; the number of employed persons in research-development activity; monthly gross average wage. The statistical methods which were used in this study in order to analyze specific indicators for sustainable development were usual ones.

#### Results obtained

It should be specified the fact that there are disparities both for regions' level and within a certain area. Regional disparities generate effects which are not benefic for the national economy. There were identified certain effects with a major negative impact over the economy, such as: the delay of economic growth, achieving in some cases the blockage of this increase; the accentuation of inflation; high costs for supporting disadvantaged regions (Otiman, P. I., 2006, p 226).

In accordance with the European Union's orientations, one must calculate the world development indicator, in order to determinate regional disparities (Beciu, S., 2013, p. 30).

The Gross Domestic Product represents the main macroeconomic aggregate specific to national accounts and with its help, one can appreciate the economic evolution for an area of development, as well as the one of the counties that form a certain region.

In table no.1 one can find the evolution of the Gross Domestic Product within the South-Muntenia area, during the period 2007-2011. The GDP records a positive evolution at regional level, from 52005.4 millions RON (in 2007) to 69894.9 millions RON (in 2011).

Within the area, during the reference period of time (2007-2011), the GDP, expressed in absolute values, had an oscillating evolution.

Table 1
Evolution of GDP in South- Muntenia Region , period 2007-2011

- million lei current prices-

No.	Specification	2007	2008	2009	2010	2011	2011/2007 (%)
1.	Total Region	52005.4	64535.4	65141.8	66114.8	69894.9	134.3
2.	Argeş	14085.1	16759.1	17545.5	16601.7	16731.1	118.7
3.	Călărași	3175.5	4653.2	4255.5	5382.2	5499.2	173.1
4.	Dâmboviţa	8055.2	9312.2	9154.5	10248.9	10322.8	128.1
5.	Giurgiu	2683.2	3640.3	3905.6	5274	5398.5	201.1
6.	lalomiţa	3305.3	4664.9	4550.8	4821.9	5387	162.9
7.	Prahova	16087.8	19714.5	20061.5	18200.3	20718.5	128.7
8.	Teleorman	4613.3	5791.2	5668.4	5585.6	5837.8	126.5

Source: National Institute of Statistics, TEMPO-Online, www.insse.ro, 2014 -own calculations

One can note that those seven counties had a different contribution to the GDP. Prahova and Argeş counties are in the top of classification because they realized 29.6% in 2011 and 23.9% of the regional GDP. On the opposite side there are the counties which had a lower contribution in order to realize the regional GDP, as following: Giurgiu (7.8%) and Ialomiţa (7.7%).

These results highlight a different economic development within the region. An important factor which directly contributes to the economic development is represented by the attractiveness degree for foreign investors.

In table no.2 is presented a prognosis of the GDP evolution in South- Muntenia Region, for the period 2015-2017. In this area there is anticipated a growth of 11.4% at regional level. In Prahova county, one may estimate for the year 2017 the biggest GDP, with a value of 26833 millions RON in current prices. The favorable evolution of this indicator is determined by the significant contribution given by the industrial activity in this county. The lowest value of GDP is estimated in the lalomita county- 5387 millions RON (2017). It is mainly due to the agricultural profile of this county, unlike the other ones.

# Assessments on the evolution of Gross Domestic Produsc within SOUTH- MUNTENIA Region, in 2015-2017

- millions RON, current prices-

No.	Specification	2015	2016	2017	2017/2015 (%)
1.	Total Region	87442	92252	97467	111.4
2.	Argeş	23077	24419	25878	112.1
3.	Călărași	6845	7196	7583	110.7
4.	Dâmboviţa	12898	13598	14357	111.3
5.	Giurgiu	6802	7159	7554	111.0
6.	lalomiţa	6417	6744	7105	110.7
7.	Prahova	24047	25397	26833	111.5
8.	Teleorman	7357	7740	8158	110.8

Source: - National Prognosis Commission- The projection of main economic and social indicators in TERRITORIAL PROFILE until 2017, November 2013, www.cnp.ro

-own calculations

In table no.3 is presented the evolution of GDP per capita within South- Muntenia Region, during the period 2007-2010. This indicator is one of those indicators that highlights in a clear and precise way, the regional disparities.

In 2010 there was a growth of GDP/capita with 28.7 % in comparison with 2007 at regional level. Argeş county is the only one in this region which was included in the top of the most developed 10 counties in Romania, in 2010 (www.adrmuntenia.ro).

In the analyzed period, South-Muntenia Region records an economic development in absolute terms. Despite this fact, one could find that this region fails to recover the difference in proportion with the national average (www.infopolitic.ro). Short-term prognosis does not indicate the recovery of existent gaps.

In table no. 4 is presented the employment rate on age groups in South- Muntenia Region, during 2008-2011.

Table 3 Evolution of GDP per capita in South- Muntenia Region, during 2007-2010

-RON/capita -

No.	Specification	2007	2008	2009	2010	2010/2007 (%)
1.	Romania	19315.4	23934.6	23341.4	24435.9	126.5
2.	South Region	15757.8	19648.3	19913.7	20288.2	128.7
3.	Argeş	21012.3	26033.1	27377.6	25974.4	123.6
4.	Călărași	10070.8	14836.8	13601.1	17256.3	171.3
5.	Dâmboviţa	15482.7	17542.1	17261.1	19345.5	124.9
6.	Giurgiu	9340.2	12883.6	13888.6	18828.0	201.5
7.	lalomiţa	11514.5	16156.9	15813.5	16802.2	145.9
8.	Prahova	19799.7	24111.7	24595.5	22390.9	113.0
9.	Teleorman	11611.8	24111.7	24595	22390	113.0

Source: -National Institute of Statistics, TEMPO-Online, www.insse.ro ,2014

- Socio-economic analysis of South Muntenia, February 2013, www.adrmuntenia.ro
- -own calculation

Analyzing the data, one could find a decrease of the employment rate, from 61.1% (in 2008) to 58.5% (in 2011) for the age group of 15-64 years old. This decreasing trend is also maintained for the age group of 15 years old and over it, reaching in 2011 a percentage of 50.3% in comparison with 52.8 % (in 2008).

# Employment rate in South-Muntenia Region, during 2008-2011 (%)

2008	2010	2011					
15-64 years old- Total							
61.1	59.7	58.5					
15 years old and over it-Total							
52.8	51	50.3					

Source: - Socio-economic analysis of South Muntenia, February 2013, www.adrmuntenia.ro

The reduction of employment rate was mainly given by the economic crisis and the departure of some important investors in other countries where the taxation is much more reduced. Employment degrees are low in counties such as Giurgiu, Teleorman, Dâmboviţa and Călăraşi.

In table no.5 is presented an evolution of the employed persons in the field of research-development activity both at national level and South- Muntenia area, during 2007-2012. This indicator is part of territorial sustainable development indicators used both at the European Union level and national one.

At national level, after the analysis, one could estimate an oscillatory evolution of personnel in this domain, within the analyzed period of time. In 2012, one could observe an insignificant growth of the employees in this sector, in comparison with 2007.

In South- Muntenia Region, the number of personnel in the research-development field recorded a decrease from 4376 (in 2007) to 3236 (in 2012). In counties such as Giurgiu, Ialomiţa and Teleorman there is recorded a very small number of employees in the research-development field. This is mainly due to the loss of funds for encouraging this activity field.

Table 5
Employees in research-development activity at the end of the year
at national level and within South- Muntenia Region, during 2007-2012 (number)

No.	Specification	2007	2008	2009	2010	2011	2012		
1.	Total	42484	43502	42420	39065	42363	42674		
2.	Macroregion 3	24736	25850	23253	20475	24487	25138		
3.	South Region	4376	4484	3676	3543	2253	3236		
4.	Argeş	2607	2575	2424	2333	1165	2130		
5.	Călărași	331	326	302	304	420	340		
6.	Dâmboviţa	320	394	362	345	365	353		
7.	Giurgiu	7	6	1	-	-	55		
8.	lalomiţa	1	3	11	8	3	-		
9.	Prahova	1087	1158	556	533	277	335		
10.	Teleorman	23	22	20	20	23	23		

Source: National Institute of Statistics, TEMPO-Online, www.insse.ro, 2014

In table no. 6 one could observe the evolution of the average gross monthly wage within the South-Muntenia region, during 2007-2013. This indicator records at national level an increasing trend for the analyzed period.

In South-Muntenia region, the average gross monthly wage recorded an increase from 1295 RON (2007) to 2011 RON (2013). The most significant growth has been recorded, as it was expected, in Arges county (+68.4%) in 2013 in comparison with the reference year. The most reduced growth has been recorded in lalomiţa county (+44.8%) in 2013 in comparison with 2007. Also, here has been recorded the lowest average gross monthly wage with a value of 1695 RON, in 2013. In this county, low wages could be explained by the reduced employment degree and the low added value, realized in the main activity fields.

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Table 6 Evolution of average gross monthly wage in South- Muntenia Region, during 2007-2013 (lei)

No.	Specification	2007	2009	2011	2013	2013/2007 (%)
1.	Total	1396	1845	1980	2163	154.9
2.	Macroregion 3	1656	2216	2486	2699	162.9
3.	South Region	1295	1748	1813	2011	155.2
4.	Argeş	1346	1858	2021	2267	168.4
5.	Călărași	1114	1509	1530	1703	152.8
6.	Dâmboviţa	1331	1664	1717	1939	145.6
7.	Giurgiu	1246	1717	1695	1831	146.9
8.	lalomiţa	1170	1524	1575	1695	144.8
9.	Prahova	1380	1894	1925	2125	153.9
10.	Teleorman	1118	1519	1570	1708	152.7

Source: National Institute of Statistics, TEMPO-Online, www.insse.ro 2014 -own calculation

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#### **Conclusions**

- South-Muntenia Region was included, at national level, in the category of the less developed areas from economical point of view because it realized a GDP lower than 75% in comparison with the European Union average. This was a result of the area's agricultural profile and of the rural predominance that does not represent a high degree of attractiveness for foreign investors or for native ones.
- ➤In South-Muntenia region, during the analyzed period, the indicators of territorial sustainable development had an oscillating evolution from one year to another. Arges and Prahova are the counties where were recorded significant positive evolutions of the indicators that were taken into consideration.
- ➤In 2010, Arges county was included in the category of the most developed counties in Romania, from economical point of view.

# **Bibliography**

- 1. Beciu, S., (2013) Sustainable Rural Development: Current Trends and perspectives of the Northeast
- 2. Region of Romania, Ceres Publishing House, Bucharest, p.30.
- 3. Otiman, P.I., (editor), (2006), Sustainable Rural Development in Romania, The Romanian Academy Publishing House, Bucharest, p.226.
- 4. Pohoaţă, I., (2000), Strategies and European Policies of Sustainable Development, "Alexandru Ioan Cuza" University in Iaşi, The Centre of European, pg. 9-10 (*available on-line -* http://www.cse.uaic.ro).
- 5. \*\*\*www.adrmuntenia.ro- Socio-economical analysis of South- Muntenia area, February, 2013
- 6. \*\*\*www.cnp.ro- The projection of main economic and social indicators in TERRITORIAL PROFILE until 2017, November 2013
- 7. \*\*\*www.insse.ro, TEMPO-Online, 2014
- 8. \*\*\*www.infopolitic.ro- Background analysis. South- Muntenia Region
- 9. \*\*\*www.oirposdru-vest.ro
- 10. \*\*\*www.mmediu.ro