

**„DUNĂREA DE JOS” University of GALAȚI
Doctoral School of Social and Human Sciences**



Abstract PhD Thesis

**Territorial performance approach in the context of
sustainable development
Case study : Dobrogea Region**

	Phd student, Cojocaru Diana
Doctoral supervisor	Prof. univ. dr Daniela Ancuța Șarpe
Scientific comitee	Prof. univ. dr Mirela Ionela Aceleanu Conf. univ. dr Dragoș Huru Prof. univ. dr Mihela Neculiță

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CHAPTER 1

Economic theories and conceptual delimitations on sustainable development

1.1. Sustainable development theory - conceptual aspects

The theory of sustainable development emerged during profound research and scientific debates that crystallized in an international and political environment in the context of globalization.

Building a sustainable environment in developing countries requires a different approach to the one adopted by developed countries and this is often not clearly understood and discussed. Differences stem from environmental issues and their scale, from identification of priorities, the capacity of local industry and governments, as well as from radically different skills levels, the cultural and global differences between developed and developing countries influencing the understanding and implementation of sustainable development .

Experts in the field have analyzed the way in which developed countries develop sustainable development concepts, as opposed to developing ones, with a series of conclusions¹:

- Because the main sources of income for most of the developing countries remain agricultural products and raw materials, their quantitative and qualitative decline can cause real disasters.
- Limited financial resources hinder the development of industry and the knowledge-based economy.
- There are high levels of inequality in developing countries, many of which promote a dual economy characterized by a rich elite and the ordinary population living in poverty.
- Developing countries consume much less resources and release far fewer greenhouse gases than the developed countries.
- Among the most important resources that benefit developing countries from it was identified the basic capacity for innovation in the use of building materials, settlement development and institutional structuring.

In ecosystem models², socio-economic infrastructure is nested in the super-elaborate construction of the natural system. It establishes clearly defined limits on the growth of the human population and the use of energy and natural resources. It also requires a complete redesign of cultural landscape architecture and management to minimize the loss of complexity, structure and biodiversity of the ecosystem, and maximize economic efficiency. Such a strategy requires synchronization with natural feed-back systems, disturbance regimes and space-time heterogeneity. Management practices must adopt adaptive and proactive strategies that contribute to environmental uncertainty. In conservation, this requires a shift from human activities and

¹ Du Plessis C., (2002), Agenda 21 for sustainable construction in developing countries. CSIR Report BOU E, p. 204.

² Guillaumont P., op. cit., p. 89

systems that promote the status quo and steady state to those that create adaptive flexibility and resilience.

The essence of the concept of sustainable development is in fact preserving and transmitting to future generations the ability to manifest their choices in the economic, social, cultural or political field³.

1.2. Multidimensionality of sustainable development

Achieving sustainable development goal requires the following:

- a) ensuring sustainability for economic growth for all countries, without exception;
- b) Placement of individuals, with their various needs, in the spotlight;
- c) Creating a way to establish a general, sustainable policy in which development takes into account the specificities of each country;
- d) Ensuring simultaneity on all dimensions on which the sustainable development process is based.

It can easily be observed that if the principles of sustainable development are respected, the solutions that will solve the problems: political, social, economic, demographic will naturally appear, we can conclude that sustainable development needs to be addressed in a multidimensional and multidisciplinary way.

1.3. The practice of sustainable development in the European Union

In 2005, the European Union Council also adopted the Declaration on Guiding Principles for Sustainable Development to be followed in order to achieve EU's sustainable development objectives.

According to this document, the EU is committed to pursuing and respecting the following policy principles relevant to sustainable development as an objective to be achieved:

- 1) promotion and protection of fundamental rights;
- 2) cross generational equity;
- 3) open and democratic society;
- 4) citizen involvement;
- 5) enterprises and social partners involvement;
- 6) coherence of governance and policies;
- 7) policy integration;
- 8) using the best available knowledge;
- 9) the precautionary principle;
- 10) „polluter pays” principle.

³ Todoro M., (1997), *Economic development*, Editura Longman, Londra, p. 14.

³ Nath B., Talay I. (1996), Man, science, technology and sustainable development, în B. Nath, L. Hens, D. Devuyt (eds.), *Sustainable Development*, Brussels, VUB Press, p. 42

³ Emas R., (2015), The Concept of Sustainable Development: Definition and Defining Principles, https://sustainabledevelopment.un.org/content/documents/5839GSDR%202015_SD_concept_definiton_rev.pdf (accesat 10.07.2017)

The 2020 Sustainable Development Strategy, adopted in 2010, contributes in bringing Europe out of the crisis and setting the foundations for a more sustainable future, based on sustainable and inclusive growth.

The key areas for integration are, for example, the European Strategic Investment Fund, through the Union's energy and climate change policy, regarding especially circular economy.

Sustainable Development Indicators (SDIs) are used to monitor EU's Sustainable Development Strategies. From over 130 indicators, ten have been identified as main indicators. They are intended to provide a general picture of the European Union's progress on sustainable development. For a complete picture, it is necessary to analyze the progress of all the indicators in a specific area of interest.

CHAPTER 2

Particularities of sustainable development

EU - Romania - Dobrogea region

2.1. New benchmarks in the EU's sustainable development strategy

The new systemic approach to the concept of sustainable development includes economic, social, psychosocial, legal, administrative, etc. components. Thus, the links between the main indicators characterizing economic and social development, namely population growth, raw material resources, economic growth, population consumption, social protection and the natural environment, are related to the type of land ownership, social influences and stratification of society, and the motivation of government bureaucracies, the nature of popular attitudes about work, the public administration system, leisure and self-refinement, the attitudes of economic and political elites.

We can assess that sustainable development has a multidimensional character that involves consistent changes in social structures and attitudes, in the institutional system, aiming at accelerating the process of economic growth, eradicating poverty and reducing inequalities.

2.2. Sustainable Development Policy of Romania

According to the legal provisions, one of the fundamental objectives of regional development policies, as formulated, is to reduce existing disparities at region level by stimulating balanced development and accelerating the recovery of those areas that are lagging behind development, due to historical, geographical, economic and political circumstances, as well as the prevention of new regional disparities and imbalances. On the other hand, the sectoral policies of the government are correlated with local and regional initiatives and resources, in order to achieve sustainable economic, social and cultural development of the regions. Thus, these processes of stimulating regional activities, coordinating them with governmental policies, promoting interregional cooperation represent an effort to correlate the needs of the country, as well as the needs of the geographic, economic and cultural regions of Romania.

We can summarize that at regional level a series of methods, means and measures meant to support the process of sustainable development:

- a) reducing disparities between counties, urban versus rural areas, areas in the center versus peripheral areas, etc .;
- b) preventing the occurrence of problem areas;
- c) coordinating regional development initiatives with national priorities and EU guidelines;
- d) promotion of differentiated policies according to particular regional features (monofunctional areas - predominantly agricultural, fishery - urban agglomerations, natural and built areas, areas fighting environmental problems, border areas).

2.3. Defining guidelines for sustainable development in Dobrogea region

On Dobrogea's territory we can talk about territorial cohesion, harmonious development of all these places and the guarantee that the citizens in the area can take full advantage of the special characteristics of these territories. Practically, this cohesion is the means by which diversity can be transformed into value that contributes to sustainable development.

For Dobrogea region it can be said that the degree of capitalization of local economic resources was influenced by the level and extent of the structural reforms of the transition, marked by the delay of the emergence of private, efficient, competitive and competitive economic structures, but also by the level of territorial distribution and absorption of external financial assistance needed for investment.

The afflictions that Dobrogea region offers to its inhabitants derive from many aspects. First of all, its geographic location offers areas with diversified tourist potential: delta, seaside and mountain, aspect that makes this part of the country the area with the largest and most diversified tourism potential: religious, cultural, spa and recreation . Historical and archaeological potential is another asset of the area, with Dobrogea sites constantly attracting researchers, historians and culture people who carry out their activities, enjoying both nature and the basic research available. This explains the large number of scientific papers that have been published in the country or abroad, all of them having a Dobrogea theme: history, culture, economy, religion, pedology, etc.

In the economic segment, emblematic activities are being considered those activities derived from being a port city and an international tourist destination, we believe that the improvement of living standards among local community members can not be dealt with by dissociating the effects that urban regeneration actions along with the increase in quality urban services can induce them.

The South-East Regional Development Strategy assigns Dobrogea a special place because of the physico-geographical conditions, the presence of the Danube Delta (declared reservation) and the Măcin Mountains National Park, precious due to the rare flora and fauna living in the area.

Integrated projects should capitalize on the potential existing in Dobrogea and, through a complex of cross sectoral actions, leading to economic and social development of the region.

From the perspective of the European funds attracted by the county councils, Constanta County is on the 10th position, with about 223 million lei absorbed, while Tulcea is on the 21st position, with about 173 million lei absorbed.

Analyzing the amounts received from the European Union in Constanta County, it is noted that the private sector attracted half of the amounts attracted by the public sector (66.13% of the public sector, 33.87% of the private sector).

In 10 years, Constanta has won 443 European-funded projects that have led to the development of environmental infrastructure, education, transport, energy, tourism, health, support for small and medium-sized enterprises, and vocational training.

CHAPTER 3

Study on identifying sustainable development dimensions in order to determine the sustainable development index of Dobrogea region

3.1. Analysis of the urban - rural disparities framework for Dobrogea region

In the study on the impact of economic strategies on sustainable spatial development, the analysis of the situation of regional development and the identification of existing development disparities at the level of the Dobrogea region were followed. The main objective of the study is to contribute to the substantiation of the strategic planning process of the development of the Dobrogea area for the following years. The analysis process started with the identification of economic, social, demographic disparities within the area, through in-depth analysis of current urban and rural development levels and identification of the necessary investments to improve the present situation.

The process of elaboration of the study included, besides the analysis and interpretation of quantitative data, the collection of quality data in the area. Thus, according to the methodology, 11 focus groups were organized, 1 focus group in each community included in the research area.

The objectives that were pursued during these workshops were:

- General assessment of the sustainable development situation in the Dobrogea region;
- Assessment of sustainable development perspectives in the Dobrogea region;
- Testing certain assumptions resulting from the analysis of secondary statistical data;

In the long term, economic strategies related to the Dobrogea region can target two major objectives:

- in terms of efficiency - economic growth at the local level;
- in terms of equity - reducing inter-regional disparities.

The specificity of the analyzed area is represented by the disparities between the industrial and tertiary concentration nodes (Constanța - Navodari), the isolated industrial centers (Tulcea, Năvodari), the tourist areas (the coast and the Delta) and the extended areas with the agricultural and viticultural areas. The Dobrogea area is characterized by the discontinuity of industrial activities and by combination with tertiary activities (trade, services, tourism) and agriculture.

3.2. SWOT Analysis - Dobrogea Area

STRENGTHS

- Constanta County has an urban population above the national average;
- The share of local active units in construction, industry, commerce and other services is owned by SMEs, most of them operating in the area of trade;

- The free zone Constanta is one of total of 6 existing in Romania, which also register profit;
- The industry of the region participates with a share of 30, 5% of GDP at SE region;
- High share of agricultural land in the private sector;
- The region is crossed by important transport corridors such as the Danube - Black Sea Canal, part of the Rhine - Mainz - Danube European Corridor;
- Land resources for housing construction;
- The area benefits from the largest Black Sea port - Constanta;
- High hydrographic potential (eg the Danube River north of the area);
- The area is distinguished by a high tourist potential due to a diverse natural environment: lakes and natural lagoons with therapeutic properties: Salt Lake, Lake Techirghiol, Danube Delta Reserve - the unique area in Europe, the Black Sea coast;
- The concentration of 30, 6% of the tourist units in the country
- Completion of the Bucharest-Constanta highway and completion of the Constanta belt;
- Airports in Constanta and Tulcea;
- Qualified workforce resources (tourism, navigation, naval, etc.);
- The existence of an institutional framework favorable to the increase of professional skills;
- Diversified industries: machine building industry (Constanta), petrochemical industry (Năvodari); metallurgical industry (Tulcea); shipbuilding industry (Constanta, Tulcea, Midia, Mangalia); clothing industry (Constanta, Tulcea); construction materials industry (Medgidia); the food industry that is represented in all counties;
- Promoting cultural tourism in the area - archaeological sites - and the religious one at the Dobrogea monasteries.
- In Constanta County there are more than 50 companies producing wind energy, developing a capacity of 1974,325 MW.

WEAKNESSES

- The high share of the employed population in agriculture (40% of the total) and a relatively small contribution to the creation of regional GDP, low productivity of agriculture;
- The natality index at average and below average
- The uncontrolled development of the tourist towns of the Black Sea;
- Accessibility difficulties in the Danube Delta area;
- Low economy dynamics
- There is only one industrial park in Constanta
- Poor offer of complex tourist packages, low promotion of tourism.
- Potential not used in agriculture (eg land that is left behind) poor management of agricultural holdings;
- Lack of promotion of the image and tourist potential of the region due to maladministration and marketing;
- Poorly developed transport infrastructure;
- Major economic sectors are in decline, with the most affected being the steel and metallurgical industry, the chemical industry and the machinery industry;

- Poor technology in most households in rural areas;
- Poor capital insufficient for SMEs and difficult access to funding sources;
- Reduced foreign direct investment;
- Accelerated degradation of ports and related infrastructure;
- Lack of urban mobility plans for large urban centers that would streamline the movement of people and freight.
- Insufficient concern for environmental protection.
- Weak marketing and promotion of domestic products;
- The existence of poor quality products on the market, both indigenous and imported
- Existence of non-approved products;
- Unemployment rate high;
- Ignoring the principles of sustainable development, the political factor exerting pressures and negative influences on the economy of the area;
- Poor management of the low developed areas, which does not impose public institutions responsibility for economic and social development, lack of impact studies and monitoring techniques;

OPPORTUNITIES

- Productivity increase in agriculture through technology transfer;
- Making Approved Appraisals of Products Having Traditional Areas in Their Production;
- Increasing the quality of products and services by implementing a quality system;
- The penetration of organic products into the external market by creating centers for their promotion;
- Development of agritourism and ecological tourism in mountain areas and the Danube Delta;
- Increasing the attractiveness of free zones for internal and external investors by expanding the service offer that the free zone offers - cheap skilled labor near the free zone, expanding and upgrading the infrastructure available to the free zone;
- Increase in number of dwellings due to the facilities granted by mortgage loan;
- The area has a huge potential for wind and solar energy;
- National and European programs support the development and diversification of the area from an economic point of view, with a positive impact at national level;
- Due to the increased international interest in eco-tourism, the region is extremely precious, making it possible for tourists to benefit from biodiversity and the natural environment;
- Tertiary sector development opportunities by increasing the demand for services for individuals and companies;
- With the deployment of transport infrastructure, considerable economic growth is expected, with the realization of quality connections for transport safety;
- European Union support for the development of multimodal transport systems that are built on the principles of sustainability, security and innovation;
- Existence of an increased potential for the development of maritime and river transport, with a major impact on economic growth;

- European programs targeting the development of agriculture in the area provide subsidies for rural people, which can significantly increase the attractiveness of the area;
- Existence of social inclusion strategies, targeting all ethnicities of the region;
- Competition between the public system and the private health system has led to increases in the quality of medical services;
- Practicing the greening of soils and polluted waters;
- Developing the green and public network in urban agglomeration areas;
- Potential for growth of foreign investment, the region presenting real attractions for opening new business;

THREATS

- Land degradation;
- Mass deforestation with implications in potential landslides; river degradation and flood risk;
- Banking policy discourages investment through expensive loans;
- Insufficient financial resources;
- External competition;
- Insufficient business concern for medium- and long-term strategic development;
- Legislative instability and excessive bureaucracy;
- Population migration trend from rural to urban;
- The competition that tourism generates in the generous offers of other states;
- Increasing number of vehicles and under-sized and poor quality infrastructure;
- The aging of the population which leads to a massive increase in the degree of dependence on community services;
- The competition brought by Community products, for which consumers have a preference;
- Medical staff emigrate to the European Union, with a negative impact on health services;
- Deterioration of the medical system, difficult to rectify, with impact on the social life of the inhabitants;
- Delays in implementing projects with European funds due to cumbersome administration;
- High pollution indexes of exploitation areas;
- The drastic decrease of non-renewable resources;
- Emigration of the population to permissive countries, affecting the economic and social life of the region;
- Danger of rising inflation due to the rise in oil and oil products;
- Lack of predictability of tax policies promoted by the government, which engenders investor mistrust;

3.3. General assessment of the urban development of the Dobrogea area

Specialist analyzes show that the urbanization phenomenon is an effect of economic development, namely economic growth that determines the concentration of population in cities. However, lately, studies show that there is a reversed relationship between these components: urbanization, due to the advantages of agglomeration economies, determines economic development. Studies support the idea that cities have a major role to play in increasing the productivity and income of the population. There is practically a direct link between the development of an area and urbanization, which means that the development or regression of one of these elements affects the evolution of the other.

3.4. Determination of the Sustainable Development Index for the Dobrogea area and influences on the economic growth strategies

Analyzing the sustainability level related to the results obtained by applying development models has significant advantages compared to the use of more specific indicators, such as the Human Development Index (HDI) and the Gross Domestic Product (GDP). The criticisms are related to the rather simplistic, theoretically ungrounded approach, somewhat arbitrary weights, which combine variables related to social aspects.

3.5. Sustainable Development Index (SID) calculation methodology

Research is exploratory and descriptive research, trying to understand social phenomena, evaluate and synthesize data and information over a period of time.

The study was conducted on the basis of collected secondary data, in line with the IDD approach (methodology known as the sustainable development index), Martins and Candido (2008) being those who developed it in order to measure the area's sustainability by assessing a series of indicators grouped by size.

Thus, in view of the above, the IDD model includes a total of 46 indicators spread over the six dimensions of sustainability.

In classification, we will see sustainability indices with values:

- Between 0,0000 and 0,2500 - represents the critical state of sustainability.
- Between 0.2501 and 0.5000 - represents alert status.
- Between 0.5001 and 0.7000 - represents the acceptable state.
- Between 0.7001 and 1.0000 - represents the ideal state of sustainability.

3.6. Analysis of the results for the Sustainable Development Index (IDD) - Dobrogea area

1. The social dimension

This dimension is related to the quality of life, the satisfaction of human needs, social justice, the level of education and the basic conditions for people's survival. According to results reflecting this dimension, it can be seen that the social dimension has an index of 0.4610, which is

a state of alert that leads to the conclusion that society and the public and private powers have to consider several aspects properly on the social aspects of this area.

2. The demographic dimension

This dimension involves quantifying and analyzing demographic levels and patterns for the area under consideration. The population growth rate, which showed a rate of 0.5422, confirms acceptable sustainability performance.

3. The economic dimension

The economic dimension presents the macroeconomic and financial performance of the analyzed area as well as the impact on resource consumption and primary energy consumption. Variables, such as industry involvement in GDP, per capita income and GDP per capita were placed in a critical state of 0.1888, 0.1754 and 0.0735 respectively, showing a low-income status at active person level.

This dimension showed a level of 0.3844, which is an alert situation also according to economic size indices.

4. The politico-institutional dimension

The political-institutional dimension of sustainable development refers to the process of citizenship, where a population mentions and legitimizes its rights, ability, skills and mobilization to strengthen the sustainable development of the area it originates from. In conclusion, the studied politico-institutional community obtained an average of 0.2288, which is in the alert zone for both the community and the institutional environment.

5. Environmental dimension

The ecological dimension of sustainable development refers to the guarantee of natural resources, the proper use and improvement of their use, and the avoidance of environmental degradation, ensuring the resource framework for future generations as well.

The data obtained from the research highlights for the Dobrogea area an average of 0.6200 for the environmental dimension, which places the studied area in an acceptable situation with regard to durability.

6. The cultural dimension

This scale exposes the cultural identity of the analyzed area, ie the population's reporting on education and culture, in order to increase intellectual capacity and knowledge of the environment.

The Cultural Sustainability Indicator with a value of 0.0624 denotes a critical state, with all the variables analyzed being critical.

CHAPTER 4

The Analytical Approach to the Sustainable Development Index of Dobrogea region through the Balanced Scorecard Designer Professional software

4.1. Sustainability Balanced Scorecard - a new concept for assessing performance in sustainable development

Sustainability is the underlying principle of strategic sustainable development. The correlation of the strategy with the sustainable development management system can be done by using the Balanced Scorecard methodology (Gheorghe-Moisii and Late, 2012). The Balanced Scorecard model provides decision makers with a set of tools that enable them to explore performance factors, translating the mission and strategy into a set of key performance indicators that can be monitored through multiple perspectives.

4.2. Advantages of using Balanced Scorecard Designer Professional software in managing the performance of a sustainable development project

Balanced Scorecard Designer is a software that facilitates the analytical approach for performance management, facilitating the interconnection of processes related to the creation and computerized management of Balanced Scorecards.

4.3. Designing a system of key performance indicators associated with the Sustainable Development Index of the Dobrogea area

The development of the Integrated System of Key Performance Indicators associated with the Sustainable Development Indicator of the Dobrogea area was based on the agreement of the representatives of the regional development centers in Tulcea and Constanta County Councils to provide information on the values of these indicators as well as their evolution intervals, so that the optimization features of the Balanced Scorecard Designer software can be applied to determine the individual and global performance of the project being analyzed.

4.3.1 Performance indicators specific to the economic dimension

With the economic dimension of the Balanced Scorecard, we grouped five indicators included in determining the regional development index of Dobrogea: trade balance, per capita income, labor income, per capita Gross Domestic Product and industry participation to GDP.

The overall performance of the economic dimension specific to the sustainable development index of the Dobrogea area is determined as a weighted average of the individual performances of the five indicators (Figure 4.1); we have assigned equal weight (0.2) to the indicators grouped in this perspective, as we did not aim to generate a hierarchy of these.

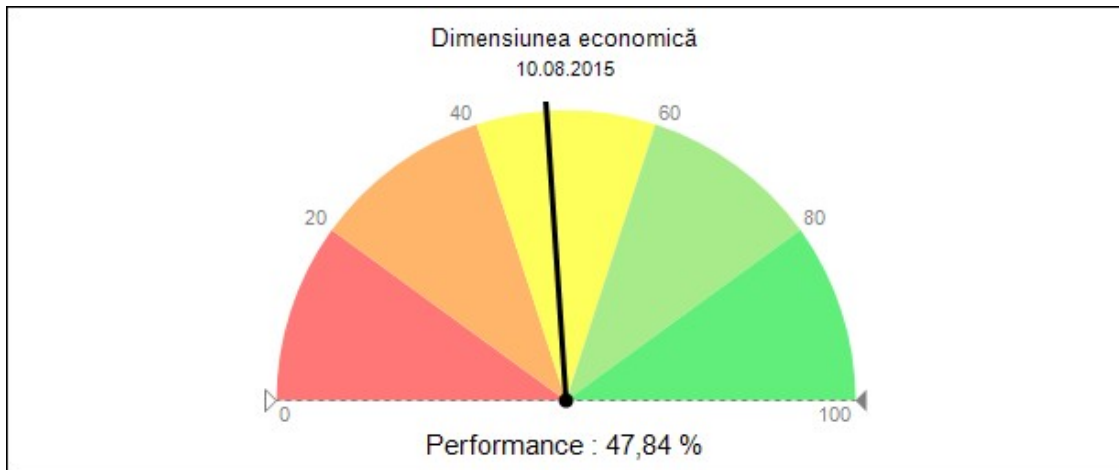


Fig 4.1. The overall performance of the economic dimension specific to the Sustainable Development Indicator of the Dobrogea region
Source: print-screen BSC Designer software

4.3.2. Performance indicators specific to social dimension

The social dimension of Dobrogeas' sustainable development index integrates five key performance indicators, namely: primary healthcare provision, schooling rate, illiteracy rate, families in the social program, and life expectancy at birth.

The overall performance of the social dimension of the Dobrogea Sustainable Development Indicator, calculated on the basis of the weighted average of the performance of its five indicators, is 45.70%, being slightly below the economic performance (Figure 4.2).

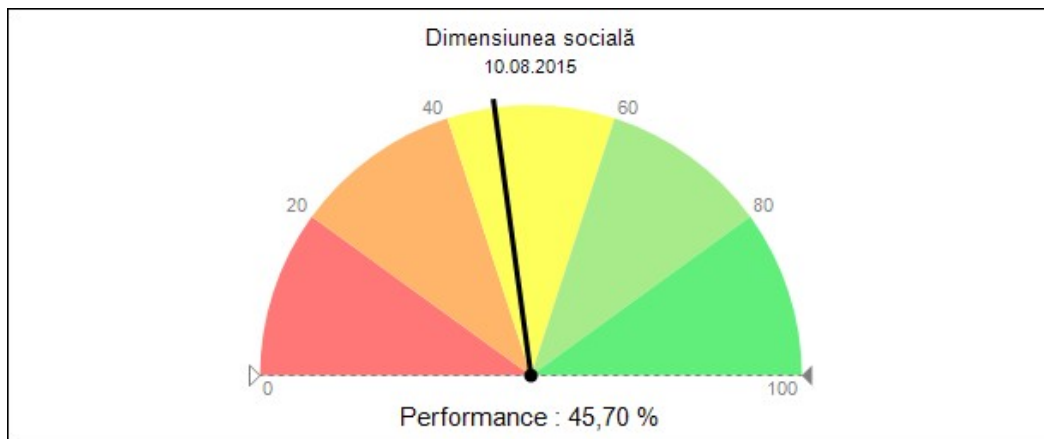


Fig 4.2. The overall performance of the social dimension specific to the Sustainable Development Indicator of the Dobrogea region
Source: print-screen BSC Designer software

4.3.3. Performance indicators specific to the environmental dimension

The environmental or environmental dimension integrates five key performance indicators: water quality, average water consumption per capita, access to the water supply system, access to the sewerage system and access to the garbage collection system.

The level of global environmental performance specific to the Dobrogea Sustainable Development Index (55.49%, according to Figure 4.3) exceeds both the economic and environmental dimensions, the level of performance of the fourth dimension, the demographic one.

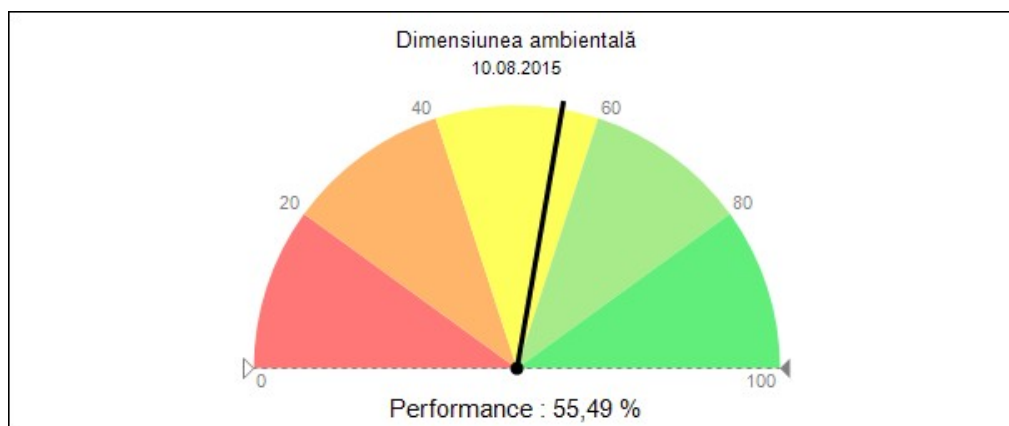


Fig 4.3. Overall performance of the environmental dimension specific to the Sustainable Development Indicator of the Dobrogea region

Source: print-screen BSC Designer software

4.3.4. Performance indicators specific to the demographic dimension

The demographic dimension groups a set of five indicators that we considered relevant from the point of view of the survey objectives: Population growth rate, urban-rural population ratio, demographic density, male / female population ratio and population distribution by age group .

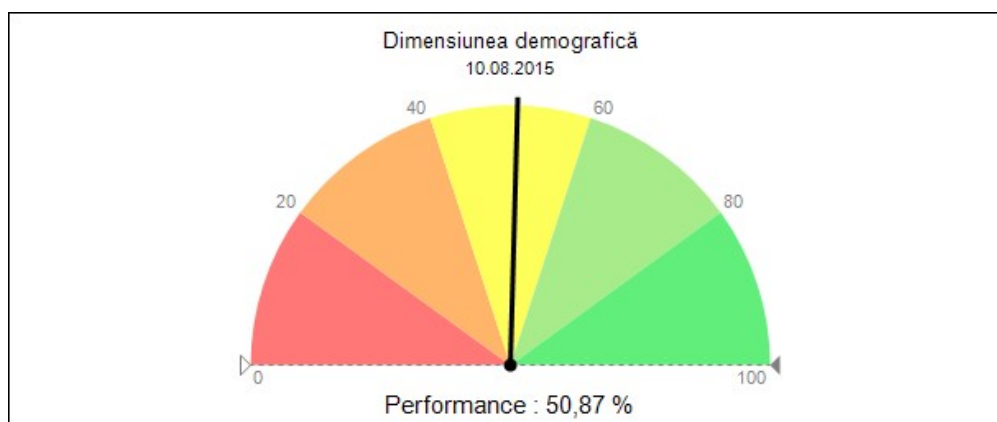


Figure 4.4. Global performance of the demographic dimension specific to the Sustainable Development Indicator of the Dobrogea area

Source: print-screen BSC Designer software

The level of overall demographic performance (50.87%) is above the levels of economic and social dimensions, but it is lower than the level of the environmental dimension performance (Figure 4.4). Thus, the role of the Balanced Scorecard model is to highlight performance gaps in the dimensions it integrates.

CHAPTER 5

Economic strategies for increasing territorial performance of the Dobrogea region in the context of sustainable development

At European level, the concept of territorial intelligence, which focuses on capitalizing on the territorial potential, on the balanced development of the territory and on reducing disparities, is under discussion. Territorial intelligence has been discussed and introduced in the Treaty of Lisbon, the concept being added to the social and economic dimension, an objective underpinned by European Union policy. Territorial Intelligence seeks to stimulate, on a regional scale, a dynamic of sustainable development based on a combination of environmental, cultural, economic, social objectives as well as interaction between knowledge and action, information exchange, consultation on project development.

Intelligent growth alongside sustainable and innovative growth lies at the heart of the priorities and interventions that apply, in line with the strategic vision of the Europe 2020 strategy, which explains that productivity and innovation will be able to deliver the greatest opportunities in the long term long in the economic development of Europe for the next ten years.

Ensuring the framework for sustainable growth involves the following lines of action:

- Changing environmental pressures and turning them into competitive advantages - Companies operating in the area need to implement programs to efficiently use water, materials, and energy. This can be ensured through a full analysis of the company's priorities, which should provide action directions designed to monitor and realize the operational framework for the green economy.

- Promoting renewable energies - which seeks to implement regional energy efficiency and renewable energy strategies.

- Prevention of droughts and floods - requires the promotion of ecological water storage directions, with the creation of hydrological conditions favorable to the protection of biodiversity in the Dobrogea region. This can be done by initiating projects for the construction of water storage facilities, ladders, dams, dams and laths.

- Consolidation of the Black Sea coastline - the coast is affected by the demographic increase, by the non-organic tourism, by the ever increasing traffic in the area, all of which lead to disturbance of the ecosystem. In this regard, massive actions are needed to prevent erosion of sand dunes, to reconfigure roadways, to create bicycle paths. Thus, the local population will be able to enjoy the benefits of smart tourism, beach protection and decent traffic.

From the development perspective of the Dobrogea area, as a component of the SE region, there are 3 strategic areas that can be developed to promote sustainable development:

1. Organic farming - is identified as an opportunity for this area, both because a large area of land can be converted for organic farming and because more and more customers want healthy products. This area is conditional on the sustainable development strategy of Dobrogea for the following reasons:

a. agriculture is a sector of tradition in the Dobrogea area, in this sense, the inhabitants having the availability and experience for the development of this sector;

b. The dangers of desertification lead to a multiplicity of efforts to protect ecosystems and the application of non-polluting ecological techniques;

c. Organic agriculture can be an important source of income for the population of the Dobrogea region, which does not have any special material resources.

2. Transport and transport services

The transport domain is a strategic domain that makes the sustainable development of the Dobrogea area conditional because:

a) there is a poor development of transport networks and services in the analyzed area;

b) the transport sector is a major polluter with direct effects on the principles and indicators of sustainable development (climate warming, resource consumption - fossil fuels, danger to the health of the population in the region, etc.);

c) the opportunity to develop transport services, especially inter-modal systems, is determined by the good geographic location of the Dobrogea area.

3. The energy sector, especially through the development of alternative sources and forms of energy - is a strategic area based on the following aspects:

a. the power generation and distribution systems in the Dobrogea area are represented by former large enterprises whose modernization and re-technology is particularly expensive;

b. there are geographical, relief and location premises for the development of the alternative energy domain;

c. The development of the sector is favored by the existence of poles of innovation and technology transfer in the region that can facilitate the transfer of knowledge and information.

Chapter 6

Final conclusions, contributions, proposals and future research

The objectives pursued in the paper can be defined as follows:

- Economic analysis of the Dobrogea area, through the macroeconomic aggregates, in order to highlight the levels of economic development of the localities.
- Studying the volume of economic activities to emphasize the importance of the relations between the different locations of the area and their influence on the economic development of the area.
- Economic relations with the outside develop according to the existence of the outlets, depending on the level of economic development and the capacity of the institutional system to favor this system of relations. Also, social ties could foster economic relations through their knowledge and trust between economic partners.
- In the context of the economic crisis, the influence of the social factors on the economy in the area must be analyzed, which has a bearing on the implementation and development of the concept of sustainable development.
- Thus, the innovative aspect of the paper can be summed up:
 - synthesizing and presenting the evolution of the main macroeconomic aggregates for the Dobrogea area, highlighting the need for a deepening of regional integration and showing the reasons for the low interest of regional cooperation;
 - highlighting the role of conjuncture conditions of society (economic and socio-political determinants) for the economic development of the area;
 - defining and calculating social fragmentation and cultural proximity, reflecting the structure of society and the ability of certain groups to frame social relationships;
 - analysis of ethno-cultural concentration, in the context of economic development, political instability, bi- and multilateral agreements, emphasizing the importance of the social context for sustainable development.

The research of economic integration issues of the Dobrogea area allowed the following conclusions to be drawn:

1. Define the concepts of sustainable development, inclusive growth, territorial intelligence and integrated territorial investments in a complex manner by accessing the literature.
2. Analysis of the specialized literature in order to determine the current state of the research related to the sustainable regional and regional development.
3. Research has shown that a prominent place in the theory of international economic integration is the justification of the integration policy, ie the component related to economic growth strategies of an area ensuring the observance of the principles of sustainable development.
4. Analysis of economic aspects at the Dobrogea level through the microeconomic and macroeconomic aggregates in order to highlight the level of economic development.

The solution for the scientific problem identified during the research consists in determining the theoretical and practical aspects of the problems related to the economical strategies for the growth of a zone in the conditions of economic crisis in order to elaborate the recommendations for improving the economic aspects has allowed the elaboration of the following **recommendations**:

➤ According to the results of the research, it is recommended to introduce in the scientific circle the definition of international economic integration as an objective and at the same time controlled process of approximation, mutual adaptation and merging of the national economic systems, which is based on the multifunctional interests of different levels of society, eventually increasing the complex efficiency of the economic system of groups of countries and increasing the welfare of their citizens.

➤ Highlighting the theoretical concept of territorial intelligence in an independent form of integration processes, which is fully justified today by the practical work of integration communities.

➤ Proposal and argumentation of the necessity of reforming the group of Dobrogea localities, at the basis of the new system, there are formal criteria: income per capita, GDP per capita, minimum wage, income distribution.

➤ Proposal to analyze and calculate the sustainable development index of the area starting from a set of variables arranged on 6 dimensions.

➤ Radical review of the current mechanisms of strategic planning of the economic development of the Dobrogea area through a system of efficient measures to attract investors and tourists.

➤ Using the PGB interregional circulation balance methodology, based on the logic of the cross-thematic balance theory, transforming it to the level of the trade balance scheme.

Original contributions to the sustainable development of the Dobrogea region:

Theoretical Contributions:

➤ Addressing the concept of sustainable development of an area;

➤ Presenting the components of sustainable development synthesising and analyzing the literature and the various studies of specialized organizations;

➤ Presenting new elements of sustainable development in the eyes of European bodies;

➤ Structuring of the theoretical aspects regarding the strategic options of the regional sustainable development;

➤ Selection of economic, social, demographic, institutional, cultural and environmental indicators and creation of formulas for the calculation of the Sustainable Development Index of the area;

➤ Integration of indicators into a model for analyzing the various correlations between the indicators of sustainable development in order to substantiate the regional economic strategies;

➤ The compilation of new indicators not found in the literature, ranging from general to particular and vice versa;

➤ Determining factors of influence of the indicators and establishing their sign in the expression of the sustainable development function;

➤ Establishing methods for prioritizing aspects of the area under consideration in terms of their sustainable development and establishing future action options;

- Proposed open issues on the subject of sustainable development of the Dobrogea area;
- Structuring the work and making connections between the analyzed issues, clearly highlighting the interdisciplinary character.

Practical contributions:

- Carrying out a comprehensive study of the Dobrogea area, which was aimed at identifying all the essential elements related to the possibility of strategic approach to sustainable development;
- highlighting the interdependencies between long-term capabilities and resources of the Dobrogea region and short-term financial results using the Balanced Scorecard methodology;
- Identifying and solving optimization problems for components and subcomponents of the sustainable development index;
- Making a graphical layout of the paper through ideas underlining techniques, writing formulas, graphics, images and tables.

Future Research Directions:

- Identifying new properties of the sustainable development function, selecting new indicators, establishing innovative standards for sustainable development indicator;
- Determining mathematical models to quantify customized results for various branches of activity;
- Scientific substantiation, quantification and other social indicators (eg: mobbing, quality of work, quality of communication in organizations, etc.);
- Draw up statistical analyzes on the value of sustainable development functions and different indicators, interpreting the results and proposing further solutions;
- Making and solving new optimization issues on components of sustainable development;
- Addressing the concept of sustainable development at the level of SMEs;
- Methods of estimating the quantities of these resources in the Dobrogea area in the coming years in order to establish new laws of variation of these indicators;
- Implement the calculation of the sustainable development index of the Dobrogea area for the grounding of the economic policy decisions of the area;
- Creating Territorial Collective Heritage, saving resources, involving actors to ensure the best sustainability and resource value of the resource, and the ability to build and preserve a collective patrimony by leveraging resources specific to Dobrogea;
- Creating services, desectorizing and integrating economic activities for the development of sustainable use functions (desectorization), all being able to contribute positively to this patrimony (re-territorialization).

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