

Assessing the regional development degree – step one: Calibrating the polar diagram

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Abstract. *The issue of regional development is widely debated, regulated and analyzed in official EU documents, as well as in specialized literature. The theme of the research is extensive and it includes the analysis of economic, legal and administrative dimensions that contribute to the development of a strong interdisciplinary research. The traditional objective of regional development policies is to reduce regional disparities, intra and inter-regional, achieving a relative balance between economic and social development levels of various areas of a national territory.*

To achieve this goal, it is necessary to develop management tools capable of providing an objective scientific analysis developing reliable data to contribute to the shaping in an essential manner the main directions of regional development.

The article is the first part of the “Polar diagram – Tool for periodic assessment of the degree of regional development” and it aims to achieve a brief description of regional development areas that are the subject of analysis of the project, as well as highlighting the main indicators that will be used in the research, in order to contribute to the development of a regional polar diagram.

Keywords: regional development, polar diagram, economic development, indicators.

JEL Classification: H5, H7, R5.

Introduction

The regional economy has as a main reason for its existence, the need to provide a theoretical and methodological rational basis, scientific for the strategies and regional policies, i.e. to establish a coherent set of objectives and ways to mitigate regional disparities in terms of aggregate economic-social dynamics, as well as identifying measures and appropriate tools for achieving these objectives.

The issue *raised* in the research project aims to develop an instrument able to provide registration information on the fluctuations recorded in the regional development process and hence on the process of how is the regional economy developing.

Given the complexity of the regional development process, this research aims to analyze the evolution of a set of indicators, deemed relevant by the authors in the context of regional development, set of indicators that will contribute to the development of a monitoring process for the status of regional development in Romania. The set of indicators will be developed in relation to eight areas of development such as: social development, economy and market, governance and regulations, science and research, environmental protection (sustainable development), public health, education and training. For each of these areas, a number of five unitary indicators, considered by the research team as relevant in terms of applicability in the eight regions, will be identified through the research conducted within the project.

The research objective will aim the development of a *polar diagram* of regional development in Romania. The set of used indicators, based on a periodic analysis will contribute to the monitoring of regional development status in the eight development regions in Romania, which will contribute to the development of the regional development polar diagram in Romania

1. Calibrating the polar diagram - Setting the indicators

1.1. The Social Development and the Economy & Market Dashboards

The research project draws the attention upon the real danger of an unrighteous use of the indicators periodically assessing the regional development degree, the jeopardy of an ill assessment that can sometimes prove worse than the lack of an assessment.

This part of the project also underlines the need to emphasize that the Millennium Development Goals (MDGs) set by the United Nations for 2000-2015 timeframe should have been almost accomplished but find it seems that the Global Financial Crisis has already and will still create problems for most of the goals. The world leaders express their concern about meeting the MDGs and “the UN is also working with governments, civil society and other partners to build on the momentum generated by the MDGs and carry on with an ambitious post-2015 development agenda”. (www.un.org/millenniumgoals/)

Nevertheless, all the efforts are concentrated in the direction of reaching the goals. The European Commission declared this year the “European Year for Development”, as an incentive for everyone to contribute to the international development policy.

1.1.2. The Social Development Dashboard

The social development had become an issue impossible to be treated collaterally and gained its top single position on most of the private, public or non-profit entities missions. In the literature, academics have intensified their analysis upon the crisis effects that are registered on the level of population and labour market, local economies, quality of life, local governance and economic and social increasing disparities (Matei and Matei, 2010; Kotler and Caslione, 2009; Lustig and Walton, 2009; Siddique, 2010; Ciutacu, 2010).

The Social Development Dashboard shall seek to calibrate **five indicators** that will later be integrated in the broad analysis on the periodical assessment of the regional development degree:

1. **Price of the in-work poverty (PIWP)** defined by the minimum *wage and guaranteed minimum income*. The in-work poverty refers to the “individuals who are classified as ‘employed’ (distinguishing between ‘wage and salary employment plus self-employment’ and ‘wage and salary employment’ only) and who are *at risk of poverty*. This is a relative concept referring to those living in households whose total equivalised income is below 60 per cent of the median national equivalised household income (Eurostat Statistical books, 2010, p. 104). This indicator needs to be analyzed according to personal, job and household characteristics. It should also be analyzed in comparison with the poverty risk faced by the unemployed and the inactive.” (Eurostat Methodologies and Working Papers, 2010, p. 7).
2. **Price of the out-of-work poverty (POWP)** refers to the *unemployment benefits and social aids*. Out-of-work poverty involves both the unemployed who are at risk of poverty, and to the unpaid family workers – who are not receiving unemployment aids. This category pertains to the agricultural workers and it can be often seen in Romania. It is defined by the Romanian National Institute for Statistics as “The unpaid family worker who works in a household managed by a member of the family or relative and receives no remuneration either in the form of a wage or in kind. The farm household (agricultural) is considered such a unit. If several people in a household work on the family farm, one of them – most often the head of the household – is considered to be self-employed, while the rest are unpaid family workers”.
3. **Price of the out-of-the-labour-force poverty (POLFP)** means the *minimum welfare pension, children allowance* (e.g. child poverty, retiree poverty). This category (out-of-labour-force poverty) comprises the elderly persons at risk of poverty and the children facing the same risk (usually those coming from large families, young people, the Roma community, unemployed households, and families comprising rural workers).
4. **Distribution of poverty (DP)** through different channels. Lustig and Walton (2009) provide a broad view upon the transmission mechanisms that is of great use for grasping the whole range of poverty distribution channels pertaining to the measures taken during crisis:

- **Labor market** – loss of jobs who leads to the loss of income is a direct channel through which poverty immediately increases in the household.
 - **Prices** – inflation, raise of taxes and other charges – this channel has an impact upon the global market demand for commodities, leading to reduced companies' profits; on the consumers' side, *persistently high inflation, in particular on food prices, will challenge food security and reduce the resources poor consumers can spend on non-food items, such as education and investment.* (ODI Briefing Paper, 2009, p. 2)
 - **Reduced access to public and private assistance** – state support and bank loans – this channel takes into account the decreasing public budget that is unable to cover the increasing demand for social protection, and the limited access to bank loans due the both the dropping private income of the population and the more restrictive requirements of the banks (e.g. debt to income ratio).
 - **The provision of goods and services** – the poverty is transmitted to this channel no matter who the transmitter is (state, private companies or tertiary sector) as all are facing the same problem of the falling revenue.
5. **Promotion of Poverty (PP)** There are many actors who strive for raising awareness on the poverty issue. For this paper's argument, we shall be taking into account as the most active in this regard the World Bank and the International Bank for Reconstruction and Development, the International Monetary Fund, the United Nations, and the European institutions, due to both their high profile in social marketing campaigns and their financial assistance for the current crises, with special focus of their involvement in Romania.

1.1.3. The Economy and Market Dashboard

The economy and market indicators are probably the most often used statistics in the decision-making process of the government, public administration, non-profit organisations, or even private entities. The most common indicators refer to the real Gross Domestic Product, Consumer Price Index, Employment rate or Money supply. These can be easily accessed on a national level but do not necessarily provide useful information on the degree or regional development.

Therefore, our project chose to develop certain indicators that, even if they can sometimes hide subjective data, they can provide us, in the end, with a solid image upon the degree of regional development.

Taking into account the trend of focusing on public "industry" results and efficiency, it becomes natural to develop **five indicators** that can be calibrated on regional data and that can result in knowing whether the region is efficient, market oriented and consumer oriented:

1. **The Three-fold Efficiency (TFE).** The Economists have developed three methods for measuring the efficiency. Firstly, the efficiency of production or technical efficiency relates to the efficient use of resources in a technical manner. In other words, the technical efficiency involves obtaining a maximum output with a given set of inputs. In terms of cost, it means that an organization must produce a certain quantity in the cheapest way possible. Secondly, the allocative efficiency refers to the distribution of

resources between alternative uses so as to obtain an optimal mix of production. In other words, allocative efficiency considers choosing between different technical effective combinations. Taken together, the technical and allocative efficiency determine the degree of economic efficiency. Thus, if an institution uses its resources perfectly efficient both allocatively and technically, then we can say that it is economically efficient. Otherwise, if there is allocative or technical inefficiency the organization operates less efficient from an economic standpoint. Thirdly, opposite to the technical and allocative efficiencies, the dynamic efficiency is a less precise concept. In general, the dynamic efficiency refers to the efficient use of resources insufficient in time, thus combining both the efficiencies in an inter-temporal dimension.

2. **The threat of alternatives (TAs)** can be considered rather low, not from the viewpoint of a monopolistic thinking, but by realistically assessing the situation enforced by the public goods. A privately owned company envisions the decision making system based on CSR – Corporate Social Responsibility – as the ultimate goal on the evolution scale, a development target. For this company, the financial profit comes first, and the social one can appear only as a result of a sustained real growth. The goods that the company deals with are divisible, which means that once consumed nobody can benefit from it any longer, so the quantity available to others has decreased. There are many alternatives to this issue. The threat of alternatives is absolutely vital in this case, and this powerful fight for profit created more and more rivalry. However, the public sector is considering goods that are not divisible. The most known example, of a pure public good that is both non-rival and non-excludable, is that of “defence”. The available quantity of “defence” is not divisible, meaning that the security that I feel does not diminish the “quantity” available to the others, and, more importantly, the consumers cannot be excluded from use.
3. The problem that arises is that, because it can be consumed without modifying the remained quantity available to others, it becomes a stimulus for not paying what you consumed – **citizen’s power (CP)**. The reference point becomes the consumer’s willingness to pay, according to the “consumer sovereignty” principle. The market mechanisms would never provide a social project. The markets certainly functions in terms of demand and supply, and those trying to satisfy the demand are looking to maximise their profit. Such a market, being of course a normal one, based on competition, would never succeed in providing Pareto type solution, meaning covering the demand of some without affecting anybody else – being it a “Pareto improvement”, *i.e.* the change makes at least one person better off, without leaving anybody worse off, or a “Pareto optimal situation”, when the systems reaches a certain level where it is impossible to make anybody better off, without leaving somebody worse off.
4. Even like that, there is the **power of supplier (PS)**, that lies in the fact that the good is still an economic one, scarce and desirable, and these features assures it the power of attracting payment in return for its use or consumption. In this regard, the supplier’s behaviour facing a decision should be emphasized. **Three broad categories of**

behaviour paradigms may be distinguish for public decision making: “optimizing” behaviour, “satisficing” behaviour and “justifying” behaviour (Munda et al., 1993, p. 43). Though most of the decision making techniques are part of the first category, less of the second, in practice, they are often used as a mean to justify public decisions, even if these decisions are not in accordance with the *optimizing and satisficing principles*.

5. The **barriers to entry (BsE)** actually hide the decision making system or, more precisely, the centralisation or decentralisation of the decision making systems. A decentralised decision making system relies on cooperation. If this cooperation is not stimulated, the decision making system can be damaged. Giving all these, the decentralised decision making system still has its advantages, due to the fact that it does not depend on the existence of a central decision making core that would be in charge of collecting and analyzing the data. This type of operations becomes difficult on the account of proper technology deficiency which would allow an efficient allocation of available resources. A decentralized decision making system would appear as the ideal solution, but the government could find itself in a situation of decision making impossibility when these sub systems fail to cooperate.

A modern public administration must be focused on meeting the citizens’ needs, better informing the citizens, cooperating with those to whom it is addressing and strengthening public control over government. It aims to strengthen and broaden the framework for civil society participation in decision making. (Profiroiu, 2002, p. 16)

The problem of measuring the citizen’s power and willingness to pay perpetually revives, the result being a Pareto efficient allocation of public goods – that makes at least one person better off, without leaving anyone worse off.

As a result of these forces action, the **rivalry** comes into sight. The rivalry refers to the problems that need to be solved, to the issue of ranking them and, more importantly, to issue of choosing the right allocation of resources, keeping in mind the public interest, *i.e.* social benefit. Putting it simply, it is all about covering the *distance from the present state to de desired one*. (Fiala, 1997) This is the moment when those having the mission of managing public resources – public managers – must prove responsible (administrative structures of collective decisions, not individual, their cohesion is underpinned by the principle of collective responsibility – for example, if the Prime Minister of Great Britain (Androniceanu, 2007) and fair when assessing the actual level of public demand for the provided goods and services. This rivalry creates many biases, the reason being the crucial parameters like decision maker competence, the constraint complexity, or the considered evaluation criteria. The mechanisms employed by the analysts in order to solve these issues – mechanisms that have become necessary as a result of the innovation mentioned above, and the lack of innovation would mean no real growth – are numerous, the basic condition being that they must be logically built, and accurately reflect the modelled reality. Their place in the decision making cycle has a special meaning, as it is the key moment of outrunning, or not, a *bottleneck*.

1.2. Governance and regulation, science and research

1.2.1. Governance and regulation

The development process is governed at all levels, both through international organizations such as the United Nations or the European Union and the national authorities at central and local level.

To cope with all the global challenges and problems, states have created supranational institutions such as the United Nations, World Trade Organization, UNESCO, the World Health Organization, and the International Labour Organization. In parallel with this process there is an increase in the influence of nongovernmental international organizations, acting globally in a wide range of domains, from Green Peace (environmental organization), Amnesty International (an organization that monitors human rights) or organizations that promote animal rights. All these nongovernmental international organizations received official recognition from the UN in the meeting of the Heads of State and Governments held in 1992 in Rio de Janeiro, Brazil organized by UN and it was devoted to environmental issues. The United Nations is neither a government nor legislative, but it offers means to resolve international conflicts.

Also at European level, the European Union is involved in various fields such as business, social, research, culture, trade, education and training, human rights, environment, justice, public health, foreign policy etc.

At national level the government and the ministries play important roles in formulating local development policies and strategies. At this level are devised the directions and ways in which to perform the development process, each ministry having one area of development, thus for the economy Ministry of Economy; education and research Ministry of Education, Youth and Sports; social: Ministry of Labour, Family and Social Protection; environment: Ministry of Environment etc.

Authorities at central level issue rules and regulations which can facilitate development in all existing areas but can equally complicate the process, through legislation less accessible and heavy bureaucracy that not only delays but also even prevents any type of local development.

The following level is the local one, where stakeholders, county and local councils as well as mayors take over government policies and apply them in the field, each using its own measures at their disposal. By county or local council decisions and provisions of the mayor local development programs in the cities, communes and villages of administrative-territorial units can be adopted.

Local authorities can improve the living standards of citizens through improvements in public services subordinated to them. “Local public services, according to Romanian legislation in the field may be subordinated to the local council (organized by the local council, as self-managed public companies, public companies or other public or private types). Local public services are seen *m* public utility services, considered industrial and commercial public services, in sanitation, water distribution, sewage, gas distribution

domains etc. or public administrative services purely administrative (civil protection, guardianship authority, marital status etc.), education services etc.” (Matei, 2004)

Apart from state structures, citizen participation plays an important role in involving all stakeholders in urban development. Educating citizens in the spirit of participation in administrative decision is a critical component in development. Information and access to public information facilitates citizens’ involvement, in order to identify social requirements and their actual needs.

From the perspective of regional development, establishing a set of indicators on governance and regulation can consider:

Selected indicator	Utility	Application
No. of public authorities within the development region	Process of analysis on the distribution of authority sources in the regions	Regional/local administration level
Number of civil servants/local elected officials	Analysis of administrative capacity in quantitative terms - human resources at local level	Local public administration/Human resources
Categories of decentralized functions from the state level towards local authorities	The analysis of different categories of responsibilities evolution and their division between the state and local level	Local public administration
Number of normative acts issued by the county	Analysis of the regulatory capacity of local public authorities	The degree of autonomy/local decentralization
Financial resources transferred from the state budget to local authorities	Analyzes the dependence/ autonomy degree of local authorities from the state level.	The degree of autonomy/local decentralization

1.2.2. Science and Research

Science and research must be the starting point for any development process. This means harnessing the human potential at local level and the knowledge and existing information. Within each area of development research is needed to substantiate development programs promoted by each actor. (Dincă and Dumitrică, 2010)

Given the continuing transformation and society’s continually progress it is absolutely necessary to identify new methods of production and development that enable the growth of the living standard and also to ensure environmental protection and the right to a healthy environment recognized by the Constitution to all citizens.

One can talk about research in the domains of health, information technologies, transport, economy, national security, environmental protection, education and governance. Research is the way to improve activities in all sectors of social life. Man is constantly evolving, and its needs are diversified and therefore he will always seek to find the most efficient ways to meet his/her needs and at the same time to protect the natural environment thus achieving sustainable development.

Local development depends to a great extent on progress in science and research. Thus any strategy, plan or local development project is based on extensive research, research that aims to identify the best actions that authorities can undertake as well as the effects they will have on people's lives and on environment.

Research is the one that increases the quality of administrative measures and of the various activities undertaken by the authorities. Advances in science facilitate the easier fulfillment of the fundamental objective of public administration namely general well-being. Also research in information technology makes it easier for public authorities to communicate with the citizens; it improves citizens' access to public information.

The generation and exploitation of knowledge have become vital resources of global welfare growth. Knowledge is also central to determining competitiveness and as such states of the world, especially the developed ones, have engaged in a systematic generation, developing sophisticated national systems and international interactions. In the knowledge triangle, education-research-innovation, the last item is most closely related to the impact on welfare and the most problematic in terms of the related policies. Innovation, a process with many variables, has in its center the cooperation between research and industry. In the last decade, developed countries have proposed intermediary entities or forms of interaction and collaboration through which bridges between the two sectors are created, allocating these entities increased public financial resources.

Even if the system of research, development and innovation has failed so far to generate impressive success examples in transferring results in the socio-economic development, it has managed to maintain or to develop actors (including universities, institutes, research teams) having a certain international visibility and who can be or already are poles of excellence.

Science and technology development aims to increase the competitiveness of the economy, improve social quality and to increase knowledge of potential capitalization and expansion of the horizon of action. To fulfill this role several strategic objectives can be shaped:

- creation of knowledge i.e. the achievement of scientific and technological results, competitive worldwide, aiming to increase the contribution of the Romanian system to the global knowledge stock, increase international visibility and transfer results into the economy and society;
- increasing the competitiveness of the Romanian economy through innovation with an impact upon the economic actors and transferring knowledge in the economy;
- Increase social quality through the development of solutions, including technological ones that generate direct benefits to the society.

The priority areas considered in the development field of research and innovation aims: information society technologies, energy, environment, health, agriculture, food security and safety; biotechnology; materials, processes and innovative products; space and security; socio-economic and humanities research.

Thus taking into account the specifics of the analyzed field, in order to develop a set of indicators to monitor regional development process, we consider as being interesting to monitor a set of indicators that can provide information on:

Selected indicator	Utility	Application
No. of research entities existing in the region	Decentralized local research capacity	Local public administration
No. of research institutions, including universities in the state system existing in the region	Analysis of regional research capacity	Local/regional level
No. of researchers existing at the region level.	Regional research capacity in terms of human resources	Local public administration/Human resources
No. of research projects aimed at local development	Preoccupation of local authorities for research	Local/regional/national level
No. of partnerships between research institutions and public authorities	The degree of cooperation and integration of research results in the development processes.	The development of associative structures.

1.3. Environment (Sustainable Development), Public Health, Education and Training

1.3.1. Sustainable Development

The economic development process inevitably involves changing the natural environment both by using environmental factors as renewable resources, but also because the nuisance affects to a greater or lesser extent, sometimes irreversible the ecological balance.

Economic development involves an external cost borne by the environment, whose dimensions, increasingly evident in recent years, if not properly evaluated, question the long-term viability of the very process itself. Economic development theories have approached from the early stages of their shaping the natural resource issues and their limited nature. Starting from the need that the objectives and echelons of environmental protection measures are connected to the transition path to a market economy in order to ensure sustainable development, it is clear that macroeconomic adjustments must take account energy and environmental restrictions.

As a manifestation of macroeconomic dynamics, sustainable economic development requires a set of quantitative, structural and qualitative transformations, both in economy and in scientific research and manufacturing technology, in the mechanisms and organizational structures of functioning of the economy, the fundamental principle of this development will be PPP, i.e. "polluter pays principle".

In this context, the sustainable development concept appears, representing that form of economic development in which it is intended that the satisfaction of the present consumption demands does not compromise or prejudice those of future generations.

The concept of sustainable development expresses the process of broadening the opportunities through which present and future generations can fully manifest options in every area: economic, social, cultural or political, man being placed in the center of action

for development. If from the historical perspective, the economic conditions have had a dominant role in the evolution of humanity, the other conditions cannot be ignored today any longer, the economic component being the essential component of development.

The core concept of sustainable development is the interaction between population, economic progress and potential of natural resources, highlighting the key issues arising from: optimizing the needs-resources ratio, goals to be achieved, the necessary means, based on mutual compatibility over time and space.

The overall objective of sustainable development is to find an optimal of interaction and compatibility of four systems: *economic, human, environmental and technological*, in a dynamic and flexible functioning process. The optimum level corresponds to that long-term development that can be sustained by the four systems. For the system to be operational, it is necessary that such support or viability to be amplified in all the subsystems forming the four dimensions of sustainable development - starting from the energy, agriculture, industry to investments, human settlements and biodiversity.

We talk therefore of human resources capacity to support the development of human society for an indefinite period i.e. sustainable use of natural resources (Allaby, 1998) within the carrying capacity limit. In this context we talk about development to ensure development of human socioeconomic system on a continuous path without affecting the existence of future generations within the carrying capacity limits. The practical application of this perception of sustainable development has triggered a pragmatic definition of it that involves integrating environmental policies in economic and social development policies at all levels in a holistic manner through economic, political and technological strategies. (Barbier, 1987, pp. 101-111)

Thus the concept of sustainable development assumes the balance of the four key dimensions, which are really the pillars of sustainable development that may be retained under the name of the four 'D's of sustainable development, namely sustainable human, social sustainability, economic sustainability, environmental sustainability.

The set of indicators used in this research will attempt to answer these four dimensions of sustainable development, thus being selected some profound interdisciplinary indicators as follows:

Selected indicator	Utility	Application
Number of active entrepreneurs	Allows the dynamics analysis of the private sector and its development trends.	Local/regional level
Area of artificial regeneration	Analysis of the measures taken for environmental conservation and development.	Local authorities' policies regarding environmental protection.
Municipal waste recycling rate collected	Analysis of local public services in terms of waste collection	Local/regional level
The coverage degree of population to garbage collection services	Easiness of access to sanitation services	The development level of local public sanitation services
Population connected to wastewater treatment system	Facilitating access to wastewater treatment mechanisms.	The degree of local/regional development

3.2. Public Health, Education and Training

The development is based on human resources, so that locally there should be responsibilities regarding qualification of the workforce and increasing the capacity to adapt to environmental changes. In education and training, local development processes must take into account seven items (Morin, 1999): The need of introduction and development of applied studies; Promoting a knowledge able to grasp global issues, fundamental, to be able to incorporate local knowledge; The human condition should be the center of learning processes; Knowing the identity and human development; Education should eliminate uncertainties; Education should develop understanding; Education should contribute to the link between individual and society.

Romania passed after 1989 to a system of democratic education – in the sense that it serves to maintain and develop the identity of those educated/trained, national, social, cultural, religious values of the person and the people they belong to, of the society, culture, religion, geographical space, which takes place in the context of education and teaching, with ample openings to the values of humanity.

The educational ideal of Romanian school is the free, integral and harmonious human individuality development, in the formation of autonomous and creative personality. Education aims at the formation of human personality through: acquiring scientific knowledge, the values of national and universal culture; formation of intellectual capacities, affective availabilities and practical skills through assimilation of humanistic, scientific, technical and aesthetic knowledge; assimilation of intellectual work techniques necessary for instruction and lifelong self-instruction; a culture of respect for human rights and fundamental freedoms, dignity and tolerance and free exchange of views; sensitivity towards human problems, moral and civic values against, respect for nature and the environment; the harmonious development of the individual through physical education, hygienic-sanitary education and sports; professionalization of the young generation through useful activities that produce material and spiritual goods.

Thus to ensure a sustainable development, central and local authorities should focus primarily on two fundamental areas such as **Education and Training and Public Health**.

The development of integrated measures which have as their main effect local/regional development will have to start from the peculiarities of the two main areas of development, bearing in mind their development tendencies.

The proposed set of indicators for consideration in the two areas of development is aiming:

3.2.1. Public Health

Selected indicator	Utility	Application
Mortality rate	Demographic evolution	Developing of certain local/regional public policies.
Infant death rate	Demographic evolution	Developing of certain local/regional public policies.
Natural population growth	Demographic evolution	The development of measures to support the birth rate
Number of hospitals beds per 1000 inhabitants	Health system capacity to provide specialized assistance	The functioning of public health services
Number of doctors per 1000 inhabitants	The capacity of the system to provide specialized assistance	The functioning of public health services

3.2.2. Education and Training

Selected indicator	Utility	Application
Economically active population	The capacity to implement development trends	Local/regional level
Employment rate	Monitoring the employment rate	Developing regional local measures that contribute to increasing the employment rate
The education level of adults 25-64 years	Identification of possible development directions	Developing training programs at the local/regional
Individuals level of computers skills	Computer using degree at local / regional level	Developing training programs at the local/regional
The total school population on macro regions, regions of development and counties	Demographic evolution	Preparing local/regional educational system depending on the fluctuations in the level of school population.

Conclusions

This research aims to draw the attention *to the need of developing a unitary tool for constant monitoring of fluctuations in the process of regional development, called polar diagram*, tool that can then be the basis for the implementation of sectoral policies designed to contribute to the elimination of inter and intra-regional disparities.

Thus building on the results achieved by applying the *polar diagram* we can identify underdeveloped areas within a certain development region relative to other developing regions. Measures can be implemented to contribute to ensuring a balanced development process in the eight development regions.

The aimed *impact* is that through the polar diagram to create a documentary that would be the basis of an objective mean of information for academia and the public/private sector on fluctuations recorded in the regional development process in Romania.

Notes

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