

## TECHNIQUES AND SYSTEMS OF INDICATORS USED IN THE ANALYSIS OF SUSTAINABLE DEVELOPMENT OF RURAL AREAS

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### Abstract

*The present article exposes the summary of a research project whose purpose is measuring sustainable development in Romania at the level of rural areas. Sustainable Development (Sustainable Development in English) means better quality of life now and for future generations. According to the vision of sustainable development, progress integrates immediate and long-term objectives, local actions and global economic and environmental issues, all of which are inseparable. Such a vision of society can not be imposed only by political, society as a whole must adopt certain principles (political, economic, social, thinking). Sustainable development can be defined simply as a better quality of life for everyone, both now and for future generations. Sustainable development means: balanced and equitable economic development; high levels of employment, social cohesion and inclusion; a high level of environmental protection and responsible use of natural resources; generating a coherent political system open, transparent and accountable; effective international cooperation to promote global sustainable development (Gothenburg Strategy, 2001).*

**Key words:** *sustainable development, sustainability, research paradigms, quantification, resources*

### INTRODUCTION

The concept of sustainable development was born 30 years ago in response to the emergence of environmental and natural resource crisis, especially those related to energy [1]. Basically, the Stockholm Conference on the Human Environment in 1972 is when it is recognized that human activities contribute to environmental damage, putting endangered future of the planet [2].

A few years later, in 1983, the World Commission on Environment and Development (WCED) began work, by a resolution adopted by the UN General Assembly, which gives the best known definition of sustainable development:

**"sustainable development is development which aims to meet needs of the present without compromising the ability of future generations to meet their own needs "** [3].

### MATERIALS AND METHODS

Monitoring the development of the phenomenon, and using indicators beyond

economic activities precedes the definition of sustainable development principles, consecrating themselves along with the definition of sustainable development strategies developed in assistance with United Nations, respectively EU. Such monitoring tools were produced by many institutions, from business or civil society formations, expert groups or research centers to local governments, national governments, organizations.

In this research project, the purpose is seeking to assess the current state of sustainable development in the rural area.

The main objectives are analyzed:

- Support agriculture and rural development;
- Long-term problems for the agriculture sector and rural adjustment;
- Implementation of the *acquis communautaire* in the field of agricultural policies.

Sustainable development should be seen as an adaptation of society and the economy at large problems facing humanity today: climate change, water crisis, drought, desertification, depletion of resources, waste, loss of

biodiversity, population growth, poverty, migration etc.

The term sustainable development began to become, however, well known only after the Conference on Environment and Development, organized by the United Nations in Rio de Janeiro in the summer of 1992, known as the "Earth Summit". It resulted in development of several conventions on climate change (reducing emissions of methane and carbon dioxide), biological diversity (conservation) and stop massive deforestation. Also then, the Agenda 21 - sustainable development support plan, was drafted. The concept of sustainable development means all forms and methods of socio-economic development, whose foundation it is primarily a balance between the socio-economic systems and the natural capital items.

Although sustainable development was initially meant to be a solution to the ecological crisis caused by intense industrial exploitation of resources and environmental degradation continues and seeks primarily in environmental preservation, now expanded concept of quality of life in its complexity and in terms economically and socially. Subject of sustainable development is now a concern for justice and equity between countries, not only between generations.

## RESULTS AND DISCUSSIONS

The concept of sustainable development was initially linked to environmental issues and natural resource crisis, especially those related to power 30 years ago.

Natural resources represent all deposits of minerals and ores, arable land, forests and water available in a particular country.

Natural resources are substances that occur naturally but are considered valuable in their relatively unaltered form. A material is considered a natural resource when the primary activities associated with it are extraction and purification, as opposed to creation. Mining, oil extraction, fishing and forestry are generally considered natural-resource industries, while agriculture is not. This term was introduced to a large audience

by EF Schumacher in his book "Small Is Beautiful" in 1970.

Natural resources are usually classified as:

- renewable resources
- non-renewable resources.

Renewable resources are generally living resources (fish, forests, for example) that can recover if not over-exploited. Renewable resources can recover and can be used indefinitely if used rationally. Once renewable resources are consumed at a rate that exceeds their natural rate of recovery, they will diminish and eventually will run out. Rate that can be supported by a renewable resource is determined by the rate of recovery and the size of that resource availabilities. Renewable natural resources that are not living include soil, water, wind, tides and solar radiation.

Although sustainable development was initially meant to be a solution to the ecological crisis caused by intense industrial exploitation of resources and the continued degradation of the environment, which primarily looks preserving environmental quality, now expanded concept of quality of life in its complexity, in terms economic but also social.

Over time the concept of sustainable development got into agriculture too, as a reponse to the many shortcomings of conventional agriculture, from this perspective being a system of sustainable agriculture technologies and practices designed not only to ensure satisfactory production, but also to achieve environmental objectives. Thus, in recent decades increasingly stated that the viability of rural areas can not depend only on agriculture, but must also strengthen its role in protecting the rural environment, the production of safe and quality food to help maintain the attractiveness of rural areas for young people and for those who will be born in the future.

## CONCLUSIONS

1. Sustainable development is a form of growth that meet social needs in terms of welfare in the short, medium and long term, basing it on the grounds that the development must meet the needs of the present without

jeopardizing those of future generations. Sustainable development is based on three-dimensional environment, economy and society determinant of information system, on which one can quantify and form an accurate picture of sustainable development and the interaction of access.

2. Sustainable development is a slow process of change that allows long-term use of the environment so that economic development remain possible while maintaining an acceptable level of environmental quality.

Sustainable development in the ecological conditions are:

- regeneration of natural resources and preserving their natural stock to an acceptable level;
- reducing pollution to a "minimum security"
- observance of biodiversity conservation;
- Avoiding irreversible effects of economic processes by:
  - Strategies aimed at preventing risks;
  - The orientation of technological development towards protecting the environment;
  - Orientation of institutional change and economic decisions towards protecting the environment;
  - Distribution of income fair and reasonable manner.

The essence of sustainable development of human society is given by the management, present and future of its natural resources, energy, materials and information, the objectives of economic growth and ensuring a quality increasingly better life and environment.

As the environment and its resources are shared among different users to expand their range of protection and savings collective action is needed.

Decisions on economic development be taken taking into account potential costs of pollution and damage to the environment and the amount of resources consumed and converted, the value of any improvements ead office. However, it is often difficult to determine the environmental costs, the amount of resources that can be used without affecting their regeneration and what benefits exist or will be provided as a result of certain human actions.

3. Integrated rural development program involves the application of complex socio-economic sectors in rural areas, correlated with each other, are in a continuous interdependence and mobile, so encourage sustainable development.

4. For rural areas become more attractive living spaces should be addressed following general objectives of rural development:

- reorganization planning;
- land improvement works;
- works to improve access roads;
- beautifying the landscape;
- conservation and preservation of ecological balance;
- improve comfort people.

Also development of rural communities can not be separated from the development and consolidation of farms without their evolution towards modern farms. Sustainable development policy should include three main areas:

- household development through systematization and modernization of its equipment without altering traditions;
- Strengthening farms compatible with those of the EU;
- Development of rural communities through provision of infrastructure (water, telephone etc.) And providing residents with social services.

5. Regarding the National Strategy for Sustainable Development of Romania, it aims commissioning of two types of indicators:

a. National Sustainable Development Indicators - focus on key priorities expressed by measurable targets allowing benchmarking national and international partners and the objectives of the EU Sustainable Development Strategy. This set of indicators will be based on the results of the working group Eurostat-UNECE-OCDE and it will be constantly updated.

b. Indicators of progress of National Strategy - covering the entire package depoliticized that it generates, including those which are not covered by EU strategy. In this way, all policies will be subject monitoring, aiming the empowerment of the policymakers and allowing the public opinion to assess the success of actions.

## REFERENCES

- [1]Dona, I., 2000, Rural Economy, Economic Publishing House, Bucharest
- [2]Bleahu, Ana, 2005, Rural development in the European Union, Quality of Life, XVI, 3-4
- [3]Oanacea, Margareta, 2003, Modern management in agricultural units, Ceres Publishing House, Bucharest, Chapter 10, p 90-95