



## THE 6<sup>TH</sup> EDITION OF THE INTERNATIONAL CONFERENCE EUROPEAN INTEGRATION REALITIES AND PERSPECTIVES

### Premises of Sustainable Development on Rural Communities

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**Abstract:** In this paper the authors want to highlight the opportunity on rural areas and development in terms of durability. The content of sustainable development offers to local communities real and lasting solutions. In this sense for a community to be truly sustainable, it must adopt a holistic approach, taking into account short-term environmental and economic sustainability of natural and cultural resources. The authors believe that a sustainable community among its objectives to include their major environmental issues, poverty eradication, improvement of quality of life, developing and maintaining an effective and viable local economies, leading to a global vision of sustainable development of all sectors of the community.

**Keywords:** sustainable development; local communities; environment; local economies

#### 1. Introduction

In this way the community has control over the development process, decisions and develops and adopts them engage the local sustainability. This community is characterized by an active social structure, groups, associations and institutions able to mobilize long-term common stock and to assume responsibility for this ongoing process of development.

Prosperity of local communities such as the population is insured act in collaboration and in partnership, to improve quality of life and uses its resources to meet needs. In order to revitalize the rural economy, sustainable community mobilizes its capacity to provide quality care, a higher standard of living for all residents, prevent pollution, conserve natural resources and local resources and increase the efficiency of their use. Rural areas face particular challenges in terms of growth, jobs and sustainability in future years. But they offer real opportunities by their potential for growth in new sectors, ensuring the conditions of rural recreation and tourism, attractiveness as a place to live and work and their role as a reservoir of natural resources and valuable landscapes. Agriculture and food sectors must use the opportunities offered by new approaches, technologies and innovations to meet market needs at both European and global.

## **2. The Concept of Sustainable Development of Agricultural Farms**

In countries with transition economies like Romania, sustainable development issues farms are more than poverty and lack of productive technologies, rather than applying cleaner technologies and high levels of consumption as in developed countries.

A major impact on agriculture in the application of land had caused excessive fragmentation of agricultural lands, which do not permit the application of technology more effectively. As a result there has been an excessive development of cereal production at the expense of extensive grain legumes, which degrades the natural environment.

To establish a sustainable farm will be taken into account:

- soil and climate;
- household size;
- liquid or solid waste, m<sup>3</sup> space of pits;
- crop rotation and crop rotation;
- soil tillage;
- combating weeds and pests;
- available work force;
- organization of work;
- sale of goods;
- finance.

In conclusion, we might define as the most sustainable farms that:

- use complex and advanced management techniques to ensure the environmental integrity of the natural environment and even to consumers;
- specific area according to soil and climate and provide a certain relation between product offerings and product demand, that is to be flexible;
- maintain biodiversity, landscape beauty and other goods that are not assessed on existing markets;
- is economically efficient from a social perspective, ie: ensure food security and adequate income while farmers.

To convince the heads of farms practicing sustainable agriculture is needed primarily for financial support, but at the same time, they are interested in income and status in society if they will upgrade next time constraints.

## **3. Coordinates the Organization Scientifically Farms to Ensure Sustainable Development**

The organization is a combination of direct and indirect human resources, material and financial information at workplace level, departments and unity throughout the organization .In scientific establishments, delimit two main subdivisions. First, the overall organization of the unit embodied in the establishment of organizational structure and information system. This organization is part of the function performed by the senior management of the firm, conditional on the effectiveness of management-sensitive whole. The second major category is the organization of the main components of the company: research, development, production, marketing, personnel, financial and accounting

affairs. This category is accomplished at the middle and lower management levels, but predominantly in quantity terms. For farms to organize in accordance with sustainable development issues must be addressed:

1. **Dimension and the size of the farm.** Strategic option for achieving sustainable agriculture is to increase the size to land ownership and the formation of medium-sized farms, based primarily on family labor.
2. **Production structure.** It is necessary to continue the production structure to the needs of national economy and export requirements, processing and use of superior agricultural products, raising their quality parameters.
3. **Organizational and marketing structures in agriculture.** They'll have to set up new organizational structures and marketing in agriculture for farmers to better exploit the surplus production to be better informed as to this end they must travel expenses to the city and waste their time work.

To organize sustainable farms must not forget that a very important role the state should have it, primarily through appropriate legislation and not least financial support differentiated on the basis of efficiency and performance.

#### **4. Human Resources, Land and Technical Material Necessary to Ensure Sustainable Development of Agricultural Farms**

##### **4.1. Human Resources**

People who work with their production experience, the skills of their work with their scientific knowledge is the primary factor in agriculture production.

Share of rural population in total population has decreased from 60% in 1980 to 46% today. As we see the rural population is reversed and it will continue to measure social and economic progress in Romania. This decline occurred primarily due to modern agriculture, but the most industrialized and intensive agriculture is much environmental impact of agriculture is higher.

Studies on type farm rural households in Romania have revealed the following: households are created by the family, usually older man with a below average grade school, helped his wife and other family members, performing a community service.

In general, agriculture can be divided into three categories: owners, who work under (20%), and day laborers who do not have another job (Ministry of Agriculture and Food, 2006). Employment in agriculture is also aging, characterized by a high percentage of people over 50 years (31.3%) compared with 19.1% average for the economy.

In conclusion, we might say that farm work is generally a family business. Therefore, structural reforms in agriculture must consider the training of farmers and attracting young people especially in rural areas.

##### **4.2. Land Resources**

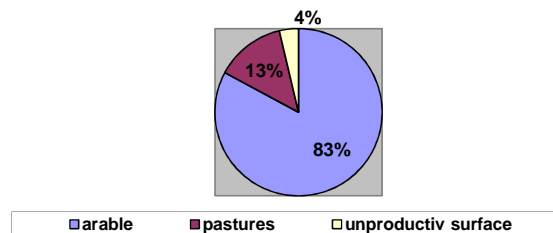
The role is crucial in ensuring the rational use of land supply, which is based on farming and other treasures throughout the world. Due to limited land and its importance as a factor in environmental

law and land policy established rules and measures at national and regional land use, particularly with regard to planning and carrying out land reclamation.

Potential land resources of mankind are much greater than those used in agricultural production, but the possibilities for reaching a new culture areas are limited, because many social factors, economic and natural. Around 64% of Romania's territory is used for agricultural production, 28% is forested, and the remaining 8% are other uses (built land, roads, railways, rivers, ponds and others).

**Table 1. Existing ground surface on BIOAGRA S. C.**

Categories of use	U.M.	Surface	% of total agricultural	% of arable
Total agriculture, including:	ha	1125	100	-
Arable, of which:	ha	932	82,86	100
- Cereals	ha	488	-	54,42
- bean	ha	10	-	1,07
- fodder	ha	192	-	19,76
- oil plant	ha	237	-	24,32
- medicinal plants	ha	4	-	0,43
Pastures	ha	151	13,45	-
Unproductive surface	ha	42	3,69	-



**Figure 1. Structure of agricultural land at S. C. BIOAGRA**

In conclusion, I would say that that area of land resources are satisfactory, the key problem is the structure and not least the size of farms. When the size farms will be optimal, then the land resources are properly exploited.

#### 4.3. Material and Technical Base of the Farm

Material and technical factors play a very important economically and socially. First, they have greatly facilitated work in rural areas and secondly, because labor productivity growth cheapened agricultural products.

Capital in the agricultural farm, the current technical and social restructuring requires new approaches, both in terms of volume of capital insured, technical structure and value and the fair allocation of additional investment. The volume of capital employed is determined by marginal productivity and interest rates, both components consisting of numerous risk and uncertainty. The current level of equipment in agriculture is unable to provide mechanical work done during the

optimal set of culture technology. Only by ensuring an optimal need of tractors and agricultural machinery will be able to practice sustainable agriculture on the farm.

**Table 2. The current level of equipment to SCBIOAGRA**

The type and brand of machine	U.M.	Year			2006/2008
		2006	2007	2008	%
Tractor U - 650	pieces	8	12	15	53,33
Disc Harrows	pieces	2	4	7	28,57
Tractor High Yield HP180	pieces	0	0	2	0
Auto tip for grains and fodder	pieces	4	7	8	50,00
Combine Class	pieces	0	1	1	0

Activity in the livestock sector has the following main activities of the sector specific fixed assets, such as:

- stables for cows - bovine 200capete two pieces;
- Youth cattle manure - 300 heads;
- barn for the birds - chickens 8500;
- cattle manure with a current destination maternity;
- saivan for sheep - 560 heads;
- 2 lanterns.

It must be made clear that the company takes on leased land and leased grown concentrated feed volume at the need. Unfortunately the society has aged equipment and construction of very large machines having already achieved some standardized ages. But the lack of financial funds, the company had to use the existing machinery park. Intervention with new investments is represented by large tractors and combines CLASS. Another very important factor in achieving sustainable agriculture is the use of chemical fertilizers. It is known, the optimal dose cultivation without chemical fertilizers and pesticides, results in poor yields, poor quality products due to pollution green. If by 1992, were used in society to 300-400 tons of chemical fertilizers, since 2008, the quantities used have decreased drastically, ranging from 150-200 tons. Causes of reducing the amount of fertilizers used in agriculture are numerous: lack of functioning markets, while emphasizing the gap between the growth rate of prices of agricultural and industrial origin at the expense of the latter, de-capitalization of farmers, etc..

## **5. Measuring Sustainable Development - The System of General Indicators at Farm Level**

The United Nations indicators emerged from the need to coordinate economic, social, demographic and environmental measure to ensure sustainability

**5.1. Sustainable cost-effective actions** are a fundamental indicator of economic and social progress. Experts say that the rent calculation purposes are to give people an idea of what they can consume without poverty. This statement is true nationally, so the actual rent is the maximum amount that a

nation can consume without jeopardizing their future assets. The concept of "rent" is therefore understood sustainable benefits for present and includes exchanges of assets (capital gain amounts to an increase in rent and capital loss equivalent to a reduction in rent).

Indicators of sustainable development must take into account mainly the environmental integrity of elements and structures and diversity of species and ecosystems. Some authors consider that a primary measurement of sustainable development must include:

- Indicators to pressure the company to report on the environment (contamination, resource use);
- Environmental condition indicators (biodiversity, ecological integrity).

## **5.2. Environmental Indicators Actions**

Environmental indicators are considered in specific areas: capital reserves and stocks, flows and deposits of waste sources, biodiversity, ecosystem integrity, the assimilative capacity of ecosystems to global changes in the ecosystem.

Latest research in the field, the structure of reference distinguished three groups of environmental indicators:

- The first group is oriented towards the causes that generate these problems (flows of emissions, use of natural resources);
- The second group wants to link the environment with the effect of human action (indicators of "effect", "quality", "status");
- The third group tries to quantify the response of society to improve the environment (indicated by the "response")

An important role is played by the **indicators for assessing biodiversity**. Biodiversity is the variability among living organisms from aquatic and terrestrial ecosystems and the ecological complexes of which they are part; includes diversity within species, between species and ecosystems.

**Biodiversity index** is the ratio between the total number of species and number of individuals in a biocoenosis.

## **5.3. The Indicators Used in Recording and Analysis of Sustainable Agricultural Farming**

To determine the effectiveness of agricultural activity should be calculated and environmental costs incurred by traders or farmers polluters if they directly contribute to environmental pollution.

It is very important to know who is responsible for actions on the environment, but more important is to determine who bears the consequences of this degradation.

Thus, sustainable farms will highlight:

- The cost of conservation or sustainability;
- Cost of health.

**The cost of conservation or sustainability (Cc)**

This cost is required to prevent or minimize degradation of the natural environment, so we could said to be an extra cost charged. An example might be that of low productive land. Where agricultural land would become unproductive due to more intensive exploitation and irrational, then that land would be pulled aside for a long time to rebuild productive capacities using appropriate technologies. The issue is who will bear those costs. A more viable way would be for government to provide subsidies and other financial incentives for farmers to carry out improvement works to conservation land and restore the land to agricultural use.

**Health cost (Cs)**

Regarding the cost issue is very delicate. Lately it was discovered that the basis for many cancer diseases and plant pesticides are used in large quantities. Farmers use large amounts of pesticides should support good science and the health cost directly. We have checked that this cost should not be introduced in the cost of production and health costs to be paid into a joint account for public health.

The main indicators used in the analysis of sustainable agricultural farming activities are:

- Indicators that reflect the economic or financial and economic outcome indicators (turnover, value added, net profit);
- indicators that reflect economic efforts, or indicators of economic and financial costs (operating expenses, financial, exceptional production costs per unit of product);
- Indicators of economic efficiency indicators of the potential use of technical-economic-financial (labor productivity rate of return. renewal and improvement of human capital along with the defense of natural capital are essential conditions for agriculture to be able to meet the needs of humanity now and in future .

**5.4. Analysis of External and Internal Factors****Analysis of external factors**

External strategic management audit is called environmental scanning or industry analysis. External audit to identify and evaluate trends and determine the events on which the company has no control such as strong foreign competition, population mobility, aging, information revolution. External audit reveals key opportunities and threats facing the association so that manager can formulate strategies to take advantage of opportunities and reduce the threats. Trends and events that represent opportunities and social threats, cultural, demographic, geographic, political, legal, governmental, economic, technological and competitive.

Its purpose is to achieve an external list of external environmental opportunities that will benefit the association and environmental threats that should be avoided. External audit tends to identify key variables that have noticeable effect.

**Social factors, cultural, demographic and environmental impacts:**

- social security programs implemented by government is an opportunity that can be successfully exploited by the company administrator.
- if the lifestyle of local residents is appropriate to the characteristics of market economy where the association can use this opportunity.

- traffic in the area is intense and where the association will distribute products more easily obtained.
- the life of the inhabitants in Romania is under threat because the income is low and inputs will be small, but in terms of a functioning market economy this may be an opportunity.
- confidence in the government while the business is integrated in a favorable industry policy is a business opportunity but only if the government considers as a source of revenue for the budget then this factor will be a threat to the association.
- attitude to work is an opportunity for regional population while the number of jobs in the area is reduced.
- attitude is an opportunity for savings in the specific romanian.
- government rules are seen as a threat as a simple market analysis shows a clear disregard of the government to maintain a level playing field and increased political patronage.

**Economic factors:**

- central budget and local taxes constitute a threat considering that in romania there are 225 taxes to stifling any business and requires managers to tax evasion for not being taken off the market.
- validity of loans will become a reality becoming more credible by lowering interest rates will lead to higher investment.
- interest rates are still high compared to lending rates in the eu further limiting access to credit.
- inflation is declining but still may pose a threat because it occurs in conditions of macroeconomic stability inflation rate is expressed as a single figure, which is still not specific to romania.
- branch that integrates economic association can be considered a priority for the government and in these circumstances the factor is appropriate but may be neglected by the government since the factor becomes a threat.
- an opportunity that can be created by specific techniques of consumer loyalty marketing is giving a revenue stability by regulating outputs.
- it is advisable for the manager that the upward trend in unemployment is that labor market supply is high to reduce the cost of production factor labor.
- it is imperative that productivity levels are high for the association to have a positive comparative advantage which will result in maintaining an efficient market.
- fluctuation of prices is a threat because the conditions in which the technical and economic analysis change the company's strategy to establish the prices of inputs will result in the nullity of the strategy adopted.
- fiscal policy is considered a threat due to the high share of income taxation of agricultural companies.



## 6. Conclusions

All countries have tried to promote agricultural development by funding research, providing support services and other forms of stimulating production by providing subsidies. This is what has allowed quadruple agricultural production in the early twentieth century, contributing to society in general. But at the same time, increased agricultural pollution and a number of landscape quality is degraded.

In Romania, issues of sustainable development of agriculture are more than poverty and lack of productive technologies, rather than applying cleaner technologies and high levels of consumption as in developed countries. However, sometimes the Romanian agriculture faces serious pollution problems, it became an easy victim, and without great opportunities for defense, the effect of various socio-economic activities taking place in our country.

Lately, people began to realize that environmental degradation is a continuing, defending the concept of sustainable development and sustainable agriculture default.

What is sustainable agriculture? Farms will be characterized by the adoption of sustainable practices and technologies:

- use advanced management techniques that maintain ecological integrity, both within and outside the farm;
- specific area and are flexible;
- maintain biodiversity, landscape beauty and other goods that are not assessed on existing
- markets; producers are profitable for the long term;
- are economically efficient from a social perspective.

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