

SUSTAINABLE DEVELOPMENT OF ROMANIAN AGRICULTURE WITHIN THE CONTEXT OF EUROPEAN UNION'S REQUIREMENTS

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Abstract:

The rich natural potential for agriculture in Romania is contrasting with the low level of economic performance. Progress toward sustainable development in rural areas depends on processes that lead to increased valuation of the natural resources by cropping and livestock breeding, capturing more value by growing the number of processing stages performed at national level for food production, improvements in the distribution of benefits with special focus on rural population, harnessing the benefits of stewarding natural ecosystems that play a key role for the overall wellbeing of the population, diversifying the structure of economic activities, and encouraging entrepreneurial involvement. European policies of rural development are supporting most of these processes, but within the national context there encountered specific challenges born by the low level of maturation for property relationships, fragmentation of land ownership and cropping plots, cultural patterns that create strong resistance to change, and lack of financial resources. The paper highlights several aspects in order to assess at what extent the Romanian agriculture is making progress toward European requirements.

Key words: Agriculture, rural development, natural resources, value chains, ecosystem services

JEL classification: O13, O18, Q18

INTRODUCTION

The concept of sustainable development means the effect of the integrated approach to decision-makers and policy, where environmental protection and economic development over time are designed to be complementary and mutually dependent (Scutaru, 2013). World Commission on Environment and Development (WCED), presented in 1987 in the report "Our Common Future" known as the Brundtland Report, for the first time by Gro Harlem Brundtland, the concept of sustainable development as being the development that follows meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Both on the short-term as well as on the long-term, sustainable communities need to consider carefully how to value economic resources, without inducing harmful environmental effects and threatening the cultural heritage.

Sustainable development pursues to accomplish simultaneous progress toward three categories of goals – economic, social and environmental. Economic goals include economic growth, equity, and efficiency. Social goals are delegation, participation, social mobility, social cohesion, and social development. Environmental goals are to maintain ecosystem integrity, preserving the economic potential of natural resources, biodiversity conservation and mitigating global issues such as climate change.

Agriculture, as economic sector that relies directly on the use of natural resources, is in the forefront of the sustainability debate and should become the leader of change by promoting innovative technologies and management. The European policy regarding agriculture and rural development integrated many sustainability goals and its implementation is expected to have a meaningful contribution to the development of agriculture by respecting social and environmental restraints. At what extent this processes are occurring in Romania and which are the specific challenges born from the features of the national countryside is questioned and discussed in order to

reveal real progress and to highlight sensitive areas that need more careful approach by central and local authorities.

STRATEGIC COMPONENTS OF SUSTAINABLE DEVELOPMENT

Sustainable development embodies the vision of a society that is able to solve the major social and environmental challenges within a continuous economic growth delivering prosperity and wellbeing more effectively (Bran, 2014). Therefore the pillars of sustainable development, acknowledged as the *triple bottom line* or *people, planet profit*, are economic growth, social inclusion and equity, and environmental protection. Hence, the goals of sustainable development could be stated as:

- Economic goals: growth, efficiency;
- Social goals: equity, participation, mobility, cohesion, social development;
- Environmental goals: lower carbon footprint, ecosystem integrity, biodiversity, healthy environment, regeneration of natural resources.

In order to achieve these goals there are necessary important changes compared to the current state of economic activities. These changes involve decisions made in a strategic framework and are known as the strategic components of sustainable development, namely:

- Management of production and services;
- Resource management; and
- Change management.

Fig. 1 presents the activities involved by each strategic component.

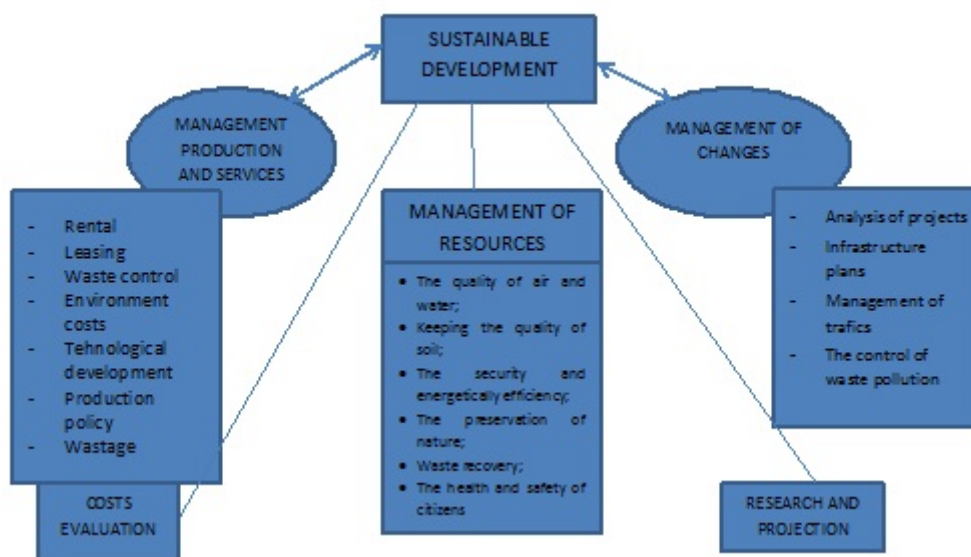


Fig. 1 Strategic components of sustainable development

Source: Rojanschi, V., Bran, F., Grigore, F., Ioan, I. (2006). *Cuantificarea dezvoltarii durabile*, Bucharest: Economica.

Sustainable development means an agreement between economic growth and social and environmental protection, detaching it from them present satisfaction and social development perspective.

The progress toward sustainable development is far slower than the conceptual evolution. Despite several decades since its proposal and widespread acceptance, the goals of sustainable development are still very distant from the realities, especially in developing countries. The Millennium Development Goals project, although ambitious and highly operation reveals that accomplishing sustainability goals is difficult. This process was considered of common interest and it was managed mainly by governments, at least at strategic levels. Experience proved that such

interventions are necessary, but will not be enough to avoid irreversible changes threatening humankind from both social and environmental perspective.

AGRICULTURE AND SUSTAINABLE DEVELOPMENT AND THE EUROPEAN REQUIERMENTS

The concept of sustainable development of agriculture involves many definitions, but all must include the human dimension in addition to environmental protection. Agriculture is amongst the most ancient human and economic activity addressing the basic need of food. Its productivity controlled the social development for centuries by saving time for more and more diverse human activities that underpinned knowledge development. Currently, agriculture is still a major sector with important social impact, since in developing countries most of the population works in agriculture. Further, the production process has a direct impact on food quality and safety triggering other social implications by health issues. Hence, the human dimension of sustainable agriculture implies complying with the following conditions:

- Sustainable farming technologies should be applied by farmers if these lead to less material losses and if they have access to specific technologies;
- Consumers demanding for safe food products are able to recognize these products in order to make an informed decision that expresses their commitment to support certain qualities of the products and production processes.

Agriculture is closely linked to the environment, its production being delivered by biological processes within technology driven ecological systems. Despite advancement in technological development major resources such as soil and water remain limiting factors since large scale production cannot be deployed without them.

Sustainable agriculture involves technological changes, but most importantly managerial changes. Technology should maintain productivity while reducing environmental impact, while managerial changes should improve the economic accessibility of food in a world where more than one billion people is still suffering by hunger. Innovation created major productivity leaps, but these were accompanied by similar growth of environmental damages. Therefore one of the dilemmas is how to steer innovation within the limits of the people, planet, profit framework.

The progress of agriculture toward sustainability could be assessed by using a number of indicators, out of which we selected the followings:

- The share of fixed capital used in agriculture in total fixed capital nationwide;
- The share of agriculture in total investments made investments nationwide;
- The share of agriculture in total energy consumption in the country's energy consumption.
- The share of agricultural land in the country's total land fund - higher share for agriculture (arable, vineyards, orchards) in total land fund of the country;
- Agriculture's contribution in GDP.

The European Union, as pioneer of environmental and sustainability initiatives at global level, considers agriculture of major interest in this respect. The Common Agricultural Policy was amongst the first strategic approaches that integrated social and environmental restrains for intensive production. Several priorities of the rural development are clearly targeting sustainability, while the others include sustainability goals as compulsory objectives to be accomplished with the specific ones. For instance, the strategic goals of the rural development include sustainable management of natural resources and mitigation of climate change to be accomplished by targeting as priorities:

- Restoration, preservation and strengthening of ecosystems that are related to agriculture and forestry;
- Promoting the efficient use of resources and supporting the transition toward a low carbon emission and resilient agricultural, forestry, and food economy;
- Promotion social inclusion, poverty reduction and economic development in rural areas.

Farmers and rural entrepreneurs will be supported in activities such as: afforestation of agricultural and non-agricultural land, voluntary agro-environmental commitments; voluntary application of organic farming systems; voluntary exploitation of agricultural areas hindered by various natural hazards.

ROMANIA'S AGRICULTURE AND THE EUROPEAN SUSTAINABILITY GOALS

Romania outstands within the European agricultural economy by the high potential of its natural resources, but also by the low level of productivity. The most fertile soils, such as chernozem, varied structure of the agricultural land by relief and climate, richness and availability of water resources, low level of industrial pollution are the main indicators of this potential. On the other hand, these lands' yields are far less than the ones gathered in France, Germany, Italy, Spain etc. although a quite large proportion of the population are working in agriculture (Voicu and Radulescu, 2015). Disparities of technological endowment, training, and inputs within an unstable political context that failed to succeed in achieving strategic goals are pointed most frequently as the causes of the low performance. Meanwhile, this is also interpreted as a good potential to make a leap toward sustainability since the natural capital was less depleted than it was the case of states where to most intensive technological solutions were applied.

In relation to the European Union, Romania is a medium-sized country with an area of almost 24 million hectares and a population of almost 20 million inhabitants. The landscape is varied, being almost evenly divided into mountains, hills and plateaus and plains. Romania has a temperate continental climate. More quantitative milestones are the followings:

- 62% of the total is land for agricultural purposes (about 15 million hectares). Out of this, 64% is arable land used for crops such as cereals, rapeseed, sunflower, soybean, vegetables etc., accounting for 0.45 hectares per capita. This situates Romania as 5th in Europe; 23% of the agricultural land is natural and semi-natural pasture; 10% grasses for fodder production; 3% is land used for plantations, nurseries and orchards. (fig.3);
- 26% of the surface is represented by forest (about 6 million hectares), out of which 3% is occupied by primary forests and secondary forests and 97% forest land;
- 4% of the total (about 0,8 million hectares) is occupied by surface water bodies, including the continental shelf of the Black Sea.
- 2% is degraded or have very low productive potential.
- 6% is occupied by land used for infrastructure.

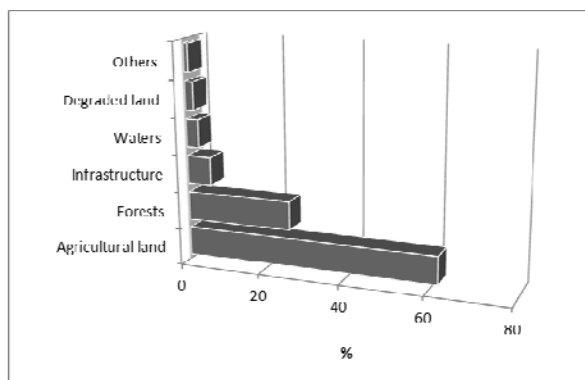


Fig. 2 The structure of Romania's territory by categories of use

Source: own representation using INS data

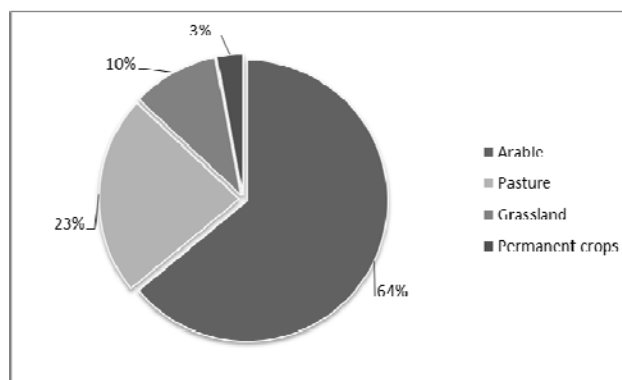


Fig. 3 The structure of Romania's agricultural land

Source: own representation using INS data

According to the National Strategy for Sustainable Development agriculture is in a state of decline due to unfair division of property, machinery and equipment with poor facilities, reduced use of chemical or natural ingredients and pesticides to the drastic reduction of the irrigated area, soil damage and lack of a functioning system of agricultural credit. Compared to other developed countries of the European Union, food consumption in Romania is declining for meat, milk, eggs, fish and certain vegetables and fruits, but instead shows an increase in cereal products.

The progress toward the ambitious sustainability goals of the European Union is fostered by a far reaching program designed by EU institutions and adapted to the local characteristics of agriculture and rural area. This is the National Program for Rural Development that faces now the second financial stage covering the period of 2014-2020. According to this program the goals to be achieved are expressed in terms of competitiveness, resources, and people and society (Hapenciuc et al., 2012).

Competitiveness is to be accomplished by strengthening research, technological development and innovation; improving access to information and communication technologies and the use and quality; improving the competitiveness of SMEs, the agricultural sector and fisheries and aquaculture sector. Regarding the first thematic objective, financial support will be granted for the analysis and research in agro-food and forestry fields by formation of groups operating in the European Innovation Partnership *Agricultural Productivity and Sustainability*, made up of farmers, foresters, researchers, consultants, companies, etc. So in this way are supported pilot projects, new product development, practice, processes and technologies, transfer of good practices.

With respect to improving the competitiveness of SMEs, the agricultural sector and fisheries and aquaculture sector there will be supported the investments for processing and marketing of agricultural products from the companies that process raw materials and aquaculture production by investing in processing fishery and aquaculture products (Pilato, 2014).

The resource related goals envisage:

- Supporting the transition to a low-carbon economy in all sectors;
- Promoting climate change adaptation, prevention and risk management;
- Protecting environment and promoting efficient use of resources.

There are financed investments in agricultural holdings and bio-fuel production, and investment in achieving biomass and other renewable energy types, with farmer's beneficiaries or other undertakings.

Protection of the environment and promoting resource efficiency will be accomplished by investments for reducing energy consumption in the agro-food sector. This component is divided into:

- Promoting employment and supporting labour mobility;
- Promoting social inclusion and mitigating poverty by investments in education, skill development and lifelong learning.

There is also the European Union Programme for Employment and Social Innovation which supports financially the practice of reform ideas and to develop best practices to scale up as helping

to accomplish the Europe 2020 goals. European programs support training for improving the correspondence between skill needs and productivity toward increased social inclusion.

CONCLUSIONS

The patterns of the economic interactions are to be changed by applying the measures designed for supporting sustainable development. All sectors of economy will undergo changes although some of them will be more transformed than others (Nastase and Kajanus, 2009). Agriculture is one of the sectors that will fall in the first category due to its close relationship with the natural processes that control the regeneration of the resources. The transformations will occur in technology, management, but mainly in economy since the most important limitation of food availability is not the physical access, but the economic one.

Romania's agriculture could be amongst the most productive ones in Europe if the status of the natural resources is to be considered. In fact, however, Romania's agriculture is low performing and fails to be attractive for strategic investors (Hapenciuc et al., 2014). The European focus on both social inclusion and environmental protection created opportunities to harness the drawbacks of transition that reduced the chemical inputs and the environmental impact of intensive agricultural technologies.

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