

## INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) BASED ON MODERN FARMING – SOLUTION FOR SUSTAINABLE AGRICULTURE

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### Abstract

*The state aid for agriculture has an important contribution to increasing the competitiveness of the sector and this necessitates additional resources that can improve the yield of agricultural production. These resources are represented by private institutions (credit, investment, insurance), which create an appropriate part of the demand for inputs. Romania's agriculture faces a real need for development as quickly as possible, through large and quick investments and the funds provided by the government are not enough to cope with such a challenge. Public-Private Partnership is a delivery/financing system that can be the best solution to this problem. The main objective of the paper is to study the deployment mechanism of the public-private partnership in the Romanian practice of agrarian development, as well as to identify some priority directions for its improvement. For the innovative development of agriculture, it is necessary to maintain a balance between the interests of the state and the private environment.*

**Keywords:** public-private partnership, agriculture, Romania, development, local action groups.

### Introduction

Public-Private Partnerships are a tool for cooperation between public authorities and private sector organizations to develop local development projects. Public-Private Partnership has been strengthened at international and European levels over the past 50 years, managing to generate more attractive opportunities for both investors and public authorities, while allowing for greater choice of how to implement strategic projects. Most EU Member States have adopted the solution of public-private partnerships, as cooperation in different forms between public authorities and business. The purpose of a public-private partnership is to provide funding for the construction of an infrastructure or the provision of a service. Law no. 178/2010, the normative act that establishes the public-private partnership in Romania, resulted from the growing need for such a contractual formula. Public-private / nonprofit partnerships are regularly touted, sometimes to the point of excess, as being innovative and all-embracing solutions to these budgetary constraints. Such contractual arrangements are typically linked to increased quality, improved service delivery, cost savings and lower cost of financing.<sup>26</sup>

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<sup>26</sup> Alexandru V. Roman, 2015, A Guide to Public-Private Partnerships1 (PPPs): What Public Procurement Specialists Need To Know, Nigip Research Report, Executive Summary.

It is obvious that, in order to improve the quality and quantity of products, agriculture needs more attention, especially after Romania's accession to the European Union, when the free movement of goods increased, and the land deficit started to increase year after year. This phenomenon, together with climate change, is a major challenge for agricultural sustainability that needs to be tackled through public endeavors and private-sector aid, using new technologies and fostering partnerships between institutions and sectors.

In order to show the real potential of agriculture for sustainable development, higher investment values are required, but the amounts allocated from the state budget for this sector have stagnated the increase of this potential. The risks of doing business in the agricultural environment are constantly reduced by innovative partnerships aimed at bringing together public sector actors, the private sector and civil society, being promoted as a way of pooling the necessary funds. Being often called public-private partnerships, these initiatives generate high expectations by contributing to sustainable development, including small farmers. Even so, many unanswered questions remain about projects that might be in compliance with the law on public-private partnerships, but also about their effectiveness in meeting all the objectives. Although there is a lot of evidence to prove the efficiency of public-private partnerships for the development and modernization of the agricultural sector, poverty reduction and inclusion remain two difficult issues to solve. When deciding to form a partnership, the decision-maker's target will have to be a partnership that provides the funds needed to generate public benefits.

Amid resources and expertise of government limited partnerships Innovative together stakeholders from business, government and civil society are promoted increasingly more as a mechanism to improve productivity and stimulate growth in the agricultural and food worldwide. Frequently referring to public-private partnerships (PPPs), these initiatives are common in sectors such as infrastructure, health and education, but their application in the agricultural sector is relatively new.

## **1. Literature review**

The phenomenon of public-private partnership cannot be approached without knowing the co-operative ideas of the economist Gromoslav Mladenatz. Being a great theoretician of cooperative law, he has produced numerous studies on the contribution of co-operation to agricultural production. In his opinion, cooperation in agriculture has the role of solving the problems encountered by small farmers. Cooperative structures for the valorisation of production can fulfill a number of functions that are beneficial to farmers, such as: guaranteeing a price that can be remunerated by producers, capitalizing the producers on the market, and creating stable prices (Mladenatz, 1935 *Agricultural Cooperatives*, Bucharest).

This synthesis was based on the works of Marin Chiritescu-Arva, a great agronomist, pedagogue, economist and Romanian theorist of cooperative agriculture. Arva's conception is based on the following arguments: the inefficiency of small households, which represented the majority of farms in agriculture, the lack of their chances to cope with large farms and the lack of capacity of small households to benefit from technical progress and science (M. Chirișescu-Arva, *Production Cooperative, Dynamic Factor of Salvation of Small Agriculture*, 1931, Bucharest). In his view, the joint effort could integrate small producers into the manufacturing class, placing great emphasis on the economic advantages, as well as the social benefits that the cooperative structure has.

Law no. 219/1998 was the first normative act that encouraged the development of public projects with the help of private companies, but the biggest impact of the increase of the number of such projects was Emergency Ordinance no. 16/2002, which was replaced at four years by Emergency Ordinance no. 34/2006.

Reporting to the 21st century, the concept of public-private partnership has grown especially since the challenges in our country have arisen with regard to the development and consolidation of the market economy, the development of the business sector, the need for local public administrations to find the necessary procedures for obtaining financing, but also after Romania's integration into the European Union. Also, the study "Rural Partnerships: Civil Society Involvement in Rural Development" (Thematic publication No. 37, 2<sup>nd</sup> year, www.madr.ro) has contributed to the mechanisms needed to make the role of civil society in rural development and building a well-organized local community. It offers the proposals and ideas of specialists in the field, as well as association models from Europe that can offer ideas and solutions for the partnerships that will be established through the support of the National Rural Development Program 2014-2020.

## **2. The involvement of civil society in public-private partnership projects - a solution for rural areas development**

The benefits of public-private partnerships are numerous. These are the result of the appropriate economic operational efficiency for the private sector, combined with the public sector, which has the role of creating a beneficial environment for society. The decision of small farmers to get involved in public-private partnerships is a proof of the effectiveness of this form of association by increasing the revenue generated by easier access to the market, but also by increasing the quality of goods and reducing the costs of new technologies farm. The dialogue and evaluation spaces of a public-private partnership are filled by different interest groups.<sup>27</sup>

For public sector partners, in addition to achieving the socio-economic objectives associated with the projects, the general benefits of PPP engagement were the strengthening of public sector institutions and skills in project design and management. At company level, benefits have been reported in terms of increased sales and market share and / or increased availability of raw material deliveries. The PPP mechanism is designed to address the issue of accessibility by pooling funds from different sources to overcome the limited funding available in the public sector. Local sustainable partnerships are needed for the proper development of local communities, which will help to obtain the necessary financial resources. In this development process, which is quite a long one, a very important role is played by the civil society, which is said to be the third basic sector with a special influence on the community, but also on the market. The evolution of civil society in Romania has been involved in the development of agriculture through its participation in the creation of local strategies for sustainable development. PPPs often deal with the supply of essential services in monopoly (or near-monopoly) conditions.<sup>28</sup>

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<sup>27</sup> Graeme A. H., Carsten G., 2014, Public-private partnership: The passage of time permits a sober reflection.

<sup>28</sup> World Bank Group Research, 2014, Public-private partnership – Reference Guide, Version 0.2, p. 25.

The development of Romanian agriculture does not refer only to the central, regional or national level. Ensuring the development of rural areas is only possible with the involvement of all stakeholders (civil society, local authorities) by organizing a close partnership between the two. There are two models of partnership that work locally: the first model is to create a new legal entity that aims at meeting local partners. This entity must be able to respond in front of the population, but also in front of funding sources, with the role of ensuring the balance between the two parties. The second model that can be implemented refers to the formation of a partnership to be represented by a responsible body with legal and administrative experience, under the leadership of a committee made up of the rest of the partners, with the aim of making decisions or selecting projects, which uses the same principles in representation, accountability and transparency as in the previous model.

Over the years, the European Commission has been able to develop and implement specific tools for community development and for mobilizing structures at the local level. Over the last two decades, LEADER's<sup>29</sup> approach to local, community-led development funded by rural development funds has supported participation in these areas in analyzing the potential of specific regions, proving to be a successful tool in implementing policies Development. The LEADER Group has been permanently supported by the European Union since 1991, becoming one of the most important elements of rural development policies, being widely accepted throughout Europe. LEADER is also a method of mobilizing and promoting rural development in local rural communities and an effective tool in situations and in different areas by adapting rural decisions to the diverse needs of rural areas. This instrument also plays an important role in reducing economic and social imbalances and disparities between urban and rural areas. In order to achieve the desired objectives, an enabling environment needs to exist with adequate structures in place both for the governance and management of public-private partnerships in the agricultural sector.<sup>30</sup>

In Romania, implementation of the LEADER approach and Local Action Groups (LAGs) started in 2007-2013 through the National Rural Development Program (NRDP). In 2011-2016, the territory was covered by 239 LAGs<sup>31</sup>, around 142 000 km<sup>2</sup>, representing around 65% of the eligible territory and 60% of the eligible LEADER population. The eligible LEADER territory is represented by administrative-territorial units (communes and small towns with a population of up to 20,000 inhabitants). For the 2014-2020 programming period, LEADER develops the innovative character of the integrated approach and continues to fund actions to harness local resources and promote local specificity. At the same time, following the general and specific objectives of the CAP and the NRDP, LEADER implies the development of local communities in a manner tailored to their needs and priorities. The added value of this approach derives from those local initiatives combining solutions to existing problems at the local level, solutions reflected in actions specific to these needs. Despite their differences, the European LAGs are the main actors in the rural development of Europe.<sup>32</sup>

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<sup>29</sup> Liaison Entre Actions de Développement de l'Économie Rurale (legături între acțiuni de dezvoltare economică rurală).

<sup>30</sup> FAO, 2016, Public-private partnerships for agribusiness development A review of international experiences, p. 105.

<sup>31</sup> <http://www.madr.ro>

<sup>32</sup> Role of Local Action Groups in Improving the Sense of Belonging of Local Communities with Their Territories, 2018, Menconi M., Artemi S., Article, p. 2.

### **3. Partnerships - rural development through the participation of NGOs**

Partnerships are not simply tools for finding complementary funds; they require a commitment from all the partners.<sup>33</sup>The concept of public-private partnership generally expresses a way of cooperation between public authorities and the private sector (non-governmental organizations or companies), with the aim of carrying out projects aimed at local development from all points of view. The sustainable development of rural areas is one of the main objectives of the European Union. It is necessary to promote a general harmonious development, contributing to reducing disparities between the levels of development of the different regions. At the national level, the Common Agricultural Policy is pursued, which involves a set of measures planned and promoted by local and central public authorities in partnership with various "actors" (private or public). This policy aims to ensure dynamic and sustainable economic growth (through the efficient use of agricultural potential, to improve living conditions) and to promote diversity and quality, respecting the variety of agricultural traditions of Europe and, implicitly, of Romania. NGOs are private organizations formed of groups of people with common interests who support and promote the interests of society and support the development of different communities. Also, basic organizations or people's organizations, set up to help others, are also considered. These community organizations are typically formed from groups of individuals who have been associated to promote their interests, such as women's associations, youth clubs, cooperatives and farmers' associations.

Long-term partnerships between NGOs and local public authorities can lead to actions to stimulate entrepreneurial culture and sustainable development in rural areas, and to further promote equal opportunities for unoccupied social categories in rural areas (young people, middle-aged people), providing applicable skills in personal, family, small businesses and businesses.

#### **Results and discussions**

The results achieved have highlighted the fact that, while there is evidence of positive contributions to sustainable agricultural development objectives, there remain some unresolved issues related to the impact of PPP on poverty reduction and inclusion, which still needs to be addressed. When deciding whether or not to engage in an agri-political PPP, decision makers should aim to ensure a partnership that represents the value for money and generates public benefits that outweigh the benefits that could be gained through alternative procurement or private investment only.

#### **Conclusions**

Since PPP projects will make private financial resources complement the public administration effort and the risks will be shared between the public and private partners, this type of project could certainly play an important role for a rapid and healthy economic development in Romania. However, we do not have to idealize this kind of projects or consider them the only lifeline of the Romanian economy. Due to the complexity and risks involved, public-private partnership projects can be either great successes or major failures. The proof is that these projects have been carried out in Europe in the last 10-15 years.

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<sup>33</sup> The International Food Policy Research Institute (IFPRI), 2008, Building Public–Private Partnerships for Agricultural Innovation, p. 1.

Although the public-private partnership has been a success in some European Union countries, the legislation in our country has failed to make this type of private partnership attractive, and this is the main reason why a small number has so far been concluded of partnerships. The new law on public-private partnership, which brings important changes, harmonized with the good practices in this area, was presented in the Green Paper on public-private partnership and Community law in the field of public procurement and concessions. It aims at: a.) attracting private financial resources to carry out public projects; b.) drawing foreign investments; c.) creating new jobs; d.) improving the performance of the public sector in the implementation of public projects; e.) reducing immediate pressure on public finances; f.) identification of new possibilities for attracting European funds.

Although the new legislation clarifies the public-private partnership, the legislative provisions remain more motivating for public authorities than for the private sector, which is why the law on public-private partnership should be corroborated in order to produce its expected effects with other legislative changes that would create additional benefits for prospective investors. The advantages we are talking about here could be, for example, those of a fiscal nature.

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