

STUDY ON IMPLEMENTED AND FUTURE PROJECTS FOR SUSTAINABLE DEVELOPMENT IN AGHIRESU AREA, CLUJ COUNTY

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Abstract

The study aimed the development of the rural environment in Aghiresu area, for a sustainable and inclusive economy, necessary for the ambitious targets of the member states of the European Union. The National Rural Development Program is considering projects to support agricultural practices that protect the environment. Through sustainable agriculture, the natural space is preserved, the landscape is protected, and biodiversity is defended. Identifying future projects, favorable to the Aghiresu area, Cluj County is an important factor for sustainable rural development and environmental protection. Through the active involvement of local authorities and financial support from the European Union, projects that are important for the local community and also for neighboring areas have been developed. Through inadequate farming practices the soil degradation has been increased. Measures for soil protection and restoration by reducing the amount of fertilizers and pesticides have been shown to have beneficial effects on the quality of agri-food products, animal welfare and human health. Agri-environment schemes have been beneficial for the protection of soil resources. Soil improvement and waste treatment measures lead to a healthy environment.

Keywords: soil erosion, slope stability, waste treatment, environment.

INTRODUCTION

The rural environment is a space with great importance for Romania, considering the significant area, namely 90% of the entire country. The share of rural residents is among the largest in Europe, over 46% of the total population. Starting from this data, it can be noticed that the development of the rural environment through sustainable development projects represents a main starting point for sustaining and future of the agricultural sector and agricultural activities. For the rural and urban population, the need for food can be mostly satisfied through farming on fertile land from rural areas, where much time has to be spent for work in nature, and considerable amounts of money must be invested for the superior quality of the soil (Dirja and Salagean, 2015; Omar et al., 2013). The projects that have improved living conditions in rural areas can be found in good quality infrastructure, land improvement activities, and rural tourism development (Grigore et al., 2009; Eswaran et al., 2001). In this context, this paper presents an analysis of the projects developed in the Aghiresu area, in order to highlight the significant investments made in road infrastructure as well as several land

improvement activities for the development of agricultural activities, based on data from the period 1990-2017.

MATERIALS AND METHODS

The study was made in the North-West part of Romania, Aghiresu area, Cluj County. In order to characterize the rural environment, the data used refers to types of projects developed, the areas where they were implemented, the value of the investments, and the number of inhabitants who benefited from the projects. The data were collected from the Aghiresu Local Council, Cluj County, as well as from the website of the National Institute of Statistics - INSSE, and have been statistically processed and interpreted.

RESULTS AND DISCUSSIONS

Located in Transylvania, in the „Dealurile Cluj” area, Aghiresu is one of the 75 existing communes in Cluj County, and is one of the most important areas. Surface where the study was applied has 105.8 km² and it is situated at an altitude of 447 m. The economy of the area is based on surface mining, agricultural production, animal husbandry, trade activities,

handicraft, and tailoring. To promote the area and bring the necessary services closer to citizens, the economic investors were supported by local authorities, so that in Aghiresu-Fabrici was built a fuel station and a bank unit, and at the same time was arranged a minimarket, these being just some of the local investments after 2000. Unfortunately, the lack of necessary funds for the development of the area after 1989 has determined this area to develop very little in the period 1990-2000, when only maintenance works was done. No significant projects have been made for the sustainable development of the area, even more, the number of employees in the enterprise has been reduced and many locals had to start commuting by train in Cluj-Napoca or in Huedin, where they have found a job. In the studied area there is a population of 6755 people (2017). The research also highlighted the fact that the poverty rate was high for this period, benefiting even from humanitarian aid from some developed European Union countries. After the integration of Romania into the European Union in 2007 and until now, it has been noticed that in the Aghiresu area, a large number of people have gone looking for a better paid job in other developed countries. Of these investments, it should be noted those made through the European SAPARD program, through which it was introduced the sewerage system in Aghiresu-Fabrici, the most populated village of the commune, a project worth 829,971.63 Euro and which was accomplished with many difficulties between October 2002 and May 2007 (Figure 1).



Figure 1. Sewage treatment plant from Aghiresu-Fabrici

In 2009, through the provisions of O.G. No.7/2006 on the establishment of the Rural Infrastructure Development Program, the sports centre in Aghiresu-Fabrici was modernized; the

football field was also rehabilitated, by a project that worth 53,576 Euro, an investment with a special importance considering the possibility, afterwards, to organize sports competitions and increase the health of young people in the area (Figure 2).



Figure 2. The sport base and football field from Aghiresu

In 2011, a project for the extension of the water supply and waste water sewerage network in Aghiresu-Fabrici was implemented.

Through the project of the National Agency for Land Reclamation (ANIF) Cluj, in 2014 was made the reception for the work „Regularization of leakage on the slopes and prevention of landslides in Somesul Mic hydrographic basin, Valea Inucului sub-basin, Cluj County”, through which an area of 450 hectares was rehabilitated by an investment of 238,961.201Euro (Figure 3).



Figure 3. Land reclamation works in Inucu area

In 2015 have had begun works in order to achieve construction-installation works on the completion of the investment objective: „School sports hall with level of local competitive sports practice, handball field and 150 seats for spectators, Aghiresu-Fabrici village, no. 367, Cluj County”, the estimated price of the works was 811,802.446 Euro.

In 2016, with the non-reimbursable financial support of AFIR (Agency for Rural Investment Financing) the project for the modernization of communal roads, in Aghiresu-Fabrici village and endowment of the house of culture, in the commune of Aghiresu, the second place after the number of inhabitants, a project with a total eligible value of 113,074 Euro. In September 2016, Cluj County Council started a comprehensive program of maintenance and repair works aimed at a section with a total length of 22.4 km of the county road DJ 108C Gârbău - Aghiresu, which is a very important investment for improvement of the quality of life (Figure 4).

Sustainable rural development in the studied area had as a priority the creation of better living conditions for the inhabitants, attracting

investors and combating the phenomenon of migration of rural youth to urban areas.



Figure 4. Modernization of communal roads

In the study, it has been noticed that significant amounts have been allocated to infrastructure, which has improved the quality of life in the Aghiresu area. In the chart below (Figure 5) it is represented the value of significant investments in Aghiresu area, during a period of ten years, presented above in the paper.

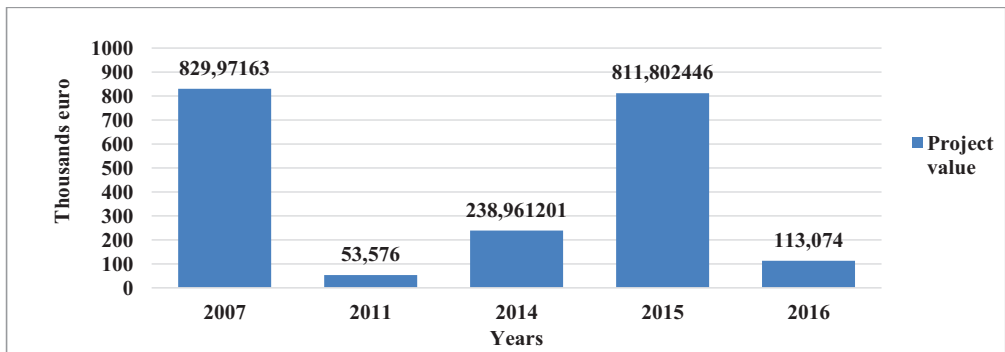


Figure 5. The value of significant investments in Aghiresu area, during a period of ten years

Through specially designed programs, in order to support the preparations for the accession of the countries of Central and Eastern Europe, starting with 2002, the Special Accession Program for Agriculture and Rural Development (SAPARD) was implemented and then, after its reorganization by the Romanian Government, continued in our country with the name APDRP - AFIR.

The Local Action Group NAPOCA Porolissum contribute to the socio-economic development in the area and comprises 13 communes, namely Aghiresu, Capusu Mare, Gilau, Maguri-Racatau, Izvoru Crisului, Manastireni, Risca, Marisel, Belis, Margau, Calatele, Sacuieu, Sancaiu and the Huedin town. The research has shown that road infrastructure is of good quality and has connections with national

roads and highway sections, which greatly contributes to raising the quality of life, and is an essential factor for freight traffic and road transport. The Aghiresu area is significant by their numerous subsoil riches, such as quartz sands, kaolin and dacite tuft. In the studied area there is also the natural reserve „Gipsurile de la Leghia”, a natural monument, a protected area of national interest that corresponds to IUCN, IV category. Through the serious involvement of local authorities in Aghiresu, for the problems that the community is still confronted with, solutions have been identified and projects have been implemented and, according to the data obtained, it results that other projects will be carried out, which will support the economic development of the area and the fight against the poverty.

The variety of gypsum in the area, called alabaster, has been exploited for decades to make decorative and handicraft articles. Setting up the local action group and implicitly the development of the area through the projects that will be presented below, have led to the improvement of the quality of life of the inhabitants and to the reduction of poverty; for the entire G.A.L. the weighted average for poverty, indicates 33.31% and for the Aghiresu area 28.9%, according to data corresponding to 2016 (INSSE-2018). The new rural strategy for Romania, by implementing the sustainable rural development tools, should result in the Romanian rural structures getting compatible with the EU rural structures in a short period of time. At the same time, the Romanian rural area also needs a modern infrastructure, correlated with the present needs of life in the countryside and with the complex rural economic activity (Oțiman, 2008). Considering the way of evaluating and re-evaluating the administrative-territorial units in terms of the tourism potential of the territory, which was carried out on two levels, the evaluation of the concentration of the natural and anthropic tourism resources and the diagnosis of the technical and tourist infrastructure dysfunctions, the studied area obtained assessment note 4, which is a good score compared to the other communes in the neighbourhood (<http://www.mdrap.ro>). Statistically, many young families in the commune have gone to work in other EU countries, which have led to a decline in the number of people employed in agriculture even though there are real opportunities in the area for the development of organic businesses, agricultural land being of good quality. Future projects for the studied area, regarding sustainability are building a synthetic football field at Aghiresu-Fabrici school, and the rehabilitation of eight smaller houses of culture in villages belonging to Aghiresu. During the year 2018, the priority for local authorities is to start finding financial funds for the sewerage works in Aghiresu village, the

second place as the number of inhabitants in the area. Although the population in the area it is heterogeneous, most of the inhabitants practice the commuting, considering the possibility of finding better paid jobs in the city of Cluj-Napoca. A more and more obvious lack of the studied area was found to be the absence of the authentic countryside.

CONCLUSIONS

The investments made in the past 10 years in Aghiresu commune have been created an important change related to improving the quality of life. Sustainable development of the area through the projects presented in the research has shown that younger generations will have good development conditions in rural areas and will not have to migrate to urban areas.

Through future development projects in studied area, will be offered attractive conditions for economic investors and so will be created new jobs, well paid, in the rural area.

Support for investment in infrastructure and rural economy will lead to poverty reduction, thus contributing to inclusive growth, these measures being provided for in the Rural Development Strategy of Romania 2014-2020.

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