# THE INFLUENCE OF E.A.F.R.D. ON THE ACCESS INFRASTRUCTURE OF A TOWN IN THE NORTH-EAST REGION AND ON THE ECONOMIC SECTOR IN ITS VICINITY

Alexandru – Dragos ROBU<sup>1</sup>, Mioara MIHĂILĂ<sup>1</sup>, Stejărel BREZULEANU<sup>1</sup>, Andy Felix JITĂREANU<sup>1</sup>, Dan BODESCU<sup>1</sup>, George UNGUREANU<sup>1</sup>

e-mail: robu\_dragos@yahoo.com

#### Abstract

The paper aims to emphasize the influence of an 996,027 Euros investment from non-reimbursable European Agricultural Fund for Rural Development (E.A.F.R.D.) grants on a local community and the local economic environment. The working methodology consisted in the analysis of the documents that were the basis of the financing, including budgets and specific documentation. Data from the reports published by the Rural Investments Financing Agency under Ministry of Agriculture and Rural Development were also used. The EU's rural development policy, aligned with the Common Agricultural Policy, aims to achieve three long-term strategic objectives: stimulating the competitiveness of agriculture; guaranteeing a sustainable management of natural resources and combating climate change favouring a balanced territorial development of rural communities, especially by supporting local economies and creating and maintaining jobs. Through this investment, it was proposed to modernize a network of agricultural exploitation roads with a total length of 11,349 m that serves an agricultural area of 1,178 ha, on the territory of the town that is the beneficiary of the financing. The number of modernized road sectors was 21. By implementing the project, access to a number of 11 economic agents from the agricultural field was facilitated and ensured, and 7 non-agricultural economic agents became directly accessible.

**Key words**: European grants, local business, transport infrastructure

The European Union rural development policy, by its Common Agricultural Policy, aims to achieve three long-term strategic objectives: stimulating the competitiveness of agriculture; guaranteeing a sustainable management of natural resources and combating climate change; favoring a balanced territorial development of rural communities, especially by supporting local economies, creating and maintaining jobs.

Romania's rural development strategy is part of the reform and development context proposed by the E.U.

Through the Common Agricultural Policy, Romania benefits from two types of financial support: direct payments granted under the 1st Pillar and non-reimbursable financial grants granted on the basis of investments made by rural investors, through the 2nd Pillar (NRDP 2014-2020) (Robu A.D. *et al*, 2021). These investors cand be private (entrepreneurs in the agribusiness or with different types non-agriculture businesses) or public units, like townhalls.

There are numerous strategies, policies and tools for improving working conditions in all types

of farms, especially those of subsistence and semisubsistence. Based on the statistics compiled by the relevant institutions of the Member States, the decision makers issue Recommendations which are transposed into the national legislation of each state. Alternatively, a number of instruments, in particular financial ones, are being promoted to improve the current discrepancies between Member States. All these initiatives are implemented on the principles of the Common Agricultural Policy (Robu A.D. *et al*, 2019).

The authors were motivated to carry out this investigation because the impact of these types of investments in the rural area is significant. Also, from the studies carried out, there is no major concern or specific literature or papers regarding this branch, i.e., studying the influence that access infrastructure has on rural communities.

## MATERIAL AND METHOD

The necessary studies and approaches for development of this paper have been carried out during 2021-2022. The primary data was the main source of information. The authors have gained

-

<sup>&</sup>lt;sup>1</sup>Iasi University of Life Sciences, Romania

access of the Townhall financing project, financial statements and accounting statements. For studying these documents, a series of visits were carried out at the unit's headquarters. Since the Townhall has several departments, studies among various documents were carried out e.g., financial documents, land possession documents, access infrastructure documents etc.

On the other hand, data from secondary sources, respectively the specific literature in Romania and abroad was used, including the official reports of the Agency of Financing of Rural Investments or other official documents issued by the Ministry of Agriculture and Rural Development (NRDP, 2022).

Both the data obtained in the analysis of the Townhall documents as well as those of the specialized literature were processed and interpreted in order to highlight the advantages of the 996,027 Euro investment that this town is currently implementing.

### RESULTS AND DISCUSSIONS

The town under study, consisting of the main locality as a residence and a number of three component villages, is located near the triple border Moldova-Romania-Ukraine (north). It is the northernmost town of Romania and has a population of 9,893 inhabitants (2019). It is located approximately 35 km away from the municipality of Dorohoi and is bordered to the north by the Prut River (Romania-Ukraine border), to the east by Păltiniş commune, to the south by Movileni commune and to the west by Hudești commune.

The precarious state of the exploitation roads in the component localities of the town taken into study created a series of negative effects, the most significant being the following:

- ightharpoonup difficult access to the main economic, social, cultural destinations and to agricultural holdings in the area;
- the lack of a detour route for personal, commercial traffic and agricultural machinery that contributes to a heavy traffic on the national road DN 29A and on the county roads DJ 298A and DJ 291D;
- ➤ lack of interest from some investors in the development of economic activity in the area;
- the difficult education implementation, generating in many situations school dropout and non-attendance at classes;
- ➤ lack of interest in establishing teaching, medical, etc. staff in the commune. medical and veterinary insurance is carried out with difficulty;
- > unattractiveness for the inhabitants or foreigners to settle down and build houses;
- ➤ difficult access for the emergency intervention vehicles;

Failure to ensure minimum conditions for people's health, comfort and hygiene.

In conclusion, the previous situation of the roads determines a low standard of living, a state of poverty and backwardness of the localities that are part of the town taken into study and the preservation of a huge gap between Romania and the countries of the European Union. The above arguments and concerns were the main reason that the municipality of the studied town decided to apply this financing project regarding the access infrastructure (roads) modernization.

The routes proposed to be modernized ensure the access of the inhabitants of the villages of the studied town to the agricultural units and properties outside the village, as well as the creation of alternative routes for taking over the agricultural traffic from a portion of the national road DN 29A and from the county roads DJ 298A and DJ 291D.

The investment specifically involves the modernization of 21 agricultural exploitation road segments located in the public domain of the studied town, with a total length of 11,349 m.

The modernization was necessary to remove the deficiencies found in the operation of the road network on the territory of the studied town in Botoșani county, with the achievement of an efficient operation, at optimal parameters, in accordance with the current rules and regulations of the European Union. These rules and regulations aim at the efficiency of agriculture and other activities in the rural environment with high crop yields, with reduced consumption of resources and a minimum cost of other activities determined by the establishment, maintenance and exploitation of production within agricultural holdings. Thus, these steps intended to modernize the transport infrastructure, which consists of road works for developing the road network were justified. By its specificality, the investment does not produce income directly, but contributes to reducing the expenses incurred by the beneficiary for maintenance and avoiding possible losses of agricultural crops, which is ultimately reflected in the economic result of the agricultural activity. Starting from this setting, the revenues that will be taken into account in the present analysis, will be found in the cost reductions of the objective subject to modernization.

For this, the expenses incurred for the maintenance of the agricultural road network in the current situation were compared with those predicted to be incurred after the investment is put into use, according to the table.

Table 1

Annual costs comparative summary table

Specification	No project		With project		Difference	
Currency	Lei	Euro	Lei	Euro	Lei	Euro
Annual maintenance costs	576,300	116,485	261,600	52,876	314,700	63,609
Maintenance work documentation cost	28,800	5,821	13,100	2,648	15,700	3,173
Total costs	605,100	122,307	274,700	55,524	330,400	66,783

Source: ARIF\*\*\* financing project, own compilation

As can be seen from *Table 1*, there are at least two categories of expenses that will be reduced once the investment is made with the help of non-refundable funds. The first category of expenses is represented by the repair of road segments that, in the absence of this modernization, will need at least annual repairs. The second category of expenditure consists of the legal documentation required for these repairs. As it is known, the legislation requires, before any intervention on any category of construction, a series of specific studies and documentation that involve specialists and relatively high costs. It can be seen that the townhall will benefit of an economy of at least 66,783 Euros per year just by

reducing the maintenance costs. But there are also other financial and other benefits, as previously detailed.

A synthesis of the financial profitability indicators, determined by the authors, is presented below, in *Table 2*.

Any investment carried out through European funds consists of eligible expenses and ineligible expenses. As is known, ineligible expenses are not subject to non-reimbursable support. However, they must be carried out and the source of the necessary amounts is provided by the beneficiary either from loans or from own funds.

Table 2

Financial profitability indicators synthesis

Indicator	Lei	Euro	
Total investment VAT included	6,431,590	1,299,994	
Total investment VAT excluded	5,412,540	1,094,017	
Rate of change		5%	
Internal Rentability Rate	7,52%		
Cost / benefit		0,77	
Cumulative net cash flow	2,544,000	514,209	
Annual gross profit	96,900	19,586	
Return of investment, years		>25	
Investment duration, months	24		
Gross profit rate	1,91%		

Source: ARIF\*\*\* financing project, own compilation

In the current situation, the source is represented by the city's local budget.

The amounts mentioned in the table include both eligible and ineligible expenses. The first two lines differentiate the amounts with and without VAT of the whole investment project.

The reason why the recovery period of the investment is relatively long is given by the fact that, by its nature, as previously mentioned, this investment does not bring direct income. The investment will however bring indirect income and a higher standard of living for the residents, or tourists in the area. In addition, it will bring much better production conditions for the agricultural and non-agricultural economic units in the area and in the whole Botosani county.

The financial plan, shown in *Table 3*, represents a very eloquent financial centralization

of the entire investment. As can be seen, it is divided into three segments both vertically and horizontally. The vertical segments show the eligible expenses, the ineligible expenses and the project total. Horizontally, in contrast, it is divided between the non-reimbursable financing received from ARIF, the contribution of the investor (townhall) and total values. In addition, it also includes the percentage intensity of the support and the amount of the advance financing requested from ARIF.

As can be seen, the financier contributes to the circulation in the economy of an amount of 1,299,995 Euros based on a grant of 995,906 Euros. The creation of 25 jobs, during the implementation, the value of VAT and an eligible value of 304,089 Euros are incorporated into the

economy based on the implementation of this

investment.

Table 3

Financial plan of the investment

Specification	Eligible expenses		Ineligible expenses		Project total		
	Lei	Euro	Lei	Euro	Lei	Euro	
Non-refundable european grant (EU co-financing and national co-financing)	4,927,146	995,906			4,927,146	995,906	
Local budget (townhall)	0	0	1,504,450	304,089	1,504,450	304,089	
Project total	4,927,146	995,906	1,504,450	304,089	6,431,596	1,299,995	
Public contribution percentage	100%						
Requested advance amount	2,463,570						
Requested advance percent	50%						

Source: ARIF\*\*\* financing project, own compilation

In addition, as will be seen in *Figure 1*, a number of 7 non-agricultural economic operators and a number of 15 agricultural economic

operators will be directly served by the 21 modernized road segments.

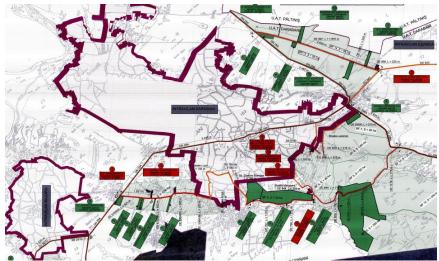


Figure 1 – The 21 road segments subject to modernization and the emplacement of the 22 economic operators directly served by the road segments (Source: ARIF\*\*\*

All these have profit centers near the modernized road segments. Moreover, as it was highlighted before, they are only a part of the beneficiaries, the road segments being used daily by many other economic operators, individuals, citizens, locals, tourists, etc.

#### CONCLUSIONS

The present work studies the implementation influence of a project aimed at the modernization of several road segments in the vicinity of a town in the north of the North-East Development Region. This is one of the 106 such investments carried out simultaneously by ARIF – EAFRD grants.

All the investments, of about 1 million Euros each, bring many benefits to the communities and the economic environment in the area. The creation of direct jobs for the performance of the works as well as the attraction of others by increasing the competitiveness of the economic units in the area, the development of

tourism, the increase in the standard of living are just a few implications of the implementation of these investments.

# REFERENCES

Robu A.D., Robu Maria, Ungureanu G., Brezuleanu Carmen-Olguţa, Viziteu Şt., Brezuleanu S., 2019 – Aspects on the size optimization of the areas exploited in some vegetable farms, Proceedings of the International Scientific Congress "Life sciences, a challenge for the future", USAMV laşi, International Proceedings filo diritto editore, 99 – 103.

Robu A.D., Brezuleanu S., Viziteu Şt., Boghiţă E., Costuleanu C.L., 2021 – Risk management and insurance premiums for crops, animals and plants: framework, influence, financial impact, forecasts, Scientific Papers., vol 64/2021, USAMV laṣi, 171 – 174.

- \*\*\* Agency for Rural Investment Financing ARIF, 2022, Financing project within sub-measure 4.3 available online at <a href="https://www.afir.info">www.afir.info</a>;
- \*\*\* National Rural Development Programme 2014-2020, NRDP 2014-2020 working procedures available at http://portal.afir.info.