



Research Article

Romania's Ability to Absorb European Funds: Case study Axis4 of the EFF

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Abstract

Attracting non-refundable community funds for the fisheries represents an advantage for member states regarding food security, possibilities to support fishermen communities to develop complementary activities, and for the sustainable development of the fishing sector. Developing support actions to develop complementary fishing activities, with the help of LAG's and local communities can reduce the pressure on natural resources. The research was conducted using the Gini Struck Method for assessing the degree of the market concentration. The variables analyzed were LAG's number, Programs, National Funding for EFF, LAG's Area and Population. The results of research have shown that there is no correlation between the size of the population or the eligible areas and the volume or the rate for absorption of funds; absorbed funds. The analysis can be useful for developing business models for local communities and fishermen or governments of member states and increasing the ability to access non-reimbursable community funds under the new EMFF 2014-2020 program. There is a high level of concentration for EFF allocated to Axis 4 in the fisheries communities in Romania, depending on the projects submitted and the support provided by the governmental organizations.

Keywords: Axis 4, EFF, LAG's, Gini Struck, Romania

Introduction

The sustainable development of the fishing sector represents a priority for the European Union EU. Fish-based products have rich nutritious value; fish proteins were registered in the first value class from the point of view of chemical composition, with a balanced concentration of essential amino-acids, adapted to human organism. The increase in consumption of fish-based products could contribute to solve the global food security. According to United Nations, Food and Agriculture Organization FAO (2001-2016), 75% of the fish farming worldwide is used for direct consumption. Fish-based products, which cannot be used for human alimentation, represent around 33 million tons annually, and they are sold as forage (fish oil or flour), food for poultry farms and pigs or for feeding aquatic species in aquaculture. An analysis of Community funds for fisheries is performed by Stanciu (2014), which shows the importance of the fishery sector in Romania. Neculita and Moga (2014) analyzed the European Fisheries Fund (EFF) allocated in Central and Eastern Europe, and the influence of EU funds for the fisheries, by using Herfindahl-Hirschman Index.

Materials and Methods

Information concerning the development of the fishing sector in the community has been accessed using official information of the European Commission, CBI Market, Ministry of Agriculture and Rural Development of Romania. Eurostat, FAO Database, and International Trade Centre data were used for the statistical analysis. The raw data have been summarized, processed, and analysed.

EU Trade on fish and other marine products

Supporting the fish farming sector in the community represents a way to reduce the EU dependency on fishery products import, and to develop a sustainable fish culture, and provides better management of natural resources. The European Commission Data (2014) show that the European market is the biggest importer of fishing and fish farming products in the world, having 35 -38% of the worldwide market. Self-sufficiency, represented by the ratio between EU production and apparent consumption, was assessed at 45% in 2011. The exports made by Member States represent 22 % of global exports (figure 1).

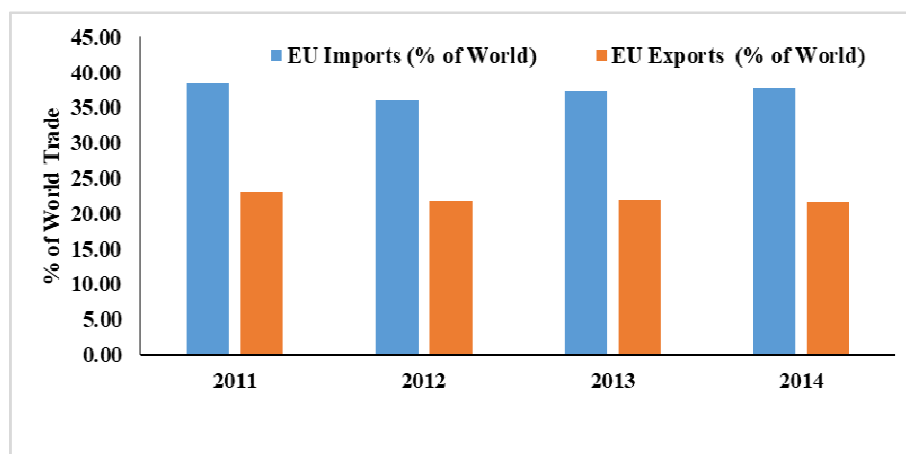


Figure 1: The share of European trade in fishery products in world trade

Source: Author, by using ITC (2016)

Although some progress has been made, especially as a result of EFF support for the fisheries sector, the EU trade balance on

fishery products is still unbalanced, being significantly dependent on extra-community imports (ITC, 2016).

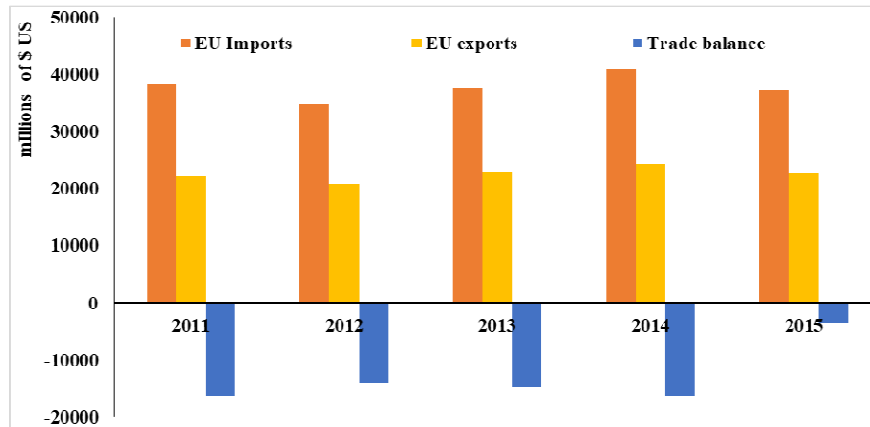


Figure 2: The trade flows of fisheries and aquaculture products in Europe (Code 03 ITC)
 Author, by using ITC data, (2016)

EU Measures to support the fishing sector

In order to increase competitiveness in the community sector, and to protect resources or reduce the EU dependency on import, 4.5 billion euro have been allocated by the Common Fisheries Programme, through the European Fisheries Fund, which began to be operational from the 1st of January 2007.

The EFF focused on five priorities: adapting the EU fishing fleet; aquaculture, inland fishing, processing and marketing; collective action; sustainable development of fishing areas; and technical assistance to implement Council Regulation (EC) No 1198/2006. The distribution of funds on the 5 axis shows a relatively uniform distribution on Axis 1, 2, 3 and reduced ratios on 4 and 5 (figure 3).

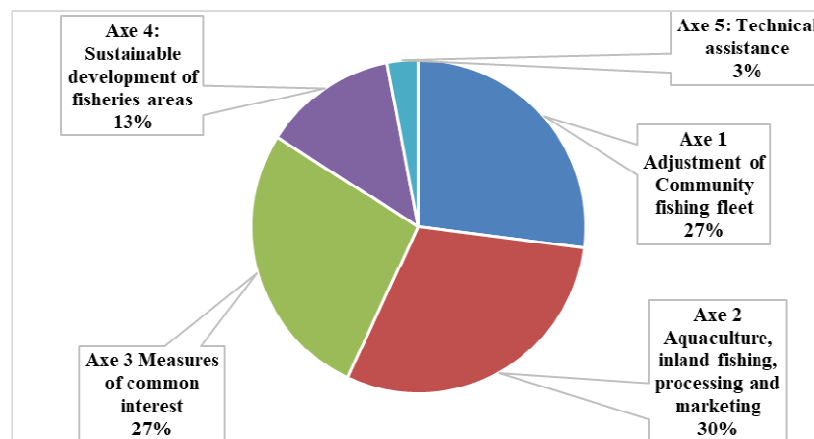


Figure 3: EFF Distribution on main axis
 Source: Author, by using Tokarski (2015)

The European Fisheries Fund (EFF)'s goal is to contribute to the realizing of the Common Fisheries Policy CFP objectives, being specifically focused on the conservation and the sustainable exploitation of the marine resources.

Analysis of CFP Measure on Axis 4

Funding on Axis 4 (Sustainable Development of Fisheries Areas) is based on local development strategies. The essential difference between Axis 4 and other EFF measures was not substantial given the content of the actions. In fact, many of the Axis 4 actions were close to those implemented under previous programs, such as PESCA, INTERREG or EQUAL. The main added value of Axis 4 was how these actions were implemented and correlated with the specificities of local communities. Almost 560 million euros have been earmarked to help local communities reduce their economic dependence on fish catches. Coastal communities and those close to lakes and ponds with significant employment in the fisheries sector were eligible for EU aid to increase global competitiveness, add value to fisheries products, and develop infrastructure and tourism services,

environmental protection and interregional and transnational cooperation.

The promotion of Priority Axis 4 on the sustainable development of fisheries areas through the European Fisheries Fund (EFF) was driven by the complex changes affecting the fisheries sector and the challenges facing European fishing communities. The main objective of Priority Axis 4 was the sustainable development of fisheries areas in order to minimize the decline of the fisheries sector and to support the conversion of areas affected by the changes in this sector. Axis 4 complements the short-term measures of the Common Fisheries Policy (CFP) through economic, social and environmental support measures to combat the depletion of fish stocks.

The implementation of the Axis 4 has been made by the direct implication of relevant actors in fishing areas, associated in Local Action Groups for Fishing (LAG, or FLAG in Romania) by elaborating and applying a strategy of durable development, in conformity with the needs of the specific area. In EU, the measures of Axis 4 have been done through 312 LAGs, and have implemented through 11,316 projects in 21 Member States MS (figure 4).

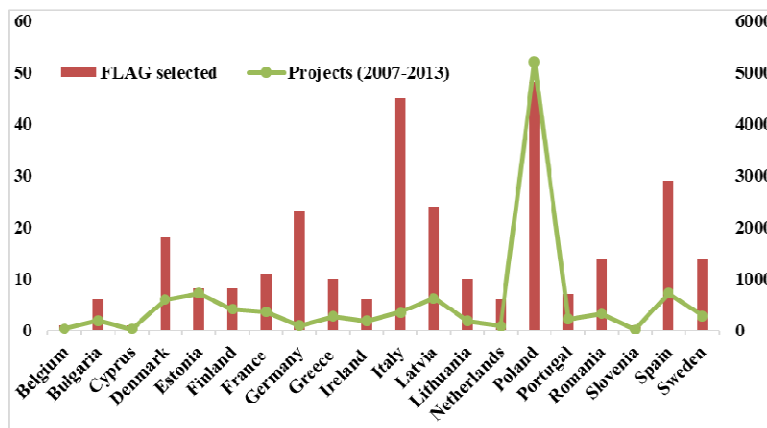


Figure 4: EU LAG's and projects implemented on Axis 4

Source Author, by using European Commission Data (2015)

The number of LAGs in Member State ranges between one unit in Slovenia and 48 in Poland. Poland ranked the first position in EU, having 5,200 projects implemented and 319 million euro used for the Axis 4

measures. Poland is the country that has allocated the highest percentage to Axis 4, with over 45% of total Community funding for the fisheries sector (figure 5).

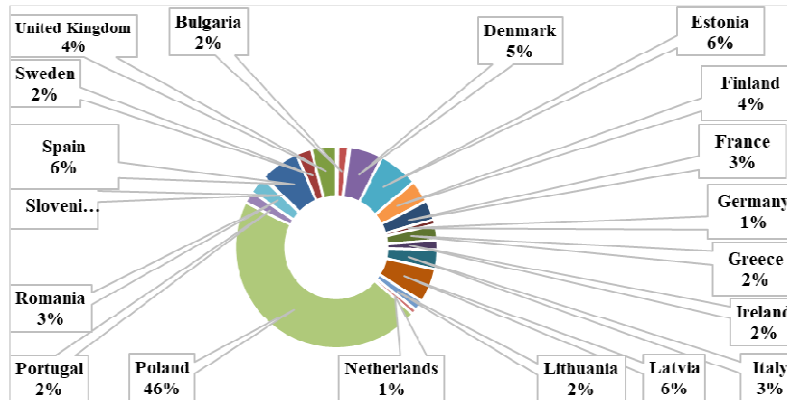


Figure 5: Share of funds allocated in Axis 4 by MS

Source Author, using European Commission (2014)

Poland is the state with the large number of inhabitants in eligible area (3,5 million),

followed by Spain (3,4 million), and Germany (2,8 million) (figure 6).

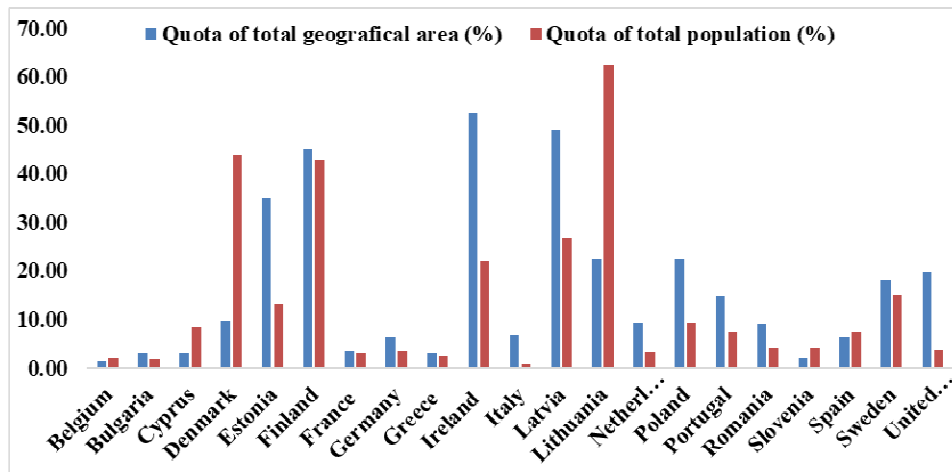


Figure 6: Share of population and geographical areas benefiting from the Axis 4 projects

Source Author, using EC (2015)

Regarding the implementation of the projects by LAGs, Finland, Spain and Poland are the Member States with the largest fishing areas

for complementary fishing measures (Figure 7).

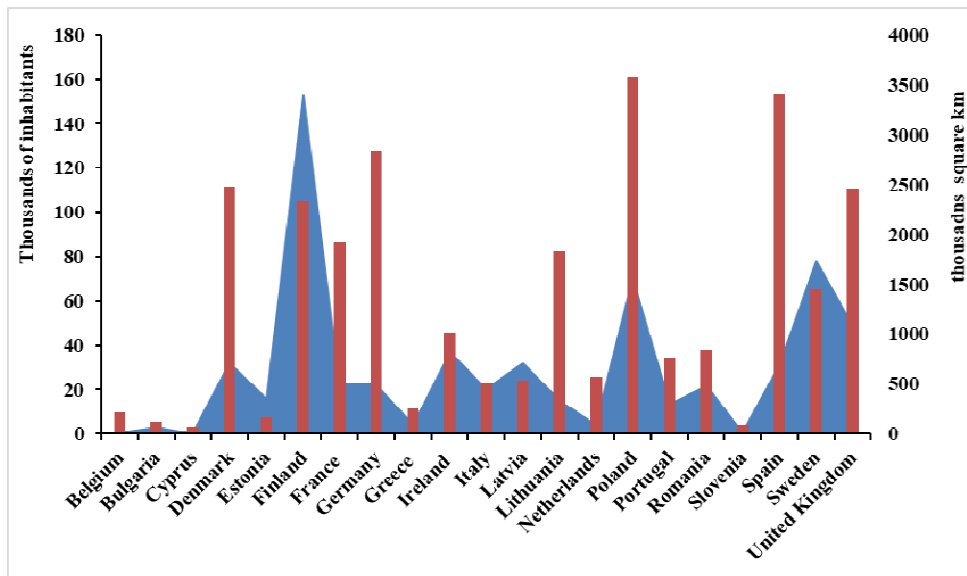


Figure 7: Areas and inhabitants in the eligible areas of Axis 4

Source Author, using European Commission (2014)

The concentration of projects and funds allocated by using Measures of Axis 4 can be analysed using the Gini Struck Method. The

calculation of the Gini Struck Index GSI used the methodology proposed by Săvoiu, Crăciuneanu and Țaicu (2010) (formula 1)

$$GSI = \sqrt{\frac{n \sum g_i^2 - 1}{n - 1}} \tag{1}$$

Where n – number of member states which have implemented projects on Axis 4

g_i– the share of the analysed variable

The results of the GSI are presented in table 1. The total EFF allocated to Axis 4 was

547,785,006.6 euro and has been distributed by 21 MS. 312 LAGs were created in EU, 11,316 projects have been approved for funding, and 27,427,311 inhabitants and of the targeted areas have benefited from these measures. The global area allocated to LAGs was 622,533.899 square km.

Table 1: GSI value for the variables considered

Analysed variable	LAGs	Projects	EFF (euro)	National Funds (euro)	LAGs Area (km ²)	LAGs Population (inhabitants)
GSI	29,53	49.47	47.39	52.11	34.35	29.56
Concentration	medium	high	high	high	medium	medium

Source Author, using own research

The data presented in table 1 show a medium degree of concentration for the population, area and LAGs, while the number of projects and allocated funds has a high degree of concentration.

Conclusions

Attracting non-reimbursable Community funds in the fisheries sector could be an advantage for Member States to ensure food security. The analysis has shown that there is a high level of concentration for the EFF allocated to Axis 4 in the community, correlated with the number of projects submitted and financial support from governmental institutions. The size of the population in the target group, the eligible areas close to the fishing areas or the number of local groups built to implement complementary measures for the fisheries sector have a moderate level of concentration. There is no correlation between population size, eligible areas and attracted funds.

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Appendix

Table 1: EU FLAG and projects selected

MS	FLAGS	g_i	g_i^2	Projects	g_i	g_i^2
Belgium	1	0.321	0.103	33	0.292	0.085
Bulgaria	6	1.923	3.698	188	1.661	2.760
Cyprus	1	0.321	0.103	29	0.256	0.066
Denmark	18	5.769	33.284	597	5.276	27.833
Estonia	8	2.564	6.575	717	6.336	40.147
Finland	8	2.564	6.575	408	3.606	13.000
France	11	3.526	12.430	353	3.119	9.731
Germany	23	7.372	54.343	100	0.884	0.781
Greece	10	3.205	10.273	269	2.377	5.651
Ireland	6	1.923	3.698	183	1.617	2.615
Italy	45	14.423	208.025	342	3.022	9.134
Latvia	24	7.692	59.172	624	5.514	30.408
Lithuania	10	3.205	10.273	183	1.617	2.615
Netherlands	6	1.923	3.698	91	0.804	0.647
Poland	48	15.385	236.686	5200	45.953	2111.645
Portugal	7	2.244	5.034	215	1.900	3.610
Romania	14	4.487	20.135	322	2.846	8.097
Slovenia	1	0.321	0.103	21	0.186	0.034
Spain	29	9.295	86.395	718	6.345	40.259
Sweden	14	4.487	20.135	273	2.413	5.820
UK	22	7.051	49.721	450	3.977	15.814
Total	312	100.000	830.457	11316	100.000	2330.752

Table 3: EFF and National financial support

MS	National Funds (euro)	g_i	g_{ii}^2	EFF (euro)	g_i	g_i^2
Belgium	2528410	0.952892	0.908004	1900000	0.346851	0.120306
Bulgaria	5396988.62	2.033985	4.137096	11064600	2.019880	4.079915
Cyprus	1000000	0.376874	0.142034	1000000	0.182553	0.033326
Denmark	12466279	4.698217	22.07325	12461279	2.274848	5.174936
Estonia	6427171	2.422234	5.867218	19281513	3.519905	12.38973
Finland	12466279	4.698217	22.07325	12461279	2.274848	5.174936
France	5535936	2.086351	4.35286	5699644	1.040489	1.082618
Germany	14146000	5.331261	28.42234	19438000	3.548472	12.59166
Greece	11700000	4.409427	19.44304	33300000	6.079027	36.95457
Ireland	788000	0.296977	0.088195	788000	0.143852	0.020693
Italy	31300000	11.79616	139.1494	31300000	5.713921	32.64889
Latvia	5724262	2.157326	4.654055	17172786	3.134950	9.827911
Lithuania	2231257	0.840903	0.707118	6693770	1.221970	1.493211
Netherlands	5000000	1.88437	3.550852	5000000	0.912767	0.833143
Poland	78303208	29.51045	870.8666	2.35E+08	42.88354	1838.998
Portugal	4780063	1.801482	3.245337	16732965	3.054659	9.330943
Romania	16492570.5	6.215622	38.63396	49477712	9.032323	81.58286
Slovenia	721343	0.271855	0.073905	2164029	0.395051	0.156065
Spain	28534674.54	10.75398	115.6481	49212448	8.983898	80.71043
Sweden	8199720	3.090262	9.549719	8199720	1.496887	2.240669
UK	11598450	4.371155	1293.586	9527638	1.739302	3.025173
Total	265340611.7	100,00	2587.173	5.48E+08	100,00	2138.470