## The Community Initiative Leader +

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#### Abstract

The countryside occupies the largest percentage of the Greek landscape. In the last decades, these areas gradually become deserted, as the local population migrates to the urban centers. The European Union sponsors the local inhabitants in order to remain at the rural areas and develop them. This study evaluates the Community Initiative Leader +, by applying Cluster Analysis. In this method there were created clusters that grouped the Groups of Local action according to some of their financial characteristics that is to say the funding that they managed. The results prove that the developmental companies of Greece are divided into 2 groups, as this process is the basic condition for a future setting up of developmental programs in the rural area.

Keywords: LEADER +, Common Agricultural Policy, Local Action
Groups

JEL classification: 013, Q18

#### Introduction

Agriculture is one of the most important factors of the Greek economy and at the same time it has a significant role in the economy of other European countries. Within the European Union (EU), the Common Agricultural Policy (CAP) was the first application of a common policy in the European countries (Arabatzis et al., 2011).

The entrance of new member states in the European Union, and the reformation of the CAP, define the future of the rural areas. The policy of the rural development throughout Europe aims in the reinforcement in a regional and a local level. The CAP strategies were the income support and the compensation of the farmers, according to the prices of the global markets (Bryden, 1994).

In the EU policies the countryside emerges as an area of preservation, protection and promotion of the natural habitat, the cultural values and the quality of life (Arabatzis et al., 2005, 2006)

The natural and cultural sources are used sustainably, they blunt the regional inequalities, and they promote the multifunctional role of agriculture and the countryside, as well as they contribute to the transformation of the current system of production (Arabatzis et al., 2008; Polyzos et al., 2008) The word LEADER originates by the initials of the following words (Liaisons Entre Actions de Développement de l' Economie Rurale) which mean Links between Actions for the Development of the Rural Economy. Community Initiative Leader was developed in 3 phases: LEADER I (1991-1993), LEADER II (1994-1999), and LEADER + (2000-2006) (Ramos et al., 2003; Arabatzis et al., 2011).

The aim of this study is the evaluation of the Community Initiative LEADER + with the method of Hierarchical Cluster Analysis. Created typology of the Local Action Groups (LAGs) that manage the Community Initiative LEADER +, based on the budgets per meter (actions) that they perform, contributing to the application of a future policy for the complete development of the countryside.

The selection of this method is based in the fact that in order to evaluate the initiative Leader +, we would have to group the Local Action Groups (LAGs) on some of their common characteristics so that the results would be interpretable. The Hierarchical Cluster Analysis is recommended for a few observations, and this is the reason that it was selected.

# Application of the Community Initiative Leader + in Greece and Europe

The Community Initiative Leader + is the initiative of the agricultural sector during the  $3^{rd}$  programming period (2000-2006) and it is the sequel to the initiatives LEADER I and II. The aim of this program is to promote the development and the structural adaptation of the underdeveloped regions. It contributes to the effort of the Community to the financial and social consistency through the balanced sustainable development, the increase of employment, the ensuring of equality between men and women and the protection and improvement of the environment. In our country LEADER + is applied in mountainous areas (like the ones that have been characterised by the instruction 75/268/EOK), islands where the social and financial hysteresis is observed in a greater scale among the populations of Chora, and in environmentally sensitive areas (eg. NATURA 2000) (Greek Ministry of Rural Development and Food, 2006).

The National Program LEADER + adopts two general developmental goals. The first one refers to the complete, high quality sustainable development of the countryside, through pilot applications, and the second in the reinforcement of the effort to eliminate the isolation of the areas in every level of the financial and social life. A great pursuit of the first goal is the growth and development of the program application areas with complete interventions in order to encounter their disadvantages and diminish the inequalities in the quality of life among the citizens of mountainous and non-mountainous areas. The quest of the second goal is the development, conservation and reinforcement of a sustainable social web in agricultural areas. The program is financed by the European Agricultural Treasury Orientation and Security- Department of Orientation, and the Program of Public Investments of the Ministry of Rural Development and Food, and the own contribution. The Leader + includes four priority axes: Integrated pilot strategies for

rural development, support for cooperation among rural areas, Clusters, and finally Management, Monitoring Evaluation of the program. Regarding of the local programs that are part of the Initiative, they are designed and implemented by the 40 Local Action Groups. The Local Action Groups are anonymous developmental companies, formed by collective bodies of the wider public or private sector (Greek Ministry of Rural Development and Food, 2006).

Many developmental programs and policies are applied in rural areas of the countryside, emphasizing mainly in the reduction of poverty and income inequalities ,by investing in infrastructure and rendering of social services (Martin, 1998).

According to Saraceno (1999) the European program Leader in the 90's, was applied in local communities of various countries, giving freedom to the local groups to manage the financial reinforcements. Every country aimed to rural development and improvement of the living standard of the local citizens. The application and significance of the program Leader was studied by many researchers in countries in and out of the European Union.

Ray (1998) referred to the Leader in France and Scotland. In the area of France, the aim was to support failed businesses by providing financial help. Concerning the islands of Scotland, Leader aimed to the enrichment of the cultural environment, the participation of the local citizens, so as based on the fundings they would receive, they would develop their local remote areas.

In Ireland, Leader aimed to promote the rural financial development and increase the level of participation of the local societies, claims Storey (1999). Moreover, Leader aimed to improve the living conditions of the population of the countryside, in cooperation with the government.

Since 1991, the European program Leader had promoted the local development in every participant country through the funding it had offered. Goal of these countries was to promote the sustainable development by committing economic and cultural resources (High et al., 2007).

## Methodology

The conducting of the results and the analysis of quantitative data was realized by using the statistic program SPSS 20. In this research for the evaluation of the program Leader +, we used data from the Management Office of the Business Program Community Initiative Leader +.

The analysis of the data, of (Local Action Groups), was based on the number of projects, the public cost, and the overall cost of the actions of the program.

There was applied a Descriptive Statistics Method, as well as technique of Analysis in Clusters, that were the developmental companies were eventually divided in groups, according to their common characteristics.

## Results

On the below table, which resulted from the analysis of the data, the (Local Action Groups) of the total cost of the Community Initiative Leader + of the fundings, was observed in action 1.2.2.3, which is for Businesses of processing and formulation of agricultural products and it belongs to measure 1.2. Reinforcements in support investments in entrepreneurship and it belongs to the Priority Axis 1, which is for complete and pilot strategies of rural development.

## Table 1: Descriptive Statistics

Total Cost of Actions	Ν	Range	Minim um	Maximum	Sum	Mean		Std. Deviation	Variance
	Stat isti c	Statisti c	Stati stic	Statistic	Statisti c	Statisti c	Std. Error	Statistic	Statistic
Total Cost 1.2.1.1	40	114108,8 3	,00	114108,83	486640,9 0	12166,02 25	4187, 95059	26486,925 21	701557207 ,026
Total Cost 1.2.1.2	40	2149156, 67	,00	2149156 <b>,</b> 67	23813495 ,91	595337 <b>,</b> 3 978	86721 ,4816 6	548474,80 825	300824615 283,610
Total Cost 1.2.1.3	40	1486451, 84	,00	1486451 <b>,</b> 84	13966939 ,98	349173,4 995	66218 ,7576 4	418804,19 593	175396954 524,599
Total Cost 1.2.1.4	40	1098160, 57	,00	1098160,57	11573113 ,16	289327,8 290	43130 ,9588 2	272784,13 507	744111843 43,936
Total Cost 1.2.1.5	40	162184,6 3	,00	162184,63	1019730, 42	25493,26 05	6811, 83887	43081,851 76	185604595 0,947
Total Cost 1.2.1.6	40	1466854, 55	,00	1466854 <b>,</b> 55	6398408, 86	159960,2 215	47213 ,3618 2	298603,51 871	891640613 85,999
Total Cost 1.2.1.7	40	2527942, 50	,00	2527942 <b>,</b> 50	6141920, 93	153548,0 233	67898 ,2744 6	429426,39 300	184407027 005,280
Total Cost 1.2.2.1	40	3188485, 13	,00	3188485 <b>,</b> 13	27260225 ,51	<u>681505,6</u> <u>377</u>	10899 3,330 63	689334,34 911	475181844 861,124
Total Cost 1.2.2.10	40	572764,0 0	,00	572764 <b>,</b> 00	572764,0 0	14319,10 00	14319 ,1000 0	90561,940 09	820146499 2,400
Total Cost 1.2.2.11	40	716508,1 7	,00	716508 <b>,</b> 17	4347981, 48	108699,5 370	34657 ,1026 7	219190,76 310	480445906 27,344
Total Cost 1.2.2.12	40	1099864, 00	,00	1099864,00	3076476, 36	76911,90 90	38546 ,1747 9	243787,41 484	594323036 33,419
Total Cost 1.2.2.2	40	736152,7 0	,00	736152 <b>,</b> 70	2254633, 17	56365 <b>,</b> 82 92	23782 ,7108 2	150415,07 023	226246933 51,280
Total Cost 1.2.2.3	40	2231478, 50	,00	2231478 <b>,</b> 50	28931866 ,55	<u>723296,6</u> <u>638</u>	99393 ,6082 4	628620,37 381	395163574 372 <b>,</b> 178

## Descriptive Statistics

matal Cast		2402150			1 = = 2 2 0 2 2	200220 0	74266	460700 00	220610212
1.2.2.4	40	2403159, 66	,00	2403159,66	,48	388320,8 120	,1285 3	469700,23 830	861,987
Total Cost 1.2.2.5	40	185492,0 0	,00	185492 <b>,</b> 00	678566,2 2	16964,15 55	7312, 00334	46245,169 62	213861571 3 <b>,</b> 562
Total Cost 1.2.2.6	40	1470000, 00	,00	1470000,00	18507345 ,42	462683,6 355	61229 ,7734 0	387251,08 914	149963406 040,712
Total Cost 1.2.2.7	40	398000,0 0	,00	398000,00	3427500, 36	85687 <b>,</b> 50 90	18416 ,6789 8	116477,30 505	135669625 91,178
Total Cost 1.2.2.8	40	1998111, 39	,00	1998111,39	5034359, 36	125858,9 840	54471 ,0502 5	344505 <b>,</b> 17 068	118683812 626,138
Total Cost 1.2.2.9	40	307795 <b>,</b> 7 0	,00	307795 <b>,</b> 70	307795 <b>,</b> 7 0	7694,892 5	7694, 89250	48666,773 30	236845482 3,462
Total Cost 1.2.3.1	40	316912,0 0	,00	316912,00	1971005, 71	49275 <b>,</b> 14 28	9418, 49999	59567,824 21	354832568 0,704
Total Cost 1.2.3.2	40	385912,9 0	,00	385912 <b>,</b> 90	3236488, 49	80912,21 23	14122 ,4052 2	89317,933 08	797769316 8,887
Total Cost 1.2.3.3	40	72368,63	,00	72368 <b>,</b> 63	182620,2 7	4565,506 8	2144, 33276	13561,951 14	183926518 ,799
Total Cost 1.2.3.4	40	96485 <b>,</b> 23	,00	96485 <b>,</b> 23	317023,7 0	7925,592 5	3315, 14662	20966,828 17	439607883 ,454
Total Cost 1.2.3.5	40	83000,00	,00	83000,00	93704 <b>,</b> 19	2342,604 8	2075, 85574	13128,864 50	172367082 ,950
Total Cost 1.3.2	40	78800,00	,00	78800 <b>,</b> 00	1283665, 33	32091,63 33	3661, 04584	23154,486 97	536130266 ,713
Total Cost 1.3.3.2	40	347747,5 7	,00	347747 <b>,</b> 57	5203270, 40	130081,7 600	14998 ,3071 2	94857,623 10	899796866 0,687
Total Cost 1.4.1.1	40	669142,2 9	,00	669142 <b>,</b> 29	5867844, 05	146696,1 012	26221 ,3347 9	165838,28 245	275023359 26,959
Total Cost 1.4.1.2	40	207122,5	,00	207122,58	658971,9 4	16474,29 85	7676, 08450	48547,821 06	235689092 9,683
Total Cost 1.4.1.3	40	167000,0 0	,00	167000 <b>,</b> 00	830398,4 1	20759 <b>,</b> 96 02	6198, 38500	39202,028 84	153679906 5,543
Total Cost 1.4.1.4	40	543954,9 0	,00	543954 <b>,</b> 90	5144364, 75	128609,1 188	22939 ,2617 8	145080,63 011	210483892 33,979
Total Cost 1.4.2.1	40	1551337, 31	,00	1551337 <b>,</b> 31	8846445, 26	221161,1 315	53883 ,0638 4	340786,41 808	116135382 749,072
Total Cost 1.4.2.2	40	723697 <b>,</b> 8 9	,00	723697,89	5270507, 45	131762,6 863	23889 ,0452 9	151087,58 849	228274593 94,981
Total Cost 1.4.2.3	40	1916872, 38	,00	1916872 <b>,</b> 38	13553744 ,44	338843,6 110	65854 ,8050 9	416502,35 793	173474214 160,743
Total Cost 1.4.2.4	40	3971439, 97	,00	3971439 <b>,</b> 97	9794996, 70	244874,9 175	10038 6,017 81	634896 <b>,</b> 92 305	403094102 896,418
Total Cost 1.4.2.5	40	213233,0 2	,00	213233,02	1464056, 48	36601,41 20	8529 <b>,</b> 70597	53946,597 29	291023535 8,870
Total Cost 1.4.3	40	652659,9 8	,00	652659 <b>,</b> 98	6263539, 68	156588,4 920	23470 ,3104 9	148439,27 710	220342189 86,640

Total Cost 2.1.1	40	323959 <b>,</b> 2 4	,00	323959 <b>,</b> 24	3141991, 33	78549 <b>,</b> 78 33	10894 ,3502 3	68901,920 69	474747467 4,786
Total Cost 2.1.2	40	166821,0 0	,00	166821 <b>,</b> 00	1038272, 96	25956,82 40	6829, 89766	43196,065 56	186590007 9 <b>,</b> 595
Total Cost 2.1.3	40	,00	,00	,00	,00	,0000	,0000 0	,00000	,000
Total Cost 2.1.4	40	270490,0 0	,00	270490,00	1409664, 55	35241,61 38	10675 ,8334 8	67519,899 46	455893682 2,878
Total Cost 2.2.1	40	473549 <b>,</b> 4 0	,00	473549 <b>,</b> 40	2161677, 62	54041,94 05	13929 ,6114 5	88098,598 21	776136300 5,699
Total Cost 2.2.2	40	151673,9 8	,00	151673 <b>,</b> 98	627199,6 6	15679 <b>,</b> 99 15	5648, 43152	35723,817 61	127619114 4,933
Total Cost 2.2.3	40	,00	,00	,00	,00	,0000	,0000 0	,00000	,000
Total Cost 2.2.4	40	141459,9 0	,00	141459 <b>,</b> 90	604089,6 4	15102,24 10	5200, 64279	32891,753 00	108186741 5,275
Valid N (listwise)	40								

#### Cluster Analysis

The following Dendrogram shows the separation of the groups that came from the Hierarchic Cluster Analysis, as well as the subgroups that were produced during the process of the analysis.

The Dendrogram shown is from the Ward Method. It has the biggest leaps in comparison to other methods, therefore it has better demarcation of the groups (big distances between variables).



## Dendrogram using Ward Linkage

## Figure 1: Ward Dendrogram

## Conclusions

In General the application of the Community Initiative Leader had positive results in the areas of intervation, however it encountered some difficulties. From the beginning of the 90's, the European Community had promoted the local development through the funding of the Leader programs, based on the cooperation with the local and national organizations of each participant country.

The profits of the Community Initiative vary for the society and the citizens of the areas. At first they have brought the local communities in touch with the European Programs and activated participation of the local population in designing and applying Initiatives in order to obtain new ways of employment and income.

In addition, it reinforced the local scientific potential (Local Action Groups), that has to define the needs of the area, and they had the possibility of promoting the local production with high added value. In addition, small investment initiatives were reinforced, significant natural and historical sites were highlighted, and conditions of alternative income were created in many disadvantageous areas.

Finally, the Leader program gave access to new technologies to the population of the intervention areas, as well as created new jobs, which restricted internal migration.

A reduction of the efficiency of the National Program resulted from the relatively small number of available sources and the false selection of departments of small capacity.

Specifically, it was noted that after the analysis with the use of Multivariate Statistics Methods , and particularly the Analysis in Clusters, can remarkably help in the separation of the developmental companies into homogenous groups according to their common characteristics.

The results indicate that the developmental companies in Greece, are divided into 2 groups. One group itself, is the developmental company of Chalkidiki, while the other 39 developmental companies are grouped into the other.

In addition, it was noted from the descriptive statistics, that the largest mean of the cost of the Community Initiative Leader's + fundings was observed in the action 1.2.2.3, which of for Companies dealing with implementation and standardization of agricultural products, and they belong to the measure 1.2. Reinforcements in supporting investments in entrepreneurship fits in the Priority Axis 1, which stands for completed and pilot strategies of agricultural development. After that is the action 1.2.2.1, which is for light industrial units (cottage industry, handicraft, folk art production etc) and belongs to measure 1.2 and fits to the Priority Axis 1.

It is obvious that agritourism in the past and investments in the present represent a powerful potential of development for the agricultural Europe, both in the economic significance of their activities, and their variety.

In particular, the investments referred to the local centers of organization, information and promotion of agricultural tourism, the small businesses such as cottage industry, handicraft, traditional industries, processing and informative companies, for the support of the local well-being, as well as they referred to actions that are reinforced by the use of modern technologies, such as electronic services, development of ecommerce, installation quality assurance systems. The target to be achieved from the European Committee is a complete policy, which takes into consideration every aspect of the rural development.

Finally, the separation of the developmental companies in groups, is a basic condition for the future establishment of developmental programs in the agricultural area. In addition, the segmenting of the agricultural area helps in the application of a policy for the local and regional development of the countryside.

## References

- Arabatzis, G. Tsiantikoudis, S. Drakaki, N. Andreopoulou, Z. (2011), "The LEADER + Community Initiative and the Local Action Groups in Greece", Journal of Environmental Protection and Ecology, 12(4A), 2255-2260.
- Arabatzis, G. Polyzos, S. (2008), "Contribution of natural and sociocultural resources in tourism development of mainland Greek prefectures: a typology", Journal of Environmental Protection and Ecology, 9(2), 446-464.
- Arabatzis, G. Tsantopoulos, G. Tampakis, S. Soutsas. K. (2006), "Integrated rural development and the multifunctional role of forest : a theoritical and empirical study", Review of Economic Sciences, 10, 19-38.
- Arabatzis, G. (2005), "European Union, Common Agricutural Policy (CAP) and the afforestation of agricultural land in Greece", New Medit: a Mediterranean Journal of Economics, Agriculture and Environment, 4, 48-54.
- Bryden, J. (1994), "Prospects for Rural Areas in an Enlarged Europe", Journal of Rural Studies, 10(4), 387-394.
- Greek Ministry of Rural Development and Food (2006), department of Management LEADER +. Operational Program of LEADER+ Community Initiative (2000- 2006). 5th Supplemental Review, 2006 (in Greek).
- High, C. Nemes, G. (2007), "Social Learning in Leader: Exogenous, Endogenous and Hybrid Evaluation in Rural Development", Sociologia Ruralis, 47(2), 103-119.

Martin , R. (1998), "Regional incentive spending for European regions", Regional Studies, 32(6), 527-553.

- Polyzos, S. Arabatzis, G. (2008), "Spatial distribution of natural resources and their contribution to regional development in Greece", Journal of Environmental Protection and Ecology, 9(1), 183-199.
- Ramos, E. Mar Delgado, M. (2003), "European rural development programmes as a mean of strengthening democracy in rural areas", Research in Rural Sociology and Development, 9, 135-157.

Ray, C. (1998), "Territory, Structures and Interpretation-Two Case Studies of the European Union's LEADER I Programme", Journal of Rural Studies, 14(1), 79-87.

Saraceno, E. (1999), "The evaluation of local policy making in Europe". Evaluation, 5(4), 439-457.

Storey, D. (1999), "Issues of Integration Participation and Empowerment in Rural Development: The Case of LEADER in Republic of Ireland", Journal of Rural Studies, 15(3), 307-315.