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Variety in local development strategies and employment: LEADER programme in Andalusia

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Abstract: For the period 2007–2013 LEADER became the fourth axis of rural development policy. One of the main characteristics of LEADER is that it adopts a bottom-up approach. Local Action Groups (LAGs) have to define and implement area-based local development strategies (LDSs). In this paper, we examine the relationship between variety in the LDSs implemented by LAGs and employment safeguarding over the programming period 2007–2013 in Andalusia, the most populated region of Spain. Firstly, we construct several indicators to capture differences in the number of projects carried out, the grants awarded, the investments made and the safeguarded employment. Secondly, we carry out an exploratory factor analysis. We use cluster analysis to classify LAGs applying similar LDSs. The results obtained show that there is no ideal strategy for employment safeguarding and that spending high amounts of money in a few numbers of projects does not guarantee success. Thus, most LAGs do not show any clear specialisation pattern but obtain moderate results in terms of employment safeguarding. This supports the idea that LAGs need to have sufficient flexibility to find a balance among the different objectives of the rural development policy and to translate this balance into the funding of projects.

Keywords: local action groups; rural development; strategy

The rural development policy in the European Union has three main objectives: increasing competitiveness through support for restructuring, enhancing environment and countryside through support for land management and strengthening the quality of life and promoting diversification. For the period 2007–2013 LEADER was formally included in the Rural Development Programmes (RDPs) and became the fourth axis of rural development policy. Although there is one sole funding and programming instrument, the European Agricultural Fund for Rural Development (EAFRD), the possibilities of funding were broadened to cover growth and employment creation in rural areas. The integration of LEADER

in RDPs is based on the idea of extending its success to parts of the RDPs by applying its method to the whole range of rural development measures (Dax and Oedl-Wieser 2016).

One of the main characteristics of LEADER is that it adopts a bottom-up approach in order to better identify local needs and potential solutions (Convéry et al. 2010; Bosworth et al. 2016). The objective of the LEADER is to involve the local community in the identification of the adequate local development strategies (LDSs) which are “area-based”. Thus, according to Article 62 of Regulation (EC) No 1698/2005, the decision making committee of a Local Action Group (LAG) should include eco-

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nomic and social partners as well as representatives of the civil society like farmers, young people, rural women or their associations and cannot have more than 50% of public sector members. It is necessary to highlight, however, that the effective implementation of the bottom-up approach presents difficulties. Several studies have analysed the composition and performance of LAGs. The examination of the composition of the LAGs boards in Denmark carried out by Thuesen (2010) reveals that it is very one-sided and the existence of lop-sidedness and democratic problems. In the same line, the study of the participation of farmers in the Czech Republic carried out by Delin (2012) shows that despite there is a growing number of farmers participating in LAGs, their position has weakened. In addition, the study on the perceptions of the LAGs board members in Slovenia conducted by Volk and Bojnc (2014) finds that they do not know the basic features of the LEADER approach very well. In the Spanish case, Esparcia et al. (2015) find a strong presence of power elites and the need for more accountability and transparency. Focusing on the Spanish region of Andalusia, Navarro et al. (2016) show the existence of unbalanced participation of the different social groups in LAGs, the low involvement of young people and unemployed people being particularly noticeable. Concerning the presence of LAGs in the media, the analysis conducted for the Czech Republic by Boukalova et al. (2016) reveals that most of the LAGs are still regarded as money providers rather than key agents in the implementation of the new paradigm of rural development.

LAGs have to define and implement area-based LDSs based on their particular situations, strengths and weaknesses. Several studies at the national and regional level have examined the projects implemented under the LEADER programme (Lošťák and Hudečková 2010; Papadopoulou et al. 2011, Pollerman et al. 2013; Dax et al. 2016; Cañete et al. 2018). Thus, Lošťák and Hudečková (2010) employ content analysis to assess the preliminary impacts of the LEADER+. They find that the most referred projects in articles are related to leisure and highlight the need for a higher representation of farming originated projects. Papadopoulou et al. (2011) compare the network structures and relations of the LEADER projects with that of the Integrated Programmes for Rural Development (IPRD) in Greece. They find that despite multidisciplinary and multifunctionality are higher in LEADER projects these are not per-

ceived as being better in achieving their objectives. The analysis of the impact of LEADER in improving “smart places” in seven German Länders conducted by Pollerman et al. (2013) starts from the fact that German LAGs focus on tourism, rural economic diversification, environmental issues, demographic change and quality of life. While some fields of action like tourism or quality of life have been successful, the degree of success in project implementation in agriculture, economy or environmental issues is quite low. In addition, the development of innovative projects in these areas can be affected by the fact that innovation is not explicitly mentioned as an eligibility criterion for receiving funding. Dax et al. (2016) highlight the same problem after comparing the implementation of LEADER projects in Austria and Ireland. They observe a shift to low-risk “standard” projects in detriment of highly creative and innovative projects which prevents the implementation of the new paradigm of rural development that defends a shift from subsidizing declining sectors to develop the most productive activities of each territory (OECD 2006). In the same line, the analysis of the projects implemented over the period 2002–2008 in the Spanish region of Andalusia conducted by Cañete et al. (2018) reveals a high presence of projects in the tourism sector which tend to concentrate in the wealthiest areas.

Most of the literature dealing with the impact of LEADER has focused on good practice collection or stakeholder satisfaction while other aspects like the socio-economic impact of the projects supported by LEADER is poorly researched (Dax and Oedl-Wieser 2016). According to the *ex post* evaluation of rural development programmes 2007–2013 information report (European Commission 2017), in Andalusia “job creation, especially among women, was possibly the main added value, together with the continuation of agricultural activity in marginal areas that would otherwise have been abandoned” (European Commission 2017). The objective of this paper is to contribute to the comprehensive evaluation of LEADER.

Spain implements its rural development policy through RDPs established at the regional level. In Andalusia, there are four priorities in its RDP, which were chosen in accordance with the Community Strategic Guidelines, the National Strategy Plan and the Spanish National Framework: competitiveness of the agri-food sector, sustainability and natural environment, diversification of quality of life in rural

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areas and development of local capacity and diversification. Regarding the axes¹, the main priorities under Axis 1 are the promotion of knowledge and improvement in human potential, the restructuring and development of the physical potential and promotion of innovation and the improvement in the quality of production and the agricultural production. In Axis 2 the main priorities are the sustainable use of the agricultural land and the sustainable use of the forest land and in Axis 3 the diversification of the rural economy, the improvement in the quality of life in rural areas and the reinforcement of the territorial cohesion and the synergies. Finally, the main priorities in LEADER are the contribution to the objectives of Axis 1, 2 and 3 through the development strategies and participation of social and economic actors, the improvement in local governance and promotion of cooperation between private and public sectors and the mobilisation of the endogenous development potential of rural areas. Thus, LEADER covers three main areas: first, the implementation of LDSs, second the implementation of cooperation projects and third the running of LAGs, acquiring skills and animating the territory. In this paper, we focus on the first area, the implementation of LDSs. It is generally assumed that projects aimed at developing different measures cause different results in terms of employment. In this paper, we examine the relationship between variety in the LDSs implemented by the LAGs and employment safeguarding in Andalusia over the programming period 2007–2013. The data and methods employed are described in the next section.

MATERIALS AND METHODS.

The focus of our empirical work is the implementation of the LEADER programme in Andalusia at the project level. Out of the 770 municipalities in Andalusia, 702 are classified as rural in the programming period 2007–2013. These municipalities are grouped into 52 LAGs. Table S1 (in electronic supplementary material (ESM); for the supplementary material see the electronic version) reports the population (number of inhabitants), area (km²) and number of municipalities covered by each LAG in Andalusia.

LAGs support a wide range of activities for implementing LDSs. In this study, we examine the projects funded by LEADER. Data were drawn from the software information system SEGGES.DOS developed by the General Secretary of Agriculture and Food of the region to monitor and control public funding within the Andalusian RDP. This software records, by LAG, the support granted under the LEADER programme for implementing LDSs with a view to achieve the objectives of one or more of the three other axes of the rural development policy. According to the Council Regulation No 1698/2005 of September 2005 on support for rural development, the EAFRD contribution rate for LEADER is 80% of the eligible public expenditure in the regions eligible under the Convergence Objective.

Table 1 reports, by measures within each of the three axes of the rural development policy, the distribution of the total grants awarded and the total investments made by the projects funded by LEADER over the period 2007–2013. It also incorporates the total safeguarded employment as a result of the implementation of those projects. Thus, the first two columns show the grants awarded and the total investments made in EUR. The third column shows the employment safeguarded (in a number of persons) as a result of the implementation of those projects. The fourth, fifth and sixth columns report the share of each measure and axis in the total grants awarded (fourth column), in the total investments made (fifth column) and in the total safeguarded employment (sixth column).

As Table 1 illustrates the range of grants awarded and investments made varies greatly among axes. Axis 3 accounts for the highest share of grants, investments and employment, in line with the findings of previous works (Lošťák and Hudečková 2010; Pollerman et al. 2013; Cañete et al. 2018). In particular projects in Measure 321 Basic services for the economy and rural population account for one-third of the total grants awarded and one-third of the total safeguarded employment. This measure supports the setting up of basic services, including cultural and leisure activities. The second most important measure within Axis 3 is 313 Encouragement of tourism activities. As its name indicates, this measure is aimed at sup-

¹The four axes of the 2007–2013 Rural Development Policy are: Axis 1 – the measures with the objective of improving the competitiveness of agriculture and forestry by supporting restructuring, development and innovation; Axis 2 – the measures with the objective to improve the environment and the countryside by supporting land management; Axis 3 – the measures with the objective of improving the quality of life in rural areas and encouraging diversification of economic activity; Axis 4 – the use of the LEADER approach to achieve the objectives of Axes 1–3.

Table 1. Measures supported by LAGs in Andalusia by axes, 2007–2013

Axes	Measures	Grants (EUR)	Investments (EUR)	Employment (number of persons)	Grants (share)	Investments (share)	Employment (share)
	111 Vocational training and information actions	6 328 194	7 476 638	162.5	2.76	1.33	0.78
	121 Modernisation of agricultural holdings	15 664 290	56 560 233	2 632	6.83	10.07	12.68
	122 Improvement of the economic value of forests	136 123	313 572	10	0.06	0.06	0.05
	123 Adding value to agricultural and forestry products	32 739 100	106 009 617	6 946	14.28	18.88	33.47
Axis 1.	124 Cooperation for development of new products, processes and technologies in the agriculture and food sector and the forestry sector technologies	854 333	984 338	34	0.37	0.18	0.16
Competitiveness	125 Infrastructure related to the development and adaptation of agriculture	6 027 023	8 512 135	57	2.63	1.52	0.27
	Total Axis 1	61 749 064	179 856 533	9 841	26.93	32.03	47.42
Axis 2.	216 Non-productive investments	802 200	1 154 744	69.28	0.35	0.21	0.33
Environment/land management	227 Non-productive investments	3 349 461	4 428 967	71	1.46	0.79	0.34
	Total Axis 2	4 151 661	5 583 711	140.28	1.81	0.99	0.68
Axis 3.	311 Diversification into non-agricultural activities	1 310 590	3 744 041	43	0.57	0.67	0.21
Quality of life/diversification of economic activity	312 Business creation and development	18 125 672	57 260 523	1 904	7.91	10.20	9.17
	313 Encouragement of tourism activities	33 531 722	90 221 555	1 747	14.63	16.07	8.42
	321 Basic services for the economy and rural population	77 763 237	173 866 891	6 698	33.92	30.96	32.28
	322 Village renewal and development	12 878 672	19 804 461	49	5.62	3.53	0.24
	323 Conservation and upgrading of the rural heritage	13 582 343	24 578 866	175.5	5.92	4.38	0.85
	331 Training and information in the fields covered by Axis 3	3 208 684	3 546 037	81	1.40	0.63	0.39
	341 Skills acquisition, animation and implementation of local development strategies	2 973 607	3 051 041	74	1.30	0.54	0.36
	Total Axis 3	163 374 528	376 073 414	10 771	71.26	66.97	51.90
Total		229 275 253	561 513 658	20 753	100	100	100

Source: General Secretary of Agriculture and Food of Andalusia (2018)

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porting small-scale infrastructures such as information centres and signposting of tourist sites, recreational infrastructures, such as those offering access to natural areas, and the development and marketing of tourism services. The projects within these measures account for more than 48% of the grants awarded, 47% of the investments made and more than 40% of the safeguarded employment. The second axis in importance is Axis 1. Although the share in total grants awarded and in total investments made is less than half of the shares of Axis 3, the share in total employment safeguarding of projects within this axis is less than five percentage points lower than the share of projects in Axis 3 (47.42 compared to 51.90%). This could indicate a higher impact concerning employment safeguarding of the projects within this axis. Special mention deserves the importance of the measure 123 Adding value to agriculture and forestry products, which represents one-third of the total safeguarded employment. The projects within this measure are aimed at investing in processing and marketing of the existing product as well as in the development of new products, processes and technologies. Finally, we have to note the minor role of those projects within Axis 2. This can be explained, at least partially, by the fact that the type of investments made have a non-productive nature and do not lead to increases in value or profitability.

A critical part of our analysis is to explore whether the variety in the implementation of LDSs funded by LEADER by each LAG affects its performance regarding employment safeguarding. For this reason, as a first step, we construct three indicators to capture differences in the number of projects carried out and the financial efforts made. The first indicator refers to the number of projects. For each LAG we measure the variety in the number of projects by summing the total number of projects funded. Then, the indicator was normalised by dividing by the highest number of projects funded in a LAG so that the resulting indicator takes a minimum value of 0 and a maximum value of 1. The second and third indicators refer to the grants awarded and the investments made, respectively. For each LAG we compute the average grant received and the average investment made. Again, we normalise these indicators by dividing by the highest average grant awarded and by the highest average investment made, respectively. To assess employment performance, we apply the same strategy: for each LAG we compute the average safeguarded employment and normalise it by dividing by the highest average safeguarded employment so that it varies between

0 and 1. All the indicators are computed by axes of the rural development policy.

To empirically conceptualise variety in LDSs, we use cluster analysis to classify LAGs applying similar LDSs into homogenous groups. LDSs are identified through a two-step analysis. Firstly, we carry out an exploratory factor analysis using the principal components method on the indicators described above. We enter the indicators related to variety in the number of projects, grants awarded, investments made and safeguarded employment by axes into a factor analysis and extract factors with an eigenvalue higher than 1. Each factor is characterised by using those indicators with loadings above 0.5. Secondly, we use the factors obtained to perform cluster analysis. We perform both hierarchical and non-hierarchical analyses in a sequential manner in order to obtain a robust taxonomy. The next section presents and discusses the results obtained.

RESULTS AND DISCUSSION

The first step of our analysis of the relationship between variety in LDSs and employment safeguarding consists in conducting an exploratory factor analysis using the principal components method. The resulting four factors are displayed in Table 2.

The four factors obtained explain 73.5% of the total variance. The first factor can be interpreted as specialisation in Axis 3 because the indicators reflecting the grants awarded and the investments made in projects of Axis 3 load high while the indicator referred to the number of projects in this axis loads negative. Curiously, the number of projects in Axis 2 also loads negative into this factor. A similar situation is observed in the second factor: both the indicators related to the grants awarded and the investments made in projects of Axis 1 load very high while the number of projects in Axis 1 load negative so this second factor can be described as specialisation in Axis 1. In the case of the third factor, both the grants awarded and the investments made in projects of Axis 2 load very high. It can be interpreted as specialisation in Axis 2 although it is necessary to highlight that, in contrast to the previous factors capturing specialisation in Axis 3 and Axis 1, the number of projects in Axis 2 does not load so negative. Finally, the fourth factor can be interpreted as employment safeguarding and diversification as all the three indicators on safeguarded employment load high. It is necessary to mention that, although with comparatively lower values, all indicators with the

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Table 2. Principal components analysis – factor loadings

Indicator	Factor 1 specialisation in Axis 3	Factor 2 specialisation in Axis 1	Factor 3 specialisation in Axis 2	Factor 4 employment safeguarding and diversification
Axis 3. Grants awarded	0.922	0.021	-0.134	0.163
Axis 3. Investment made	0.863	-0.048	-0.067	0.071
Axis 3. Number of projects	-0.744	-0.184	0.279	-0.159
Axis 2. Number of projects	-0.569	-0.101	-0.368	0.121
Axis 1. Grants awarded	0.016	0.933	0.018	0.075
Axis 1. Investment made	0.014	0.907	-0.001	0.073
Axis 1. Number of projects	-0.266	-0.550	0.011	0.365
Axis 2. Grants awarded	-0.116	0.035	0.957	0.113
Axis 2. Investment made	-0.110	-0.019	0.937	0.086
Axis 2. Safeguarded employment	0.076	-0.018	-0.052	0.739
Axis 1. Safeguarded employment	0.028	0.418	0.130	0.710
Axis 3. Safeguarded employment	0.269	-0.291	0.292	0.671
Variance (%)	22.07	19.20	17.78	14.46
Bartlett's test*	Chi-square	395.50	-	-
	Significance	0.000	-	-

Varimax rotation with Kaiser normalisation; *number of observations – 52

Source: own elaboration

sole exception of the number of projects in Axis 3, load positive into this latter factor.

To classify LAGs according to the variety in their LDSs and their performance in terms of employment safeguarding, we carry out a cluster analysis using the four factors obtained above. First, we perform hierarchical cluster analysis. Drawing on the agglomerations coefficients plotted over the number of clusters we take the five, four and three clusters solution into consideration for the non-hierarchical cluster analysis. The *K*-means non-hierarchical cluster analysis

confirms the consistency and interpretability of the four clusters solution. Table 3 shows the mean scores for each of the four factors considered and Figure 1 shows the classification of the municipalities covered by each LAG into these four clusters.

This clusters solution gives some insights about how LAGs specialise in supporting projects of different axes of the RDP and the effects that the characteristics of their LDSs generate in terms of employment safeguarding. Thus, the first cluster is composed of 7 LAGs specialised in supporting big projects of Axis 1 that

Table 3. Clusters description – mean factor scores (F1–4)

	Cluster 1 LDSs specialised in Axis 1 (strong em- ployment safeguarding)	Cluster 2 non-specialised LDSs (moderate employment safeguarding)	Cluster 3 LDSs specialised in Axis 3 (weak employ- ment safeguarding)	Cluster 4 LDSs specialised in Axis 2 (moderate em- ployment safeguarding)
F1. Specialisation in Axis 3	0.428	-0.486	2.556	0.027
F2. Specialisation in Axis 1	1.588	-0.266	-1.029	-0.101
F3. Specialisation in Axis 2	-0.306	-0.611	-0.882	0.991
F4. Employment safeguarding and diversification	0.903	0.073	-0.824	-0.291
Number of LAGs	7	23	3	19

LDSs – local development strategies

Source: own elaboration

a balance among the different objectives of the rural development policy and to translate this balance into the funding of projects.

Our study presents some limitations. First, we examine the impact of variety in the LDSs funded by LEADER. To have a complete picture, it would be necessary to combine information from the whole range of projects implemented, regardless if they received public funding or not. Second, we assess the relationship of variety in LDSs and employment safeguarding. To adequately evaluate the results of LEADER other aspects should be taken into consideration. However, LAGs do not report on whether or to what extent the projects funded by LEADER contribute to objectives like reducing rural exodus, increasing opportunities for young people or diversifying the economy (European Court of Auditors 2010). The availability of more detailed information on these issues could help to achieve a better understanding of the strengths and weaknesses of the different strategies implemented by the LAGs.

REFERENCES

- Bosworth G., Annibal I., Carroll T., Price L., Sellick J., Shepherd J. (2016): Empowering local action through neo-endogenous development: the case of leader in England. *Sociologia Ruralis*, 56: 427–449.
- Boukalova K., Koralova A., Lostak M. (2016): Tracing shift in Czech rural development paradigm (Reflections of Local Action Groups in the media). *Agricultural Economics – Czech*, 62: 149–159.
- Cañete J.A., Navarro F., Cejudo E. (2018): Territorially unequal rural development: the cases of the LEADER Initiative and the PRODER Programme in Andalusia (Spain). *European Planning Studies*, 26: 726–744.
- Convery I., Soane I., Dutton T., Shaw H. (2010): Mainstreaming LEADER delivery of the RDR in Cumbria: an interpretative phenomenological analysis. *Sociologia Ruralis*, 50: 370–391.
- Dax T., Oedl-Wieser T. (2016): Rural innovation activities as a means for changing development perspectives – An assessment of more than two decades of promoting LEADER initiatives across the European Union. *Studies in Agricultural Economics*, 118: 30–37.
- Dax T., Strahl W., Kirwan J., Maye D. (2016): The Leader programme 2007–2013: Enabling or disabling social innovation and neo-endogenous development? Insights from Austria and Ireland. *European Urban and Regional Studies*, 23: 56–68.
- Delin M. (2012): The role of farmers in Local Action Groups: The case of the national network of the Local Action Groups in the Czech Republic. *Agricultural Economics – Czech*, 58: 433–442.
- Esparcia J., Escribano J., Serrano J. (2015): From development to power relations and territorial governance: Increasing the leadership role of LEADER Local Action Groups in Spain. *Journal of Rural Studies*, 42: 29–42.
- European Commission (2017): Ex post evaluation of rural development programmes 2007–2013. Information Report. European Economic and Social Committee.
- European Court of Auditors (2010): Implementation of the leader approach for rural development. Special Report No. 5/2010, Brussels. Available at <http://eca.europa.eu/portal/pls/portal/docs/1/7912812.PDF> (accessed March 5, 2018).
- General Secretary of Agriculture and Food of Andalusia (2018): SEGGES.DOS information system. Junta de Andalucía, Seville.
- Lošťák M., Hudečková H. (2010): Preliminary impacts of the LEADER+ approach in the Czech Republic. *Agricultural Economics – Czech*, 56: 249–265.
- Navarro F.A., Woods M., Cejudo E. (2016): The LEADER initiative has been a victim of its own success. The decline of the bottom-up approach in rural development programmes. The Cases of Wales and Andalusia. *Sociologia Ruralis*, 56: 270–288.
- OECD (2006): The New Rural Paradigm: Policies and Governance. OECD, Paris.
- Papadopoulou E., Hasanagas N., Harvey D. (2011): Analysis of rural development policy networks in Greece: Is LEADER really different? *Land Use Policy*, 28: 663–673.
- Pollermann K., Raue P., Schnaut G. (2013): Rural Development experiences in Germany: opportunities and obstacles in fostering smart places through LEADER. *Studies in Agricultural Economics*, 115: 111–117.
- Thuesen A.A. (2010): Is LEADER elitist or inclusive? Composition of Danish LAG boards in the 2007–2013 rural development and fisheries programmes. *Sociologia Ruralis*, 50: 31–45.
- Volk A., Bojnec Š. (2014): Local action groups and the LEADER co-financing of rural development projects in Slovenia. *Agricultural Economics – Czech*, 60: 364–375.

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