# The Valorization of Agri-Food and Forestry Products as an Example of Innovation and Multifunctionality in the LEADER Approach in Castilla y León



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**Abstract** In this chapter, we investigate the contribution made by LEADER grants to the development of successful projects aimed at the valorization of agri-food and forestry products. We focus in particular on the typological analysis of these LEADER funded projects and their contribution to the development of territorialized, multifunctional agrarian systems in Castilla y León in Spain. The regional context of analysis—the 44 local action groups that operate in Castilla y León provides a framework for this case study of three success stories that we believe are representative of the efficacy of these investments in both social and territorial terms. Our aim is to emphasize the continued importance of the farming and forestry sectors in rural areas and the economic potential for the diversification of associated activities which contribute to rural development. To this end, we investigate the investments and actions organized and channelled through the local action groups (LAG) aimed at improving rural areas within the framework of the new discourse on sustainability, which the climate, health and geostrategic crises have prioritized in relation to the supply of primary sector products.

**Keywords** LEADER  $\cdot$  Castilla y León  $\cdot$  Multi-functionality  $\cdot$  Territory  $\cdot$  Innovation

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### 1 Introduction

After more than three decades of implementation, the LEADER approach, either as a European community initiative or as a strategy within the framework of the Common Agricultural Policy (CAP) is a fundamental point of reference for understanding the development of rural areas in Europe since the 1990s. Its new philosophy ushered in a fundamental process of change in the prevailing conception of rural spaces from an exclusively agrarian model of rural development to another alternative approach based on a wide range of activities and the diversification of income sources.

The origins of European rural development policy can be found in the LEADER community initiative implemented between 1991 and 1993 with a relatively small budget, which tried to support the transformation of the rural world by encouraging new uses of local resources that were different from those traditionally applied (Gordo Gómez, 2011). This first LEADER Community initiative set a precedent for a new way of understanding rural development with a territorial approach led by local agents designed and applied from the bottom up. This facilitated the subsequent implementation of the LEADER II community initiative (1994-1999) and the LEADER + initiative (2000–2006) (Esparcia Pérez et al., 2015), which were later followed by the application of the LEADER approach as Axis 4 of the Regional Development Programmes and of the Community-Led Local Development Strategy 2014–2020, which is still being applied today. The integration of LEADER into the regional development programmes implemented by each member state has facilitated its expansion to almost all rural areas, although it has reduced its operational capacity to some extent. This is because LEADER has become one more in a range of policy instruments, and by no means the most important in terms of resources, within a much wider framework that prioritizes actions aimed at the promotion and improvement of farming, environmental sustainability and the enhancement of the quality of life. Although one of its objectives is to support the achievement of Axes 1 and 3 of the RDPs—increasing the competitiveness of the agricultural and forestry sector, quality of life in rural areas and diversification of the rural economy-, there are various obstacles that complicate the analysis of its results and performance.

Since it first appeared LEADER has gone through several different stages. From being a Community Initiative until 2006 (with different formats and periods: LEADER I, II and + ), to being a methodological approach from 2007 to 2013 and a Local Development Initiative in the most recent period (2014–2020). Legal changes have affected the way the programme is managed and the procedure for justifying expenditure. These changes have not always been positive in that they have resulted in increased interference and supervision from regional authorities (Cejudo García et al., 2021). However, LEADER has maintained its original bottom-up approach and its essential philosophy in which Rural Development revolves around the promotion of economic diversification and making the most of local resources, both tangible and intangible.

Over the period 1996–2006, LEADER was complemented with the PRODER Rural Development programmes, which were also financed with European funds



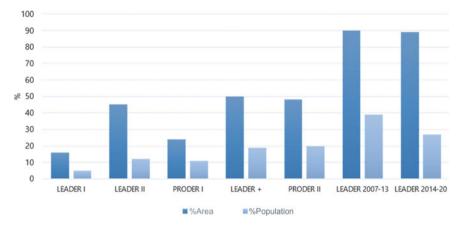


Fig. 1 Rural development programmes. Spain 1991–2020. Area and population covered. *Source* Alario Trigueros (2021b): The LEADER strategy and its contribution to the sustainability of rural areas, UIMP Galicia, Course—Demographic challenges and public policies for depopulated Spain

albeit through Support for the Regions Objective 1. Far from altering LEADER's essential philosophy, PRODER reinforced it and extended it to cover almost all rural areas of Spain.

After a difficult start in which local actors encountered a series of problems when trying to access the initial LEADER Community initiative funds, its good results, the improvements in its management and the decisive support it received from the European, National and Regional Administrations enabled the consolidation of new versions of the initiative until the 2007–2013 programming period with the progressive expansion of the area and the population it covered. As a result, in the current LEADER programming period (2014–2020), there are 251 programmes in the different rural sub-regions, which cover 89% of the total area of Spain and 27% of its population (Fig. 1).

## 2 LEADER and Territorial Development Strategies: The Role of the Valorization of Local Products

The LEADER approach has been consolidated over the last thirty years. It involves allowing the local communities in each rural area to take the initiative in planning. Organized in local action groups (public–private associations with assembly-like procedures), they draw up and execute a development strategy for their area that makes the most of local resources.

Although considerable emphasis has been placed on the value of the bottom-up participative method, which is a key characteristic of LEADER, in each programming

period certain extra requirements have been added: innovation and the dissemination of good practices, economic diversification, social sustainability and the fight against depopulation, heritage restoration, social and territorial cohesion, reinforcement of territorial identity, promotion of gender equality, etc. However, its fundamental philosophy remains intact, i.e. promoting social and economic development, improving the quality of life of the population, supporting business diversification and making the most of local resources, be they the local actors themselves, the quality of specific products, local know-how or the values intrinsic to the territory.

Promoting economic diversification within a rural context dominated by agriculture has led to a search for alternative activities to those considered traditional. Efforts have been directed towards the development of other sectors such as industry and services and above all rural tourism, which became the star attraction of LEADER I and II, together with the development of services for the population, the recovery of craft activities, the development of SMEs and other actions to promote cultural activities and heritage restoration.

In fact, under LEADER rules, it is expressly forbidden to use LEADER funds to support traditional farming activities. This, together with a pre-eminently nonagrarian rural development model, caused the funds to be channelled in various different directions. Nonetheless, ever since it first started, LEADER has offered continuous support, as a priority line of action, to the valorization of local products by promoting new non- traditional, agricultural, livestock and forestry produce, and their transformation, distribution and/or commercialization. In this way, the added value created by these activities remains within the rural area generating wealth, sustaining the business fabric and creating jobs. Although there have been slight changes in the names of the different LEADER programmes, they have all had a specific line of finance offering systematic support for projects of this kind (Table 1).

Even though LEADER supports an alternative approach to rural development that departs from the traditional model, we should not forget that farming remains a fundamental part of rural life, not only from a purely economic perspective, but also in its role as a generator of social structure and in the organization of space and landscape. As farming is an activity that cannot be relocated, it is an excellent option for the generation of wealth, augmenting its added value by transforming and commercializing the product in situ.

It is clear that alternative farming models based on valorizing non-conventional, territorialized and multifunctional products have received very little support within the framework of a productivist CAP, which is strongly based on Pillar 1, financed by the European Agricultural Guarantee Fund (EAGF). These other more innovative paths, including those based on quality, and sustainable and healthy production objectives, may be supported within the framework of Pillar 2 of the CAP, financed by the European Agricultural Fund for Rural Development (EAFRD). This second Pillar also finances LEADER and is more flexible in that it allows the different administrations to draft their own strategies within the framework of rural development programmes spanning several years. Convergence is not only necessary but also possible.

LEADER I 1991–1993	Measure 5. Valorization and commercialization of local farm products		
LEADER II 1994–1999	Measure B5. Valorization and commercialization of farm and forestry products	PRODER I 1994–99	Measure 7. Revalorization of farm and forestry production potential
LEADER+ 2000–2006	Axis 1. Measure 105. Valorization of local and farm products	PRODER II and AGADER 2000–2006	Measure 5. Revalorization of farm and forestry production potential (PRODER II) Measure 4. Valorization of farm products (AGADER)
LEADER 2007–2013 (in RDP)	Application of local development strategies through the LEADER approach with a view to achieving the objectives of Axis 1. Increase the competitiveness of the farm and forestry sector Measure 411: Increase the added value of farm and forestry products Measure 413: Quality of life and diversification of the economy		
LEADER COMMUNITY- LED LOCAL DEVELOPMENT 2014–20 (in RDP)	Measure 19.2.3: Help for the creation, modernization and/or transfer of Small and Medium-Sized Companies (SMEs) related with the increase in the added value of farm, agri-food and forestry products and the promotion of farm, agri-food and forestry products		

Table 1Valorization of locally-based farm products in the LEADER/PRODER lines of finance1991–2020

*Source* Red Rural Nacional (2011): LEADER in Spain (1991–2011) and RDP Spain 2007–13 and 2014–2020. Drawn up by: M. Alario

Although all the LEADER programmes are officially evaluated, their analysis in academic research, using mostly quantitative methods, has highlighted both the successes and the failures of these projects, putting the spotlight on newer nonagricultural sectors such as rural tourism. In this chapter, we apply more qualitative criteria in an analysis of successful projects involving the valorization of farm and forestry products. As an additional, complementary objective, we also propose to identify the main factors that could constitute key aspects of transferable experiences, as exemplified with the analysis of three specific case studies in the Castilla y León region of Spain.

#### **3** Study Area and Method of Analysis

Castilla y León is not only the largest Spanish region in terms of its surface area (94,226 km<sup>2</sup>) and the most rural and agricultural, it is also the region with the greatest demographic weaknesses, which are seriously damaging the viability of many rural communities. In macroeconomic terms, the agri-food sector is a strategic pillar of the economy of this region. In 2021, it provided 14.2% of the total Gross Value Added (7227 million euros) and 15.2% of jobs (147,921 people), putting it in fifth place in terms of GVA in Spain (Maudos et al., 2022). There is a fairly even balance between the various different links in the supply chain in this sector, with the transformation industry providing 37.7%, commercialization and distribution 24.8% and primary production 37.5% of GVA (idem). In spite of all this, after spending more than three decades adapting to the different approaches of the CAP, the primary sector has become highly dependent on subsidies. In the financial year 2022, the transfers from the EAGF and EAFRD totalled 1,198.6 million euros, and the direct subsidy payments represented on average 30% of farmers' incomes. In spite of these huge injections of funds, the CAP with its strongly sector-based and economic bias has been unable to stem the rural exodus. Between 1991 and 2022, the different types of rural areas lost a total of 282,707 inhabitants, falling from 49.7% of the regional population to 41.4% (Table 2). In the same way, the percentage of the working population employed in this sector fell from 25.2% in 1986 to 6.6% of the total in 2021. In addition, some agricultural workers do not even live in rural areas and instead prefer to commute to the countryside from their homes in towns and cities (Baraja-Rodríguez et al., 2021).

Type of settlement	1991	2000	2007	2015	2022	
Urban	1,183,204	1,177,469	1,205,747	1,180,449	1,142,356	
Periurban	96,325	131,303	193,048	235,798	246,594	
Deep rural	552,813	480,283	429,056	374,396	334,547	
Stagnant rural	260,038	238,505	228,971	213,216	199,665	
Progressive and dynamic rural	453,546	451,558	471,595	468,193	449,478	
Total urban population	1,279,529	1,308,772	1,398,795	1,416,247	1,388,950	
Total rural population	1,266,397	1,170,346	1,129,622	1,055,805	983,690	
Total population	2,545,926	2,479,118	2,528,417	2,472,052	2,372,640	

Table 2 Population of Castilla y León (1991 to 2022) by types of settlement

Source Spanish National Statistics Institute, Census of Population 1991 and Continuous Register Statistics 2000 to 2022. F. Molinero



**Fig. 2** Local action groups. Castilla y León 2014–2020. *Source* Municipal Lists of LAGs. Drawn up by F. Molinero. Base map: IGN, USGS, NOAA

This situation has accentuated the depopulation problem and the different strategies proposed to address it have systematically emphasized the role that the LAGs could play in the solution of the serious demographic crisis in rural areas, in that they have enormous accumulated experience in local territorial management. In the specific case of Castilla y León, there are 44 local action groups that apply the LEADER philosophy, covering 97% of the territory and affecting 41% of the regional population, according to an *ex ante* evaluation of the RDP 2014–2020 (2015) (Fig. 2).

In the last Regional Development Programme to be completed and evaluated (2007–2013), the most important priority in Castilla y León, with 22% of total scheduled spending, was Measure 123 (Axis 1) (improving the competitiveness of the regional agri-food sector), which included projects aimed at the promotion and valorization of local products. In the particular case being studied here, these objectives were also furthered by Axis 4, which with an additional 10.2% of total scheduled spending had an important multiplier effect. Although LEADER played only a minor role in these actions, the report evaluating its impact recognized the innovative value of projects aimed at the valorization of farm products for the diversification of production, within the framework of LEADER 2007–2013 (Ex-post Evaluation Report CyL, p. 122 and 25) (Fundación General de la Universidad de Valladolid, 2016, pp. 25 and 122). They were generally considered to have had very positive effects in that "half the projects within the actions aimed at boosting employment and diversification have had a direct or indirect influence on the increase in the

competitiveness of the farming and forestry sector (Axis 1)", by promoting technological improvements, enhancing the adaptation of local products to the demands of the market and their transformation with greater added value, so increasing overall levels of economic activity (Ibidem, 259 and 230). The number of projects actually linked to Measure 411 (increase in the value added of farm and forestry products) is very small (87), making up less than 3% of total LEADER spending (Ibidem, p. 202). However, it is important to bear in mind that in view of the limited margin for execution that the legislation offers the LAGs, not all projects for the valorization of local products are expressly financed as such (Measure 411), as in many cases they are assigned to funds for the support and development of SMEs (Measure 413), especially in the case of agri-food industries.

The local development strategy based on the LEADER method was maintained (Measure 19.2) in the RDP 2014–2020, which was extended and continues to be implemented today. Its objectives include subsidizing "the creation, expansion, modernization or transfer of small and medium sized companies (SMEs) related with the increase in value added and the fomenting of farm, agri-food and forestry products (19.2.3)" (Resolution of 13 June 2016, BOCyL N° 11) (Consejería de Agri-cultura y Ganadería. Junta de Castilla y León, 2016). Although it continues to be a minority line of finance with a budget of less than 3% of the total, it is very important in rural areas and has helped many successful and innovative projects get off the ground.

In the period up to 2020, by which time 46% of the programme had been executed, in Spain as a whole, 13% of the projects were linked to agri-food and forestry products. In Castilla y León, this figure was much higher at 20%, after the significant reduction in support for rural tourism as LEADER'S priority option for economic diversification (Table 3). This is why our aim here is to study the characteristics of successful projects of this kind.

Line of finance	Spain	Castilla y León
Tourism and the promotion of tourist activities	641	49
Basic services for the general public		6
Agri-food and forestry products	650	115
Non-farming SMEs and Industry	1584	179
Training	22	0
Cultural Heritage		1
Economic Dynamization		0
Natural Heritage		0
Results on the basis of the replies from 106 LAGs, with a degree of execution of 45.8%		

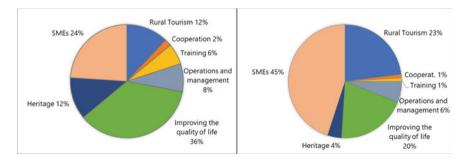
 Table 3 Projects approved within the different lines of finance. LEADER 2014–2020. Spain

*Source* Red Española de Desarrollo Rural (2020): "Compilation of statistics of interest about Local Action Groups for each Autonomous Community. 2020". FEADER, MAPA, RRN

In methodological terms, this study has been carried out on the basis of previous research conducted in 2021 into the situation of rural companies in Castilla y León. This was carried out within the framework of the "+ Empresas + Empleo + Rural" (More Companies, More Employment, More Rural) regional cooperation project and sought to identify opportunities in rural areas for the reactivation and maintenance of their economy in the wake of the COVID-19 pandemic. The specific objectives included investigating the impact on these territories of the local development programmes carried out by the Local Action Groups, evaluating their influence on the current business structure and finding out what the most actively involved stakeholders think of them.

This research did not cover the whole region. Given the territorial diversity and huge size of Castilla y León, the study area was reduced to 11 of the 44 territories in which these groups operate (Fig. 3). These 11 areas have very different environmental, economic and social profiles, but at the same time are representative of the current situation in the region. They include mountain areas (Cordillera Cantábrica, Cordillera Central and Cordillera Ibérica), areas along the border with Portugal, and areas in the plains and valleys in the centre of Castilla y León.

Once we had established which areas to include in the sample group, we then carried out the study according to a mixed qualitative and quantitative methodology. On the one hand, we analysed all the sources of demographic and economic data available at different scales, and in particular at municipal level. These sources included databases with business information and above all the data provided by the Social Security office regarding the number of companies and people in work by municipality at different times—2007, 2019 and 2020—. These dates serve as milestones between the different stages i) prior to the financial crisis, ii) in the recovery pre-COVID and iii) the current situation post-COVID. They also provided exhaustive information about the projects financed by the LAGs, which enabled us to analyse the changes in the role of LEADER grants in the development and maintenance of local business activities.



**Fig. 3** Projects (left) and Investments (right). LEADER/PRODER Rural Development Programmes. Castilla y León. Study Area 1991–2020. *Source* Alario Triguero (2021a): Study of the current situation of rural businesses aimed at identifying the opportunities offered by rural areas for the reactivation and maintenance of their economy after the situation generated by COVID-19, p. 69

However, even though the analysis is quite detailed and the associated maps allow us to reach precise conclusions that enable us to trace an outline of the main economic and demographic structures, the quantitative dimension of our analysis proved insufficient to understand the reasons why people decided to start businesses or to take certain decisions about existing business projects. Nor was it sufficient to enable us to assess the individual and collective opinions of local agents regarding LEADER. For this reason, we turned to consistent qualitative procedures, firstly, involving the design of a questionnaire sent to the economic agents in these territories which was answered by 843 businesspeople, or about 10% of all the companies registered with the Spanish Social Security Department. In order to complete this information, in-depth interviews were carried out with 69 business owners in the 11 territories. Having drawn up some partial conclusions, the third stage involved holding meetings for debate and discussion with local agents. These meetings had between 8 and 10 participants, in particular mayors, businesspeople, development agents and members of economic, cultural, and environmental organizations. The intention was to review the results obtained in the previous stages, discuss possible solutions for the problems detected and ascertain the opinions of local people and stakeholders about their territories.

### 4 Results and Case Studies

The local action groups that operate in the 11 selected territories have a great deal of experience in the management of LEADER projects, as most of them have been working in their particular local areas for over two decades. This continuous work over time has enabled them to assess the impact of their activities on the local economy and society.

#### 4.1 General Results

The first result obtained is that progress has been made in the achievement of the general objectives of rural development: promoting the diversification of the economy and taking advantage of local resources in order to create employment and dynamize rural areas in economic terms, restoring and valorizing local heritage at the same time as improving the quality of life of the population by supporting processes of cultural activation, repairing local infrastructures and facilities and promoting the image of the sub-region. In fact, the results of the survey showed that most of the promoters had very positive opinions about the LEADER grants and about the Local Action Groups themselves. Similarly in spite of its limited resources, they recognized the important role played by LEADER in the promotion and maintenance of the business fabric, in the development of new activities, and in the social and even territorial cohesion of their respective areas. This is due to the particular spatial

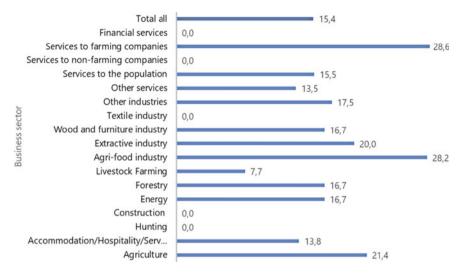
application of LEADER. On the one hand, non-business projects tend to be more dispersed. This is especially true of those related with improvements in the quality of life and in particular the restoration and conservation of historic, artistic and cultural heritage. In addition, after a quarter of a century of LEADER actions, the effects of LEADER-sponsored business projects can be noted in the vast majority of the municipalities and they are quite evenly distributed with the balance perhaps being tipped towards the small municipalities. However, this finding does not contradict the general trend whereby business-related projects tend to be concentrated in the larger municipalities, in that entrepreneurship also tends to be concentrated and where companies normally choose to set up, especially service sector businesses that seek to cover the needs of the entire sub-regional market. One exception is rural tourism projects, which are much more widely scattered throughout the whole territory.

Secondly and analysing the programme at project level, we found that in all the areas studied over the period 1991–2020, the LAGs have managed over 5000 projects with 163 million euros of public funds, which have generated a total investment of around 400 million euros, so producing a multiplier effect of 1.45. As corresponds with the objectives of the LAG and the LEADER intervention strategy, the projects oriented towards economic diversification predominate, and in particular those in support of the creation and consolidation of small and medium-sized businesses (24%). These include businesses related with the valorization of local products such as agri-food and forestry products and those providing services and others aimed at rural tourism activities and infrastructures (12%) (Fig. 3 left).

The distribution of the investment confirms the role played by business projects aimed at economic diversification. The projects that strengthen the productive fabric of the area are also of great importance. Almost half the total investment went to SMEs (45%) and to rural tourism (23%), business activities that are fundamental today in all the rural areas analysed (Fig. 3 right).

The surveys revealed the economic impact of LEADER actions in that around 15% of the current business fabric has direct links with LEADER/PRODER grants, meaning that at some time in their history (setting up, expansion, modernization) they have benefitted from LEADER funding. LEADER has played a particularly important role in the industrial sector, in which the agri-food industry stands out with over 28% of companies having received LEADER support (Fig. 4).

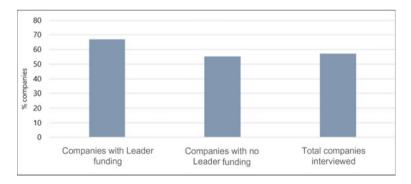
However, the effects of LEADER/PRODER funding are not only manifested in terms of their economic contribution. It is even more important that they have helped establish a diversified, solvent business fabric with a capacity for innovation, so encouraging entrepreneurship amongst women and young people and improving their access to the labour market. In fact, the companies who declared that they had received LEADER/PRODER funding have more female employees than the average for the study area as a whole. This may be due to the fact that for a project to receive funding it must create or maintain jobs and also to the relative importance of more feminized activities such as services. In the same way, in the indicator of investments in innovation in the last two years (Fig. 5), a greater tendency towards innovation can



**Fig. 4** Companies that received LEADER funding as a percentage of the total in each sector. Castilla y León. Study area 2021. *Source* Alario Trigueros (2021a): Study of the current situation of rural businesses aimed at identifying the opportunities offered by rural areas for the reactivation and maintenance of their economy after the situation generated by COVID-19, p. 70

be observed in the projects that have received LEADER support, with a difference of over 10 percentage points compared to the average for all companies.

In spite of this optimism, it is important to emphasize that although most of the policies linked to rural development are based on stimulating the labour market so as to help maintain the population, this has not been sufficient to stem the problems of demographic decline.



**Fig. 5** Investments in innovative projects in the last two years. Castilla y León. Study area 2021. *Source* Alario Trigueros (2021a): Study of the current situation of rural businesses aimed at identifying the opportunities offered by rural areas for the reactivation and maintenance of their economy after the situation generated by COVID-19, p. 73

Another of the most significant results of this process was that the rural development policy carried out within the LEADER framework has cut all ties with farming in a bid to promote multi-functionality as a means of guaranteeing economic development and the quality of life in rural areas. It is almost as if farming, in spite of its importance, belonged to some separate reality. Although, as explained above, there are strategic and legal reasons for this separation, it is also important to highlight the potential dangers of rural development (as a territorial policy) and agricultural development (as a sector-based policy) following different paths. This artificial separation between the rural and the agrarian runs the risk of creating "territories without farmers", so accentuating de-agriculturalization processes and restricting the potential for creating rural employment associated with agriculture (Silva Pérez, 2010).

Instead, what we need are "tractor projects" that can drag rural areas towards rural development. Paradoxically, given this apparent separation between LEADER and farming, the valorization of agri-food and forestry products would appear to a promising source of successful "tractor projects" that can be replicated in other areas. In fact, our analysis on the ground revealed that the most successful case stories amongst the projects funded within this line of finance were also the most solidly anchored in the territory, the ones that stood out for their multifunctional approach, and the ones that were most committed to innovation as the best means of addressing future challenges. Within this context, the COVID-19 pandemic has proved to be a disruptive episode, accelerating processes which were previously barely noticed and opening a new debate within society on hitherto unimagined challenges and priorities.

The increased concern about health and the healthy has opened a window of opportunity for those areas which can meet the conditions of quality of life, endogenous resources and connectivity required for the development of projects. Within this framework, "territorial anchoring" is confirmed as an important value in the face of globalized models that are costlier in both economic and environmental terms, and which not only create dependence, but also, in certain extreme situations, can result in supply shortages. In general, in all the spaces we studied, there is a history of industrial development based on their endogenous potential. For example, some of the most successful projects have been based on the transformation of agricultural, livestock and forestry products, by adapting, improving and expanding traditional activities and production methods, introducing the relevant technical advances and developing them to the full to meet the needs of growing markets, which are increasingly more demanding. This wide range of endogenous industries have extraordinary pull and push capacities and could be one of the great tractor forces in rural areas.

In addition, in the current market situation, the farm and forestry sector would seem to have great potential which must be exploited, above all by focusing on highquality produce and sustainable practices, so fomenting new forms of production and consumption. These products could be integrated into local and regional circuits, and into proximity consumption and distribution circuits, which without doubt would help develop other sectors such as tourism and retail.

This great business potential is reinforced by the strong involvement and deeprootedness of the economic agents in the territory. The fact that the business fabric has deep roots is very important and although it does not always guarantee that the next generation will take over the reins, their links with the territory and its resources are of great value, both due to the existence of raw materials and because of the tradition, culture and wisdom they inherit.

### 4.2 Specific Studies

In order to corroborate these conclusions, we present three case studies of successful projects financed by LEADER involving the valorization of agri-food and forestry products from Castilla y León. To this end, we selected projects that were carried out in territories that were not included in the original base study, in order to find out whether the same pattern could be observed in other LAG areas (Fig. 3). Nonetheless, we decided to maintain a diverse range of representative areas in social and environmental terms: mountain regions, highlands and plains. We also selected projects centred on unconventional uses, particularly of mountain and upland areas. They all fulfilled criteria linked to their territorial anchoring, their impact on the value chain associated with cultivation, harvesting and transformation and their multifunctional character, and were all examples of business activities that generate employment for local workers. These case studies also had innovative aspects, not only in terms of the originality of the product itself, but also in terms of the methods applied in the sustainable management and organization of the production, with particular reference to the actors involved and their positive effects on the territories (food transformation companies, promotion of tourism) and the local population (employment in general and for women and young people in particular). These projects stood out above all because the indicator of their success, as emphasized in the interviews with those involved, was that they were the culmination of an enduring lifelong project.

#### 4.2.1 A Group of Women Form an Association to Prepare Highland Products and Set up a Restaurant Business: Cooperativa Del Monte De Tabuyo

In the shade of Mt. Teleno (2188 m high), with high ridges and massifs, poor soils and valleys rutted by rivers with low water levels, especially in the summer months, at high altitude (982 m) and with sufficient rainfall for a generous development of plant and animal life and dense Mediterranean pine forest (Pinus pinaster) vegetation lies the village of Tabuyo (217 inhabitants), part of the municipality of Luyego (562 inhabitants in 2022).

In 2003, five women from the village set up a cooperative with LEADER funding. The cooperative, called "Del Monte de Tabuyo", specializes in the cultivation of raspberries, a product traditionally picked in this area, and mushrooms, which have long been picked in local forests and are now also grown directly on bales of straw. The idea for a cooperative was based on an ancient custom known as "la facendera"

applied in this area since time immemorial, in which the community came together to work for the common good. This traditional model inspired them to set up a cooperative in which the five women contributed the skills that each one knew best: some in the kitchen and the restaurant: others in the field, or in the management and publicizing of the business.

Their initial objective was to create employment for local women, who had been hit hard by the crisis in the textile cooperatives in the area. The promoters also wanted to take advantage of local know-how and craftsmanship converted into high-quality preserved foods and restaurant dishes. For these purposes, they developed a system based on a sustainable approach learnt from the traditional uses of the surrounding hills and forests. This involves full control of the production process in that the women sow, cultivate, harvest and cook all the products until they are ready to be packed for sale. Another outlet for these products is the restaurant they opened in the village, where they serve their own products as part of local cuisine.

They have quite a diverse range of activities from the organic cultivation of mushrooms and raspberries to the transformation, bottling or canning of different vegetables cultivated or picked by the members of the cooperative; their direct sale online and their direct consumption in an innovative restaurant, with a menu based on local products, prepared and cooked by the women themselves.

The cooperative has managed to breathe new life and economic dynamism into a forgotten corner of the Montes de León that has also been severely battered by frequent forest fires that have put its ecological balance and its economic and social development in jeopardy. The initiative has had a magnet-type effect encouraging others to carry out projects in the village, so creating synergies and new lines of business. Their deep roots in the territory are also manifested in their support for and collaboration with other companies and initiatives in the village. These include the setting up of a second restaurant (La Casa del Herrero) and of the Tabuyo Mycological Interpretation Centre, promoted by Luyego Local Council and the Montañas del Teleno LAG in 2005. The Interpretation Centre offers guided mushroom-related routes and encourages visitors to try the dishes based on mushrooms offered by the two restaurants. New cooperatives have also sprung up such as "Pinaster", which offers a range of services from the extraction of resin from local pine trees, to environmental management and dissemination. They have forged a good relationship with the day centre for elderly people in the village, which has led to further employment opportunities for women. In this way, they are helping reduce the exodus of women from rural areas, a fate to which they previously seemed destined.

In addition, their commitment to environmental sustainability has led them to take decisions such as installing a biomass boiler when they discovered that the offcuts from pruning the pine forest were not used for anything. With this boiler, they were able to cover a large amount of their heating and energy needs. Their example has been followed by the school, a few private houses and a new hostel, which have also installed these boilers. Other moves towards sustainability include the cultivation of mushrooms on straw bales, which after harvest are burnt in the biomass boiler.

The cooperative now has quite a long and successful history, so much so that the Ministry of Agriculture, Fishing, Food and the Rural and Marine Environment awarded it the First Prize in a competition held to mark World Environment Day in 2010. Apart from the important financial boost (10,000  $\in$ ), this prize also gave them additional encouragement and optimism to consolidate and extend their project in Tabuyo, and to continue to innovate with new products such as "Leeks in a raspberry and dill marinade", which won a prize at the 28th edition of the León Local Products Fair in the Long Duration Perishable Products category.

Initiatives of this kind undoubtedly impact on the general dynamics of the village and its surrounding area and to a large extent are responsible for the positive evolution of the village of Tabuyo. The enhancement of the value of the landscape, hiking and orienteering routes in the mountains, nature and gastronomic tourism are all factors which undoubtedly stimulate the positive dynamic in this rural area. Although it is now very difficult to revert the demographic decline in the village, given the already ageing population, there is no doubt that the Del Monte de Tabuyo Cooperative has breathed new life into the area, providing economic activity and attractions in a forgotten part of deep rural Spain that needs more initiatives of this kind.

# 4.2.2 Valorization of the Holly Branches Cut During Pruning of the Holly Woods in the Province of Soria: El Acebarillo

The small socio-territorial scale at which some good rural development initiatives are carried out in depopulated areas is magnified by the qualitative value of their success, according to criteria that go beyond purely economic results. A good example of this is El Acebarillo, a limited company with five partners, most of whom are women, which since 2002 has been commercializing holly (Ilex aquifolium) branches for ornamental purposes. These branches are produced during pruning of the holly wood known as the Acebal de Garagüeta. This wood is on common land used traditionally by local people for grazing cattle and covers 406 hectares in the municipality of Arévalo de la Sierra, in the north-eastern corner of the province of Soria at the foot of the mountains known as the Sierra de Montes Claros in the Cordillera Ibérica. Of this total area, about 180 hectares are monospecific holly woods, forming the largest, best conserved pure mass of holly forest in the Iberian Peninsula. El Acebarillo is based in the tiny hamlet of Torrearévalo (30 inhabitants, 21 men and 9 women), which belongs to the municipality of Arévalo de la Sierra, which according to the continuous census for 2022 has a total population of 72 in its three separate settlements. In this remote mountainous area situated in the outer fringes of Castilla y León, marked by an aging, declining population and an almost exclusively livestock-based economy, the business activity of El Acebarillo combines various important aspects of sustainable rural development: innovation with territorial anchoring, diversification, self-managed job creation and dissemination of the model.

This project is interesting first of all because it innovates on the back of tradition. It promotes the appreciation of holly branches and their commercial value as a-subproduct of controlled pruning. The holly is sold in two formats: as branches selected for sale to florists, and as handcrafted floral decorations such as table centrepieces, wreaths, garlands and bouquets. The economic returns from this activity have encouraged interest in the sustainable use and conservation of the Acebal de Garagüeta Nature Reserve. This is an outstanding natural space which is protected because of its environmental value although its most important heritage value is cultural. The mass of holly trees as a monospecific, cleared (*dehesa*) hillside has an anthropic origin in livestock farming, in that for centuries it has been used as a place for working animals, in particular oxen, to rest and as pasture till today. Pruning offcuts are also used traditionally as firewood and as animal feed. Due to the functional origin of these holly woods, the Regional Government of Castilla y León identifies depopulation as one the main threats to their conservation, together with the abandonment of grazing and the resulting rewilding and mixture due to the invasion of scrub and other tree species. As a result, the controlled pruning of holly branches ensures a beneficial use of the holly wood, while maintaining the gaps between the trees and its unusual status as a pure mass of holly forest.

Confined exclusively to autumn and winter, the seasonality of the pruning and of its core business limited the development of El Acebarillo. An additional difficulty was that, at the beginning, holly was a protected species in Castilla y León (from 1984), due to pressures from conservationist groups who, unaware of these good traditional uses, made generic claims about the risks involved in the excessive uncontrolled cutting of holly in other areas of the country. This was a severe blow for the parts of the province of Soria in the northeast of the Cordillera Ibérica, who since the 1950s had been obtaining additional income with the sale of ornamental holly branches at Christmas time. This led to a loss of interest in the woods and their resulting neglect. In the region, the prohibition to cut and sell holly as a Christmas decoration, which for decades had been disguised as "forest maintenance", prevented the company from promoting itself locally and made publicizing it to the outside world much more difficult, due to the increased cost of shipments and the bad press that the product received. The determination of the local councils that the sustainable management of the holly woods should be recognized eventually paid off in 2015 when the holly ceased to be a protected species in the region (Law 4/2015 on the Natural Heritage of Castilla y León) (Junta de Castilla y León, 2015). The change in the law was justified by "the evident improvement in the state of conservation of the species" and the fact that its survival was now guaranteed.

In this way, the pioneering work done by El Acebarillo and its repeated protests ultimately consolidated the possibility of commercializing the holly as an endogenous resource whose exploitation contributes to the effective conservation of the holly woods. In order to guarantee this, the company operates with an AENOR Quality Certificate of Sustainable Forestry Management using the Programme for the Endorsement of Forest Certification (PEFC) system (Norma UNE 162002). The Eco-label "Acebo de Garagüeta"—a trademark registered by Arévalo de la Sierra Local Council—certifies that the holly comes from a forest with carefully controlled pruning and forestry work.

Another important decision taken by the company was to ensure its functional diversification, breaking the confines imposed by the very short season of its core business by encouraging tourism and attracting visitors to the holly wood (over 34,000 visitors in 2022). Since 2004, El Acebarillo has offered leisure activities

that have helped dynamize the local economy. Since 2014, these services have been linked to the Acebal de Garagüeta Park House, which was opened that year by the Regional Government of Castilla y León in Arévalo de la Sierra (about 6000 visits in 2022). The company which was awarded the management of the house, offers active tourism activities such as guided hiking routes through the holly wood and its surrounding area, night-time walks in the summer to see the stars, talks and workshops on environmental education, courses explaining how to care for holly and holly-related craftwork, etc. Lastly, the diverse range of activities and services managed by the company is completed by the offer of a whole house for rent in Torrearévalo.

The success of this business project also has an important social value in terms of the jobs created and managed locally, above all of women and young people in an area which is at critical risk of depopulation. The company, which has five partners, provides one permanent position and 15 to 20 seasonal jobs in the busiest period. The holly branches are handcrafted and sold throughout Spain directly with no intermediaries, via telephone or online orders. During the Christmas season, holly can also be purchased directly in Torrearévalo or at a stall in the Christmas Market in the provincial capital, Soria.

The good use being made of the Garagüeta Holly Wood and the good management practices applied by the company El Acebarillo have been quite well publicized, leading to actions aimed at replicating this experience in other nearby holly woods. With this in mind, two of the LAGs in the province of Soria in this area, Proynerso and Asociación Pinares del Valle (Asopiva), combined to launch the Acebalia project. This project has two main objectives, namely to inform local people about the business possibilities of this resource (holly-related craft work and tourism) and to raise their awareness regarding the sustainability of the product and the social benefits it can provide. The positive results include the expansion of the Garagüeta model to other *dehesas*, the creation of other companies working with holly and holly woods (Senda Viva in San Pedro Manrique and houses for rural tourism), cooperation between the different subregions, the "Soria Holly" (Acebo de Soria) stamp to certify its origin and a continuous increase in sales.

These good decisions have earned El Acebarillo some important prizes and awards, such as the "Fuentes Claras" Regional Environment Prize awarded by the Regional Government of Castilla y León (2007), citing its value as a successful project in small villages with a high risk of depopulation. The Prize for Excellence in Innovation for Rural Women offered by the Ministry of the Environment and the Rural and Marine Medium (2010); and the "Castilla y León Rural Businesswomen" Prize awarded by the Families Department of the Regional Government of Castilla y León (2018), in recognition of the entrepreneurship and self-employment of women in rural areas that result in economic and social dynamization.

# 4.2.3 Innovation and Multifunctionality in the Cultivation of Aromatic Plants: Tiedra De Lavanda/Eco-Lavanda

Tiedra, a municipality in the province of Valladolid (Castilla y León) which in 2022 had a population of 289 (145 men and 144 women), is situated in the southwestern end of the mountains of Torozos, on the edge of the largely barren limestone plains in the sedimentary basin of the River Duero, which opens onto the Campo de Toro. This region is made up of flat plains with loose limestone soils. It suffers extreme variations in temperature and has low average annual rainfall, turning particularly arid in the summer. Due to these environmental characteristics, its farmers have traditionally specialized in rainfed cereals, vines and almond trees. The area was also known for sheep farming. The animals grazed in the uncultivated fields, rich in aromatic plants (camomile, sage, spike lavender, yellow immortelle, borage, common thyme, *thymus zygis*, marioram, rosemary or layender), which were traditionally collected by camomile pickers, herb collectors and apothecaries. The productivist approach behind the traditional farming model accentuated specialization and business concentration in agriculture with the resulting effects in terms of unemployment and depopulation. However, for the last two decades the municipality has become known for the high density of projects financed by the Zona Centro de Valladolid Local Action Group, and its economic structure has been diversified with the setting up of companies in the biofuels, tourism and agri-food sectors.

One of the most important projects involves the cultivation of aromatic plants. It has been particularly successful in terms of its effects on employment and its capacity to create synergies with other business activities. The promoters of this project are a family with strong roots in the municipality, who were concerned about how to maintain a traditional rainfed farm that was facing serious difficulties with doubts as to whether it could continue remaining viable via conventional farming. They therefore decided to take a new direction, to start up an innovative business called Aromáticas del Duero, a limited company which was set up in 2006 and specializes in the cultivation of spices, aromatic, medicinal and pharmaceutical plants. It is managed by a male entrepreneur whose original experience was in the forestry sector. This agro-industrial initiative is an alternative to the conventional cereal-growing model and consists of the planting and transformation of aromatic plants (hybrids between lavender and "lavandín" another hybrid) in Tiedra and its surrounding area. This idea was rooted in the local tradition of collecting aromatic plants in the uncultivated lands and hillsides of Torozos (herb pickers), but was completely innovative in terms of its end product as these plants had never been cultivated for the purpose of extracting their aromatic essences. Lavender is a pluri-annual crop, which requires an important initial investment but can remain in production for several years with acceptable returns, making it a reasonable alternative to the dominant rainfed cultivation of cereals. However, it must be transformed relatively quickly via steam distillation to obtain the essential oils which are then commercialized in the chemical, natural cosmetics, perfume, cleaning and disinfection industries on Spanish and international markets. This is why the investment in a distillery in 2008, financed by the Zona Centro de Valladolid LAG was an important milestone. The new plant had the greatest production capacity in the whole region and one of the largest in Spain and enabled them to further develop the business to offer agronomy and marketing services to other farmers in the area (selecting the most suitable varieties, planting, care, harvesting, joint distillery and sale). From its initial stages, when there were just a few dozen hectares in the municipality of Tiedra, they have now expanded to cultivating over 400 hectares scattered across the whole province providing employment for one permanent member of staff and six other temporary workers.

The company is constantly innovating, opening the door to "bio" products in the cosmetics range. One of its most successful achievements in terms of initiative and innovation is that from the highly masculinized agro-industrial base of the initial project, it later developed a second, quite different project: Eco-Lavanda, a limited company that organizes and manages a Lavender Interpretation Centre in the same village opened in 2018. This enabled them not only to grow and diversify the business but also to introduce new elements which would be key factors in its success: leadership and innovation.

Diversification is associated, firstly, with the launch of new products which are commercialized either online or in the interpretation centre, which has a shop which sells dried flowers, soaps, pouches, bouquets, essential oils, handicrafts and liqueurs. But above all it is due to Tiedra de Lavanda, 2019, the first interpretation centre in Spain devoted to the world of lavender (varieties, history, culture, tradition, manufacturing processes, products, etc.) financed with LEADER funds by the Valladolid Zona Centro LAG. Its aims include education, dissemination and consultancy, but above all it promotes active tourism. The Tiedra de Lavanda Interpretation Centre organizes participative activities at different times of the year and specific programmes for groups (free or guided visits), which include walks through the lavender fields, workshops, demonstrations, courses or talks. In this way, they enhance the value of intangible resources such as the landscape. In July and August, the flowering lavender offers a strong visual contrast with the cereal fields, scorched yellow by the summer heat, so creating a highly expressive landscape with enormous aesthetic and sensory (visual, aromatic) appeal, which explains why increasing numbers of tourists are visiting the area and sharing pictures of it on social networks.

From a leadership point of view, the tourism side of the business is run by a businesswoman from the other side of the family, who had previously worked in education and training in the public sector. She decided to set up this business, not only because of its business potential, but also because of her local roots, as a means of dynamizing the village and the surrounding area (the business employs three people, also women, during the period of most visits in the summer months when the lavender is in bloom), in a context in which other businesses were also being set up (tourism centre, astronomical observatory, etc.).

The creation of new businesses enabled them to build alliances and create synergies with fellow entrepreneurs. This is what happened, for example, with honey producers in that the flowering of the lavender attracts beehive owners from far and wide. A large honey-production company (Setentaynueve, Mieleros de Tiedra) has been set up in the same village. The shop sells this single-flower lavender honey with its own brand: Tiedra Trágame. They also organize weekly relaxation workshops combining mindfulness and lavender, run by professionals hired for these purposes. Lastly, they collaborate regularly with complementary businesses, either in the village itself (astronomical observatory, equestrian tourism or restaurants) or in the surrounding area.

All of this results in a successful initiative which attracts more and more tourists and which has earned it institutional recognition from the Valladolid Provincial Council. In 2002, the project was awarded the Valladolid Province Tourism Prize for its contribution to the promotion and positioning of the province as a tourist destination. It also recognized the importance of a project in developing a business sector which combines values of respect for the environment and the rural world.

## 5 Discussion and Conclusions

In this chapter we assess some of the best-known, most widely copied and furthestreaching projects financed within the framework of the LEADER LAGs in Castilla y León, and in particular within the context of the enhancement of the value of agri-food and forestry products. Our analysis revealed at least three common characteristics which formed the basis of their success.

The first is their territorial anchoring, in other words their close relationship and strong roots in the territory where the project is being implemented. This refers back on the one hand to the role played by the local context, with its resources and potentialities, as an active asset in the processes which lead to success based on their singularity and competitive advantages. In addition, at a more specifically agrarian level, territorial anchoring can form part of a strategy to halt the trend towards the delocalization of modern-day agrarian production systems associated with the standardization of production methods and globalized consumption (Ilbery, 2001). In this case, the process of territorial anchoring is reinforced in order to promote the opposite trend, i.e. relocation, with tight links between the product and the place where it is made. The coexistence of two quite different forms of agri-food production is becoming progressively established in Europe today: on the one hand a globalized, highly capitalized industrial approach, and on the other a form of farming based on territorial roots, which applies multifunctional strategies of product diversification (Ramirez et al., 2016). The territorial anchoring of products and the spatial differentiation of agri-food systems are strengthened and acquire added value when associated with images of the place and with its cultural identity. This enables them to occupy a particular niche in the market, as compared to products which are presented to the consumer in a standardized homogeneous way. This added value is reinforced by other accompanying attributes such as on the one hand, environmental, economic and social sustainability, and on the other, healthiness, values which became much more important as a result of the COVID-19 pandemic. For all these reasons, it is not surprising that the conversion of food products and their production contexts (agricultural landscapes) into heritage has opened up very promising paths towards rural development in both dynamic and more marginal contexts. In Castilla y León, as in other rural areas of Europe, different strategies for the territorialization of food have been gathering strength. These have been recognized at an institutional level in various different ways (Martínez-Arnáiz et al., 2022), and have been differentiated from more standardized products due to the unusual methods applied in their production and in their sales and marketing (consumer networks, short distribution channels, etc.).

Linked to the above, another common feature of these case studies is multifunctionality. This has two main dimensions: intrinsic (pertaining to the agri-food systems) and extrinsic (pertaining to the territories that define and host them) (Silva Pérez, 2010). Looking beyond the production of raw materials and/or agricultural, livestock or forestry-based food products, and even the forms and approaches applied in primary sector production processes, new functions are being triggered when resources that have not always been considered as marketable assets are successfully harnessed. It is not only a question of increasing the value chain of a particular product, but also of incorporating new actors and of getting complementary activities of the ground. In 1999, in a report for the Special Committee on Agriculture, the European Commission defined the basic functions of the primary sector in Europe as follows: "the production of raw materials and foodstuffs in competitive conditions (and its consequences for European food safety), the conservation of the environment and the rural landscape and the contribution to the viability of rural areas and to balanced territorial development" (Atance Muñiz & Tió Saralegui, 2000). In this sense, the externalities generated in the territory by farming itself are especially important, understood as public goods or services which could increase in value via their integration into the market. Among these assets, landscape must play a fundamental role in that as a synthesis of cultural and natural relations, it can encompass a wide range of "cultural, ecological, environmental and social aspects of all the different territories and in particular of rural areas, so becoming a crucial factor for the development of different activities including tourism" (Cañizares Ruiz & Ruiz Pulpón, 2020).

This capacity for integrating intangible assets such as landscape and other ecosystem assets into the value chain is very closely linked to another determining factor in the success of projects: innovation. The Oslo manual, an essential bibliographical reference in this field, defines innovation as "a new or improved product or process (or combination thereof) that differs significantly from the unit's previous products or processes and that has been made available to potential users (product) or brought into use by the unit (process)". In its more social dimension, it emphasizes the objective of "improving the welfare of people and communities" (OECD-Eurostat, 2018). This is why, in the processes leading to territorial development, a decisive role is played by economic and social innovation, understood as the capacity to work together for common objectives. In this sense,—together with public policies of support such as the funds managed by the LAGs among others—there are other spatial factors such as location, the good government of the territory, social and environmental factors or flows of knowledge and markets. A question that is closely

related with the principles of an innovative environment, in that economic innovation is a geographically located and socially interactive process in which agents of different kinds participate (in production, research, training, regulation, promotion, etc.), and contribute both tangible and intangible resources (Aparicio et al., 2008). Innovation can be assessed in terms of whether the actions taken in favour of the community or the territory have been applied there in the past, in reference to both the product and the method, to the market or the social sector from which these actions emerge or at which they are aimed. In this case, a conceptual instrument from the field of regional economy becomes particularly significant, namely the "social spaces of innovation" in which the problems of the territory could themselves become a source of innovation through co-creation processes in which various different stakeholders are involved (Hernández Navarro et al., 2013). We can also talk about innovation in relation to the new agents who are prepared to take action in support of the development of their local territory. It is important to emphasize the leadership provided by women, especially young women, in many of the successful case stories, in which they have discovered new ways of using local resources with strong territorial roots.

In order to mitigate or reverse the processes of demographic decline in rural areas in regions such as Castilla y León, decision-makers will have to make all the sectorbased policies converge in the common goal of rural development without excluding farming and forestry. At the same time, priority should be given to alternative agrifood and forestry models that break away from the traditional ones with which they will necessarily have to coexist. Models that are primarily based on sustainable, highquality products. Economically and socially dynamic systems activate innovation and multifunctionality on the basis of the differentiation provided by territorial anchoring and the incorporation of new components into the value chain such as agricultural and ecological heritage or the landscape.

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