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in rural areas

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Abbreviation list

Term	Description
AGADER	Axencia Galega de Desenvolvemento Rural
DPL	Demographic Promotion Law
EAFRD	European Agricultural Fund for Rural Development
EC/DG	European Commission / Directorate-General
EU	European Union
GCL	Galician Climate Law
GHG	greenhouse gas emissions
IGE	Instituto Galego de Estatística
IPCC	The Intergovernmental Panel on Climate Change
OGACLI	Observatorio Galego da Acción Climática
SWOT	Strengths / Weaknesses / Opportunities / Threads
UN	United Nations

Introduction

This document is the report on the first semester of work carried out for the project **Down to earth: Tackling depopulation challenges to improve environmental resilience in rural areas**.

In addition to outlining the general features of the Galician rural territory in contemporary times, the report deals with the environmental risks facing the Galician countryside in the Anthropocene (Bonneuil & Fressoz, 2016) with a special emphasis on depopulation and ageing. For more than a decade, there has been a sort of political and academic consensus in Galicia that recognises a strong demographic challenge that, according to different authors (Dubert, 2019), could jeopardise the future of some of its rural territories.

In 2021, Miguel Ángel Santalices Vieira, the president of the Galician Parliament, and the second political authority of the region, made a public statement in which he pointed out that rural depopulation constituted a "social pandemic" (Galician Parliament, 2021).

In this regard, it is worth noting that demographic promotion policies have become one of the Xunta de Galicia's priorities for action. Indeed, in 2021, the Galician Parliament approved the so-called Demographic Promotion Law (LEI 5/2021).

However, in addition to this demographic challenge, both ageing and rural depopulation are gaining new dimensions within the framework of the Anthropocene. The Anthropocene is the name by which various scientists identify the epoch of the climatic emergency: a new geological era characterised by the carbonisation and alteration of the atmosphere due to the greenhouse gas emissions (GHG). Scientific evidence, such as provided by IPCC (2023), warns of clear risks to the viability of contemporary human societies if global warming by the end of the century exceeds 1.5°C or 2°C above pre-industrial levels. Therefore, faced with a horizon of uninhabitability and disrupted climates, we are forced to prepare our social systems and territories for the consequences

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of climate change (that is, adaptation) and to limit its impact in our ways of life (that is, mitigation).

As UN Secretary-General António Guterres stressed in his statement of 27 July 2023: “The era of global warming has ended; the era of global boiling has arrived. The air is unbreathable. The heat is unbearable. And the level of fossil-fuel profits and climate inaction is unacceptable. Leaders must lead. No more hesitancy. No more excuses. No more waiting for others to move first. There is simply no more time for that (...). It is still possible to limit global temperature rise to 1.5°C and avoid the very worst of climate change. But, only with dramatic, immediate climate action. We have seen some progress. A robust rollout of renewables. But none of this is going far enough or fast enough. Accelerating temperatures demand accelerated action” (Guterres, 2023).

Indeed, climate change mitigation and adaptation policies have relevant links to the demographic issues that allow us to raise some questions.

On the one hand, what risks might it entail to live in ageing territories at a time of unsettled climates and a rise in extreme weather phenomena? And, on the other hand, to what extent will the transformations we need to implement, in terms of adaptation and energy transition, be able to create economic and social opportunities that will attract people to depopulated rural areas?

In other words, if modernity led to the abandonment of rural areas in favour of urban areas, might the end of modernity announced by some authors such as Bruno Latour (2022) give rise to new (rural) territorialities in which down-to-earth and decarbonised ways of life are possible?

One of the first steps in this direction has to do with reducing greenhouse gas emissions, the main contributors to climate change. According to data from the Ministry of Ecological Transition (series 1990-2020), Galicia's emissions of Greenhouse Gases (GHG) amount to 19.096.905 tons (2021). This figure represents a reduction of 34% compared to 1990, the main reference year for climate policies, and 46.6% compared to 2005.

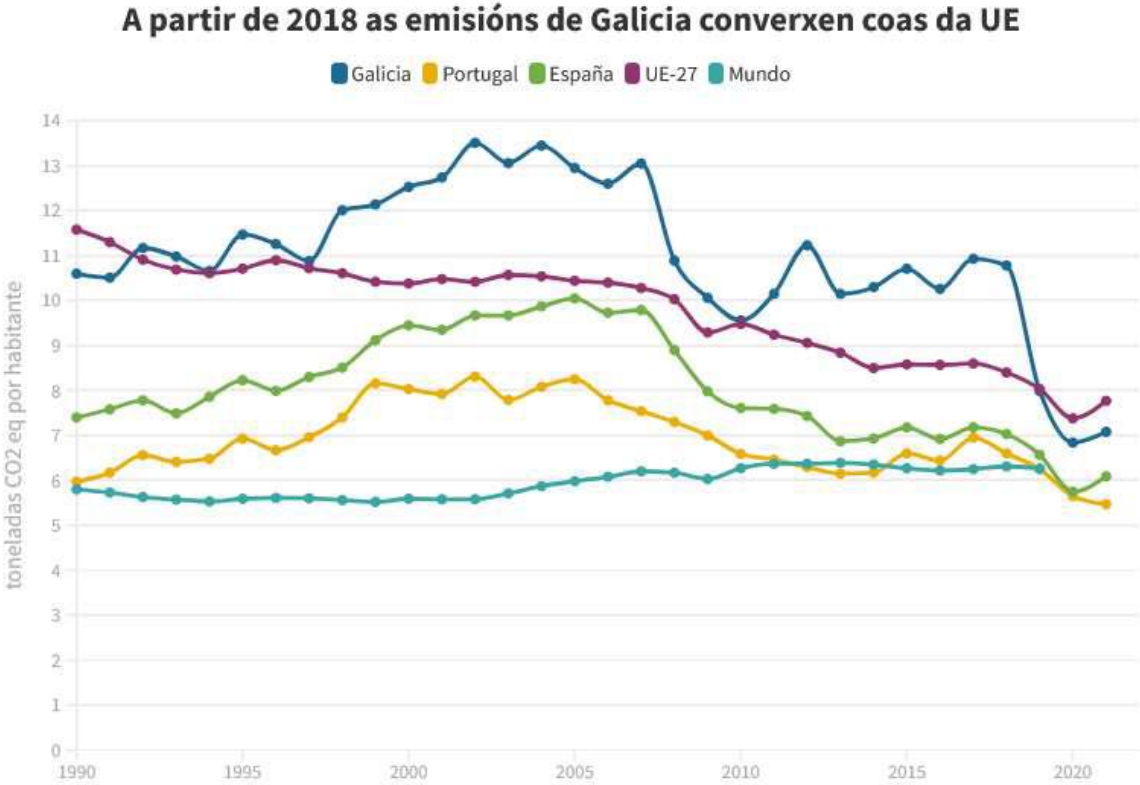
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Indeed, according to the Galician Climate Action Observatory (OGACLI) —a grassroots organisation committed to the dissemination of rigorous and up-to-date information on the energy transition and decarbonisation in Galicia—, different stages can be distinguished in the trajectory followed by emissions in Galicia since 1990:

1. A first rise, until reaching a ceiling in 2001-2007. The peak was reached in 2004 (36.9 million tons).
2. A stage of gentle decline in 2008-2018. After a sharp drop caused by the economic crisis that began in 2008 and a year of very high renewable production (2010), emissions recovered to remain at levels like those of 1990 in 2011-2018.
3. An abrupt fall in 2019-2020. The collapse of coal in electricity generation that started in 2019 and the crisis caused by COVID-19 in 2020 are the main causes.
4. A rebound of 3.3% in 2021 compared to 2020, after three consecutive years of declines.

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Figure 1 - Convergence of Galician emissions with the European average by 2018 ¹



In this sense, the Xunta de Galicia is currently processing the Galician Climate Law (GCL) to achieve carbon neutrality by 2050. By means of this law, which has already been approved as a bill, the Galician Government assumes as a legal obligation the climate ambition to achieve carbon neutrality by 2050. In other words, by 2050 the amount of greenhouse gas emissions emitted into the atmosphere should be the same as the number of gases that can be absorbed by natural sinks (forests, seas, and so on).

It is worth noting that although the Galician government has indicated in the presentation of the Galician Climate Law its commitment to a -55% GHG reduction by 2030, civil society organisations such as the Galician Climate Action Observatory consider that a target in line with the 1.5°C limit and global climate justice would be at least -65% by 2030. In this sense, we must get used to discrepancy and public disagreement in an era in which

¹ Source: www.ogacli.org. Author: Veiras (2023).

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political consensus on climate action will have to be built with extreme care and incorporating a plurality of spokespersons and stakeholders.

Due to the uncertainty of the epoch, we consider that the notion of down to earth deserves some discussion in this introduction.

In recent years, down to earth has become a common concept in a multitude of research projects in the field of regional and territorial studies. The growing centrality of this expression highlights the relevance of this idea for thinking about the challenges facing territories in the era of the climate crisis.

But what exactly does down to earth mean and how can this concept guide climate change adaptation and mitigation policies, particularly in relation to ageing and depopulation in Galicia?

The European project “Down to Earth: Tackling depopulation challenges to improve environmental resilience in rural areas” aims to specifically address the challenges affecting rural areas and communities that are particularly exposed to the effects of climate change due to depopulation and ageing.

Also, through the notion of down to earth, some authors have alerted us to the fact that we live in times of uncertainty and profound change. Or to put in other words, we are abandoning a world —the so-called modern civilization— in which we had become accustomed to living unconcerned with the limits of the planet. In this sense, it seems that we are forced to rethink our collective existence linked to a finite Earth that we —the modern and industrialised civilization— have transformed with the one thousand five hundred billion tonnes of carbon dioxide that we have dumped into the Atmosphere by burning coal and other fossil fuels (Bonneuil & Fressoz, 2016).

Adapting our territories to the challenges of climate change can be a formidable task, often obscured by the fact that these changes aren't always immediately visible. Nevertheless, it's crucial to recognize that climate change is already here. In this context, we find ourselves grappling with a planet undergoing warming, marked by a heightened susceptibility to disasters and catastrophic events driven by the surge in extreme weather

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conditions characteristic of an uncontrolled climate. It is crucial to underline that no region will escape the impacts of climate change in any way.

In a peculiar juncture, we find ourselves in a climatic interregnum, caught between a world committed to ensuring the habitability conditions of our territories (still uncertain and still under construction) and a world aware of the threats of climate change but still stalled in the necessary transformations. As Pierre Charbonnier (2022) points out, the challenge of the cost associated with changing the model, and its social distribution, continues to stand as the primary hurdle for a genuine activation of the planet's politicization. By this, we mean a politicization that catalyzes tangible transformations in decision-making infrastructures, within the socio-economic framework, and, ultimately, in the very fabric of lifestyles.

However, the future is promising and offers ample opportunities to promote and implement policy measures to improve governance and progress in Galicia's rural areas. These measures would effectively tackle pivotal challenges, including: (a) depopulation, (b) population ageing, (c) forest fires, and crucially and broadly, (d) climate change. Galicia's rural zones and communities are poised to play a pivotal role in fostering adaptative resilience.

One of the greatest threats to European rural territories is the ageing and abandonment of such an asset as productive agricultural land, as well as many other activities and their associated forms of knowledge. In Galicia there is an abundance of agricultural land that, despite offering good agronomic qualities, is abandoned or underused. Such land is an opportunity to promote its productive recovery but, above all, its productive reorientation in a context of decarbonisation of the economy and our ways of life. So, there is a whole future to be built through the reactivation and re-enchantment of these often aged and devitalised areas.

So, if we are to foster rural areas that are resilient to the consequences of climate change and at the same time attractive for retaining population, we need to look at new models of production and prosperity.

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The soil on which we must land our prosperity policies in rural areas is no longer the same as it was in the middle of the last century. As stated by some authors (Latour, 2022; Charbonnier, 2022), the very notion of soil is changing. The soil has moved—the soil of globalization's dreams is beginning to slip away—and any initiative aimed at promoting prosperity in rural areas must incorporate the planetary question: a planet with limits that has been transformed by modes of production that are alien to those limits.

Nevertheless, transcending the perception of the climate crisis only as a threat, could it serve as an opportunity to re-imagine and revitalise rural areas on a different basis than the ones already known, allowing, among other things, to effectively address pressing problems such as ageing and depopulation?

1 Rural Galicia: depopulation and ageing

Galicia is a Spanish Autonomous Community located in the northwest corner of the Iberian Peninsula. Administratively, it is divided into four provinces (A Coruña, Lugo, Ourense and Pontevedra) —which approximately covers a quadrant each— and 315 municipalities. Galicia is also subdivided into 53 *comarcas* (counties) and a vast network of 3.771 parishes. The capital is Santiago de Compostela, a historic and tourist city, one of the most important Christian pilgrimages in the world. Galicia has very clear boundaries and is well distinguished from the surrounding areas, the Cantabrian Sea to the north, the Atlantic Ocean to the west, Asturias and Castile and Leon to the east, and Portugal to the south.

Although a sort of dominant common sense also embedded in the tradition of Galician Social Sciences has connected the Galician countryside with an imaginary “backwardness” (Beiras, 1973) in which innovation and change are scarce, rural Galicia has a long tradition of innovation and experimentation (Quiroga, Fernández & Simon, 2018). Indeed, a crucial aspect of Galician emigration is inseparable from the demographic upswing fuelled by enhanced agricultural productivity and improved nutrition. Likewise, within Galicia, noteworthy instances of motor-mechanization innovation have emerged from the resilience of the rural and agrarian communities (Esperante, 2023).

Moreover, despite the existence of a dominant geographical imaginary that identifies Galicia as an eminently rural region, nowadays, many studies do not hesitate to define Galicia as an urban region. As stated by Lois (2004), Galicia is “an urban reality, given that the space is defined from the cities’ economic leadership, decision-making and power, which, together with their peri-urban areas and other urban settlements [mainly the *vilas*, small cities which constitute a second urban system tier, being the centre of their surrounding rural areas] (...) concentrate the majority of the population” (p. 101).

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Also, according to data from the Galician Institute of Statistics (IGE, using its Galician acronym), Galicia is predominantly an urban region.

However, an essential element in the demographic characterization of Galicia is the distribution of the population across the territory. While a high degree of fragmentation and dispersion persists in its settlement system, there is a notable process of population concentration in the cities of the so-called Atlantic axis (see Figure 4).

As the *Observatorio Galego de Dinamización Demográfica* (Galician Observatory of Demographic Dynamization) points out in its latest report on the demographic situation in Galicia, the fragmentation of population settlements is one of the most distinctive territorial features of Galicia, which includes 3.772 out of the 4.908 collective entities in Spain and over 30 thousand individual entities—nearly half (48.9%) of the individual entities in Spain and more than half of the Spanish disseminated settlements. Of these disseminated settlements, 41.7% are in the province of Lugo and 31.7% in the province of A Coruña (*Observatorio Galego de Dinamización Demográfica*, 2023).

The demographic and economic changes that occurred during the second half of the 20th century led to the transition from a model of rural settlements centred around family agriculture, primarily organic in nature, to one dominated by urban areas. This process resulted in the concentration of the population in major urban areas, notably in the Atlantic axis, the inland municipalities of Lugo, Ourense, and Santiago, as well as in some scattered towns throughout the territory. The local units with more than 3.000 inhabitants (131 in total) account for 61% of the Galician population. These 131 local units occupy only three percent of the territory.

In this sense, in January 2017, the IGE released an updated classification of the degree of urbanization for Galician municipalities aligning with a European standard. This classification captures essential demographic, socio-labor, and economic indicators for Galicia and its provinces, organized based on the degree and sub-degree of urbanization. This comprehensive set of indicators facilitates the identification of distinctions and

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similarities among various regions in Galicia, providing a nuanced characterization of what is conventionally labelled as urban or rural.

According to the degree of urbanization: IGE categorizes the type of locality in which an individual resides, distinguishing between urban and rural settings (see Figure 2). This classification encompasses three categories: Densely Populated Areas (ZDP, according to its Galician acronym), Intermediate Areas (ZIP, according to its Galician acronym), and Sparsely Populated Areas (ZPP, according to its Galician acronym).

The classification by the IGE reveals that over 60% of the population resides in densely populated areas or in intermediate areas with a high degree of urbanization, collectively occupying merely 2% of the Galician territory. In areas characterized by an intermediate degree of urbanization, 26.3% of the population resides on 10.4% of the territory. In contrast, regions with an extremely low degree of urbanization cover 87.5% of the territory but house less than 23.7% of the population.

Distribution of the population of Galicia according to the degree of urbanisation. Percentages

Table 1 -Distribution of the population of Galicia according to the degree of urbanisation. Percentages ²

	TOTAL	ZDP	ZIP	ZPP
2000	100%	35,67%	32,60%	31,72%
2020	100%	36,54%	37,18%	26,28%

However, following the analysis of the *Observatorio Galego de Dinamización Demográfica* (2023), as far as the urban predominance in Galicia is concerned, it is crucial to recognise that the contemporary definition of rural space is no longer in line with the old-fashioned dichotomy which, on the one hand, contrasted rural and urban spheres and, on the other, assigned a central role to agriculture in rural areas. The concept of "deagrarianisation", meaning the diminishing centrality of agriculture in rural areas, has led to a gradual

² Source: IGE. Panorama rural-urbano

ZDP: Densely Populated Areas; ZIP: Intermediate Areas; ZPP: Sparsely Populated Areas.

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decoupling of the rural and agrarian spheres. However, it is essential to recognise that these processes are developing unevenly across the territory. We are referring to a region in which traditional patterns of exodus and depopulation coexist with emerging dynamics of interconnection facilitated by mobility, which give rise to very diverse situations.

These data show that in the last decades the Autonomous Community of Galicia has undergone a profound process of demographic, socio-economic, and cultural transformation. Key facets of its demographic dynamics, shared with the broader context of Spain and Europe and deeply rooted in the so-called second demographic transition, include a noteworthy increase in life expectancy. This accomplishment marks a considerable collective success, positioning Galicia as one of the world's healthiest regions in terms of life expectancy. Concurrently, there has been a decline in fertility, a trend more accelerated and pronounced in Galicia compared to all advanced societies over the past sixty years. Despite Galicia's historically lower fertility compared to the rest of Spain since the 19th century, it has entered a particularly depressive phase in the last three decades.

The decrease in fertility is intricately linked to the gradual extension of the youth stage, a consequence of the challenges faced by young people in transitioning to adulthood. Evident indicators include delays in entering the job market, postponed partnering, and a progressively increasing average age at first maternity.

Galicia's population structure continues to bear the imprint of intense migration processes from the last century, significantly impeding real population growth and directly influencing the dynamics of all demographic variables. The resultant aged demographic structure presently grapples with challenges in generational renewal.

Amidst this complex scenario, there is a growing trend of population concentration in the western provinces, major urban areas, and coastal municipalities. This is compounded by the fragmentation and dispersal of population settlements, with Galicia housing, as mentioned above, 3.772 out of the 4.920 collective entities in Spain and more than half of the dispersed settlements.

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Moreover, recent population variations reveal that the processes of return migration and immigration fail to compensate for the negative balances of natural population growth, while emigration regains importance. This transformation in demographic dynamics poses significant challenges across human, social, cultural, economic, political, and environmental dimensions, making it a foremost concern for Galicia in the coming years.

In response to these challenges, the Galician government initiated a strategic effort leading to the establishment of the Galician Observatory for Demographic Revitalization through Decree 104/2016 dated July 28. This entity serves as an enduring forum for dialogue, fostering continuous discourse between public administrations and representative bodies of economic, social, and political interests in Galicia. Its overarching objective is to delve into the intricacies of the demographic landscape, providing advisory insights to Galician Public Administrations for the nuanced incorporation of demographic perspectives in policy conceptualization and execution.

Based on data from the Galician Institute of Statistics in 2023, the population of Galicia stands at 2.696.177 inhabitants. But, to comprehensively understand current population dynamics and speculate on future trends, it is essential to examine Galicia's demographic evolution since the end of the 19th century.

According to Dubert (2019), the Galician population aged since the end of the 19th century due to the systematic departure of young people. From 1860 to 1930, over 1.5 million individuals of childbearing age left Galicia for the Americas, with 50-52% never returning, resulting in a twofold demographic loss. This loss comprised both the individuals who left Galicia and the potential contributions of their offspring. The departure of young people year after year led to a narrowing of the Galician population pyramid, accentuating the prominence of older individuals. Simultaneously, the reduction in mortality and the increase in life expectancy during the demographic transition highlighted the significance of the elderly.

Galicia witnessed another migratory cycle from 1950 to 1975, with 450,000 young people leaving for Europe and the Americas. This period coincided with the conclusion of the

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demographic transition, the decriminalization of contraception (1978), and the approval of laws on divorce (1981) and abortion (1985).

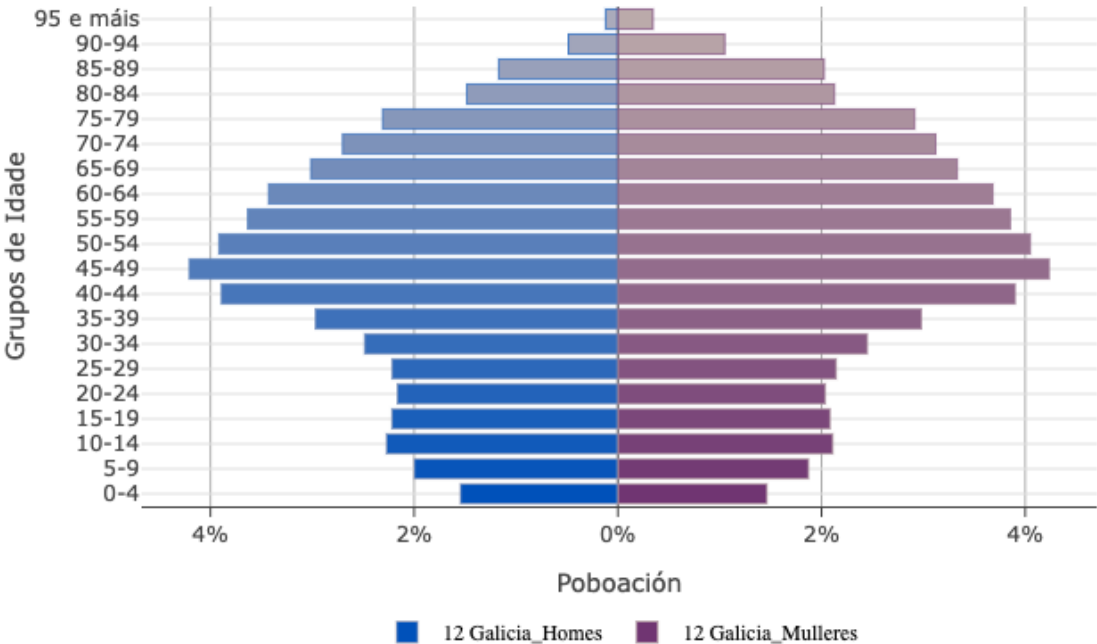
Post-1960, Galicia experienced phases of stagnation, population decline, and minor recoveries, leading to a sustained population decrease across all provinces since 2011, in stark contrast to Spain's national-level population growth.

One immediate consequence of this demographic shift is the diminishing relative significance of Galicia in terms of its demographic share nationally. Galicia's demographic weight has decreased from 11% at the beginning of the 20th century to a mere 5.9%, as indicated by 2018 Population Register data. As Aldrey and Constenla (2023) have pointed out, attributing to other Galician demographers, this trend can be primarily attributed to persistently negative migratory balances resulting from continuous emigration. Emigration has led to a progressive aging of the Galician population and a significant reduction in its birth rate.

In recent years, two fundamental challenges have emerged in Galicia's demographic structure: rural depopulation and aging. Out of a total of 30.377 villages registered by the Galician Institute of Statistics (IGE), 12.364 have ten or fewer inhabitants.

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Figure 2 - Population pyramid of Galicia. 2022 ³



Rural depopulation is linked to increasing levels of urbanisation occurred very rapidly in Galicia from the 1960s to the 1980s and resulted in the current pattern of very low population levels in rural Galicia compared to the past.

³ Source: IGE, <https://www.ige.gal/web/index.jsp?paxina=001&idioma=gl>

Figure 3 - Population change (%), 1960-2017 ⁴

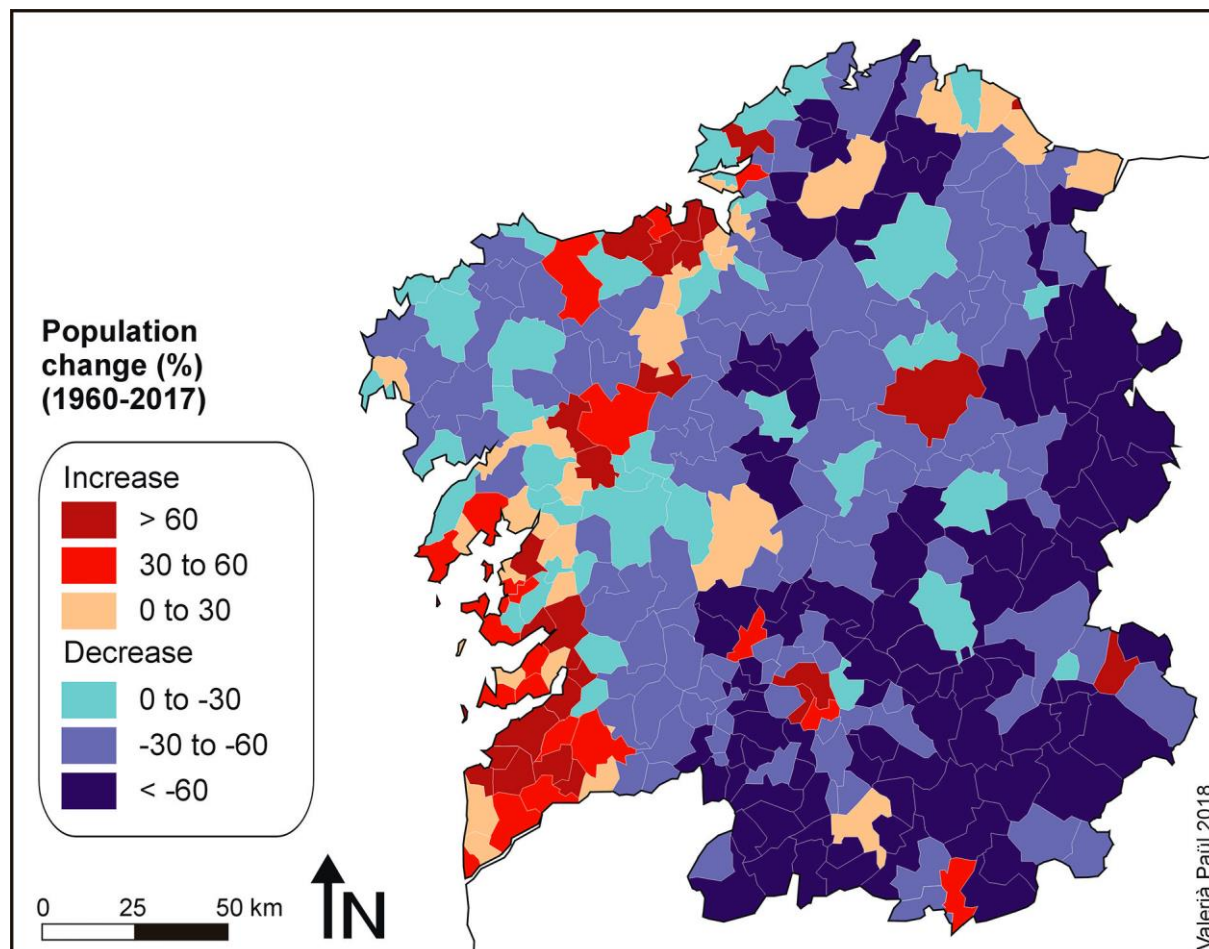


Figure 3 shows population change in Galicia from 1960 to 2017. In this period, Galicia has only increased from 2.6 to 2.7 million inhabitants (an overall population variation of 4.05%). Moreover, of Galicia's 313 municipalities: 236 have decreased while only 77 have grown. With the notable exception of Ferrol and some municipalities in its urban area, growth has happened in the Atlantic urban axis, located from Ferrol, in North-Western Galicia, to the South-Western borderlands with Portugal, especially affecting the peri-urban municipalities included in the metropolitan areas of A Coruña, Santiago and Vigo. Other urban "islands" in inland regions have experienced growth (Ourense, Lugo, O Barco de Valdeorras, Verín, etc.), but they are considered exceptions in an "ocean" of rural

⁴ Source: Paül (2018)

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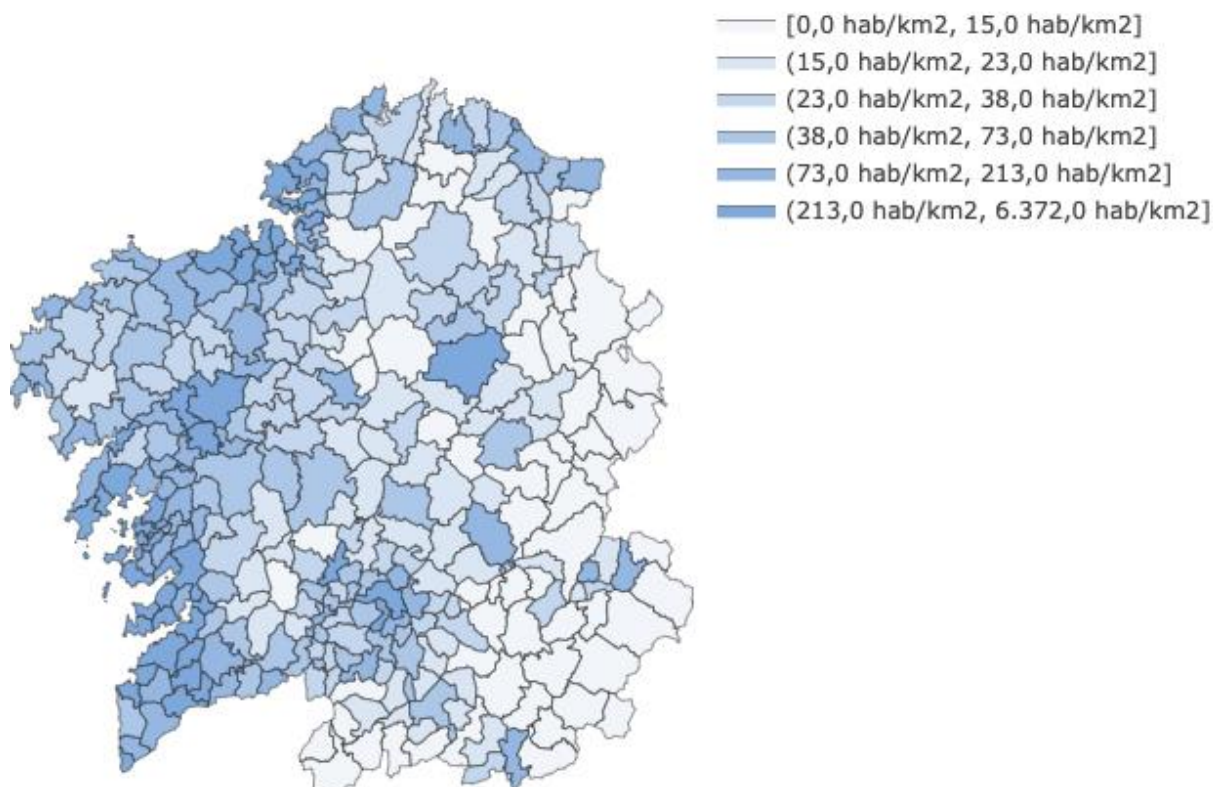
depopulation. Rural areas have experienced a severe population decrease, including some municipalities that have lost more than 80% of their population in less than six decades, such as A Veiga (from 5.330 to 907 inhabitants) or A Teixeira (from 1.908 to 339). These declining municipalities are located particularly in remote and mountainous regions in the South-Eastern and Eastern-most areas of Galicia. Nevertheless, this is not the only relevant trend in demographic terms. According to the IGE, Ortigueira a municipality located on the north coast is the municipality with the highest number of empty population centres in Galicia. As noted by Aldrey and Constenla (2023), although the demographic decline is more ostensive in a fundamental part of the eastern territory of the Autonomous Community of Galicia —especially the areas with the most rugged topography, such as the mountain municipalities of Lugo and Ourense—, some Atlantic municipalities with poor communications —such as the area of Ortigueira or the Costa da Morte—, have also experienced a sharp demographic decline in recent decades.

In general terms, the globally steady Galician population has experienced a severe geographical redistribution: if the municipalities that have lost population had 1.4 million inhabitants in 1960 (that is, more than 53% of the Galician population by then — additionally, part of the population of the currently urban municipalities was rural), now they have 777,725 inhabitants — i.e. less than 29% of the total population. To sum up, rurality in Galicia is ostensibly linked to contemporary depopulation.

One of the main demographic consequences of depopulation has been that rural population densities have decreased to very low levels. Rural Galicia has low rural densities with more than 134 (out of 313) municipalities with densities lower than 30 inhabitants/km² (see Figure 4). It is worth mentioning that the current rural Galicia of very low densities (lower than 30 inhabitants/km²) has nowadays a global population density of 15.34 inhabitants/km², but in 1960 it was 40.43, evidence that the low-density status is a recent geographical feature.

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Figure 4 - Population density, 2020 ⁵



Another consequence of rural depopulation is ageing. Authors such as Aldrey (2006) have already studied its spatial distribution. In general terms, the rural aged population is not only a consequence of out-migration but also of the contemporary arrival of retirees who have spent their active years in cities (in Galicia or abroad) and decide to spend their retirement in rural areas. This process has been observed across the developed world, but in the case of Galicia it is especially relevant. A common indicator for measuring ageing is its homonymous index, which expresses the relationship between young populations and old populations by percentage. Values under the 100 thresholds are considered sustainable in demographic terms. Between 100 and 150, ageing is considered moderate and from 150, severe (Jiménez Blasco, 2008: 96). Galicia has an ageing index (2017) of 154.77.

⁵ Source: Instituto Galego de Estatística.

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Only 17 (out of 313) municipalities in Galicia can be considered sustainable from a demographic structure perspective; all of them are metropolitan, in particular peri urban. The remaining 296 municipalities experience moderate or severe ageing. There are cases that are astonishing, with indexes over 1.000: Parada de Sil has 15 youngsters and toddlers, and 295 inhabitants older than 65 years; in Lobeira the ratio is 17 to 449; and in Vereá 26 to 502. Given that life expectancy is 82 years in Galicia, it is obvious that the demographic landscape is going to change very quickly in the forthcoming years, resulting in worsening levels of population decrease in rural areas.

As already noted, 228 (out of 313) municipalities, covering 84% of Galician territory, are under the 100 inhabitants/km² threshold; 250 (out of 313) municipalities, covering 87% of Galician territory, are above the 150-threshold ageing index; the spatial match is evident.

1.1 Empty Galicia?

Rurality is quite often correlated with economic decline in Galicia. Geographers such as Paül (2013, 2015) showed how economic densities (measured by all types of firms per km²) in Galicia are very low (less than 5 firms per km²) in rural areas: by 2011, 76% of the Galician territory and 20% of Galicians lived in these areas of low economic density. All of them were rural.

The 2016 data (post-crisis scenario) broadly maintain this pattern: 70% of the territory with 16% of the population. Overall, the number of enterprises has evolved from 206.426 to 246.290, given that possibly in 2011 the circumstances of the post-2008 global financial crisis was particularly evident. However, following Paül (2018), we can distinguish two types of rural areas:

- With less than 2.5 companies per km², mountainous and inland rural areas, especially in the South-Eastern region, show very few records. In 50 of these municipalities, there are less than 100 companies: 18 in Negueira de Muñiz (219 inhabitants in 2017), 24 in Parada de Sil (593 inhabitants), 31 in Beariz (982 inhabitants), etc. These figures — which include self-employed people — show

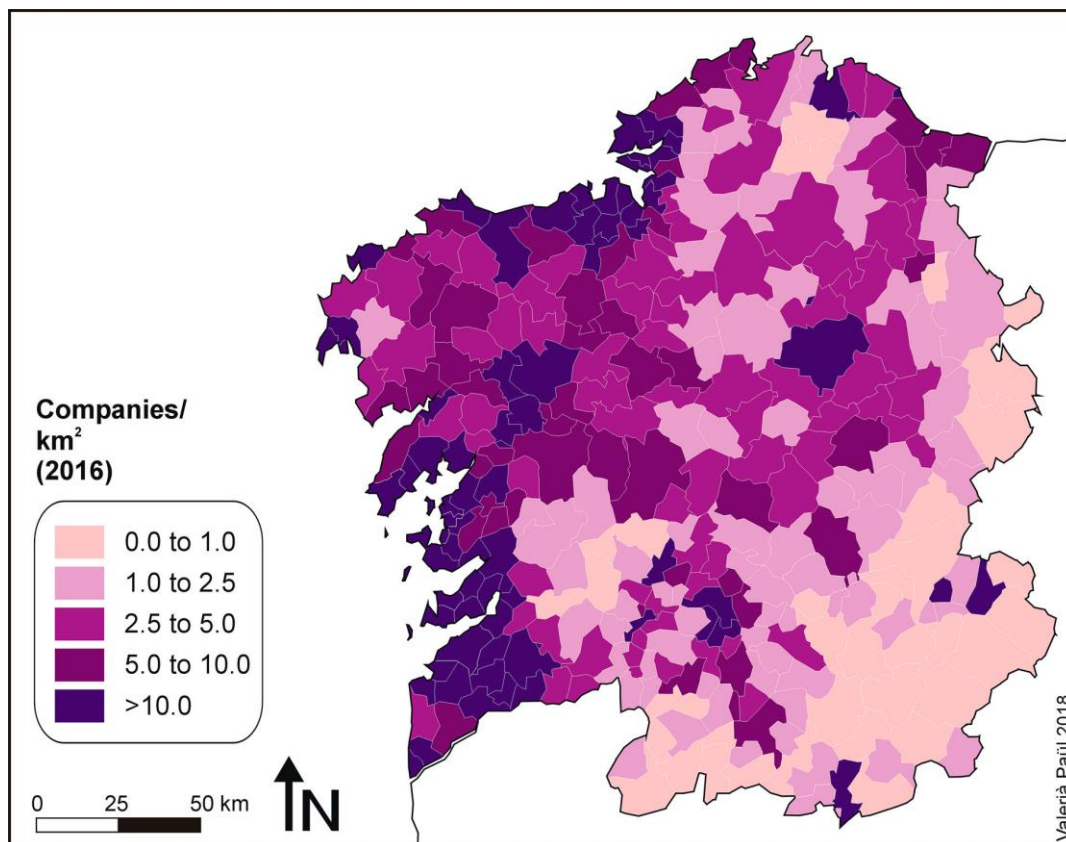
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almost absolute economic stagnation in these areas. As expressed by Aldrey (2006), “the economic perspectives are based on farms, which are visibly decreasing [...] and on the subsidies arriving from other areas such as retirement pensions” (p. 32).

- With more than 2.5 companies and even with more than 5, some rural municipalities in the Northern half of Galicia, especially in the North-Western region, show better results than their South-Eastern counterparts. This is possibly related to the importance of cattle production in the Northern half of Galicia. In addition, the Way of Saint James (in particular, the French Way) has driven the economy locally: in municipalities such as Palas de Rei companies have grown from 229 to 521 from 2011 to 2017; in Portomarín, from 98 to 267; in Samos, from 100 to 248; in Triacastela, from 62 to 149; etc. This apparently only affects the localities where the walking trail passes through, but it seems to be very relevant.

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Figure 5 - Density of economic activities, 2016 ⁶



However, beyond what is evident from the studies carried out so far, we must bear in mind that nowadays it is difficult to assess the number of companies operating in Galician rural areas. There are more and more projects of external companies that are not directly linked to the territory, with tax headquarters outside the municipality in which they operate, as is the case to a large extent in the field of renewable energies. Moreover, it should be borne in mind that some initiatives with a strong impact on rural areas generate enormous benefits in urban contexts and also great conflicts.

The identification of rurality with primary industries has been widespread. As already noted, Galicia was identified until the 1960s-1970s as a rural and agricultural region. However, since the 1970s, Rural Geography as a discipline has increasingly paid attention

⁶ Source: Paül (2018)

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to other rural activities and discussed the commonly labelled “de-agrarisation” of the countryside (Woods, 2005).

In Galicia, it is obvious there is a North/South divide: in the North farmers’ work sustains the countryside, while in the South agricultural inactivity is evident. Considering that the South-Western region of Galicia is mainly urban, and the South-Eastern region is rural, very aged and experiencing economic decline. The crisis of agricultural labour in the latter is evidence that in this region agriculture has been scaled down and kept at a low, marginal or subsistence level. There is a very relevant exception such as Xinzo de Limia, located in the middle-south of the South-Eastern region, because of the importance of the potato production. Also, in the last decade, the production of high-quality wine, under the auspices of denominations of origin such as Monterrei, has reactivated the economic activity linked to the land, introducing new forms of dynamism.

On the other hand, tourism has been repeatedly treated as the antidote sector to the crisis experienced by the Galicia rural economy. It has been targeted as the key rural development strategy since the accession to the EU in late 1980s. In particular, the Government focus has been on funding the expansion of rural tourism accommodation through the expenditure of generous EU funds associated with the regional policy (structural and cohesion funds), the Common Agricultural Policy (progressively understood as a rural development policy) and European Commission initiatives such as LEADER (launched in 1991 and, since 2007, incorporated into the rural development policy). But data provided by turgalicia (<https://www.turismo.gal/inicio>) show that the accommodation sites are concentrated in the South-Western region and, in general, in the coastal areas, that is, in the most urbanised regions. In other words, rural tourism has been developed not in “deep” rural areas but correlated with proximity to urban areas (in many occasions, in peri-urban settings) and with the coastal “sun and sand” dominant tourism model with the exception of the surroundings of the Way of Saint James (the French Way).

Although tourism has been a considerable source of economic activity in the Galician countryside and, also, some prospections connected with the saturation of the

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Mediterranean allow us to imagine that the strength of tourism in Galicia will increase, insofar as the desire to spend the summer in cooler territories increases, it does not seem to be the only card we can play in a context of uncertainty.

Indeed, if one of the major challenges posed by climate change has to do with the maintenance of the conditions of habitability of the territories, we can no longer act as in the recent past. That is, we cannot design forms of economic production or social welfare that do not consider the habitability of the planet as a priority. In some manner, this is what *down to earth* means. And this task is not easy because the costs of this change of model, or transition, do not yet have social and political consensus. As governments and policy makers worldwide recognise the urgency of decarbonising our economy and ways of life still reliant on fossil economies, we still know that an essential part of employment and of people's social welfare still depends on the economy of the fossil sectors. So, the question of changing the model, and its social distribution, remains a challenge for the implementation of policies that focus on the conditions of habitability. And yet, we are immersed in a scenario that constantly reminds us that inaction, denial, ignorance or misunderstanding of the environmental situation can lead us to a horizon of uninhabitability already announced by science.

1.2 Depopulation and wildfires

In Galicia, some of the main threats that the climate crisis may bring with it are wildfires, a type of "slow disaster" (Baruah, 2022) also linked to rural depopulation. Rural depopulation has been characterised as a factor of land and landscape degradation with direct consequences on the reduction of wildfire control capacity.

Today, the proliferation of Great Forest Fires (GFFs) presents numerous risks arising from the inability to control the virulence of fire. Galicia is characterised by the prominence of its woodlands. Currently, just over 60% of the Galician territory is devoted to this area. However, Galician woodlands have not historically had a forestry vocation, at least not in a dominant way. In this sense, the idea of woodland has had a much broader, multifunctional and collectivised significance in this territory.

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However, the multifunctional conception of the forest changed completely in the transition to the contemporary era. In terms of use, Galician woodland has shifted from a multifunctional model to a dominant forestry paradigm, dominated by pine and eucalyptus replanting (Cidrás & González-Hidalgo, 2022). Currently, around 50% of the Galician territory is wooded, mostly due to reforestation of pine and eucalyptus which is mainly concentrated in the western half of the country. At the same time, the prevalence of wildfires has always been notable in Galicia in comparison with other surrounding territories.

The fact that more than half of Galicia's territory is currently woodland is an anomaly in the European context, where only the Nordic countries achieve equally high percentages of forest area. In contrast to the latter, Galicia is unique in that it lacks publicly owned woodland, which means that it does not have any forests which accounts for barely 3% of the Galician Forest area. Far from the hegemony of individual private property, the Galician territory reveals a type of property with a long tradition in Europe: the commons. Today, 700.000 hectares of Galician forests are managed by around 3.000 woodland communities, which means that a quarter of the territory is under the domain of a collective property regime. Neither the varied management models nor the distribution of these forests in the territory, concentrated in the southern half, are homogeneous. The shared feature of this heterogeneity of forests lies, in fact, in their communal ownership, legally recognised by the Galician government since 1989.

Between 2001 and 2015 (see Table 1), Galicia recorded slightly more than 18.000 wildfires. In absolute terms, fires on individual private property stand out, with more than 12.000 fires recorded. Far behind are forest fires on Communal Woodlands, with 5.708 wildfires, and in third place are fires on publicly owned land with 94 fires. However, in terms of surface area, the data reveal a remarkable homogeneity. That is, while individual private property accounts for 64% of the Galician Forest area, 67% of the recorded fires are located on this type of property. Following a similar logic, the findings of Lois and Cidrás (2023) reveal that within the communal area—which represents 32% of the Galician Forest area—31% of the fires are located. The only significant deviation is identified in

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fires on public land; 0.5% of fires took place on this type of property, which represents 2.73% of the forest area.

Table 2 - Distribution of wildfires in Galicia, years 2001-2015 ⁷

	Sup. total (Ha)	Sup. Total (%)	Incendios (N)	Incendios (%)	Sup. Incendios (Ha)	Sup. Incendios (%)
Privado individual	1.302.849	64,45	12.237	67,84	164.993	54,84
MVMC	663.489	32,82	5.708	31,64	130.448	43,36
Montes públicos	55.221	2,73	94	0,52	5.414	1,80
TOTAL	2.021.559	100	18.039	100	300.855	100

In 2022, a staggering 51,642.60 hectares were engulfed in flames across Galicia. Among these, 34,876 hectares succumbed to wildfires in scrubland, while the remaining 16,766 hectares were lost in forested areas. This marked a drastic surge of 1,702%, a stark contrast to the preceding year, which had been one of the most favourable in the past decade. The year documented a total of 1,713 wildfires, an alarming 80% increase compared to the incidents recorded in 2021. Since 2017, the annual burnt area had not exceeded 50,000 hectares, and in the previous four years it remained below 15,000 hectares. After the major forest fire event of 2006, cases of more than 50,000 hectares burnt in the Galician forests only occurred in 2017 and 2022. In some manner, these data highlight the lethality of Great Forest Fires.

The Galician Forest Fire Prevention and Defence Plan (Pladiga) identifies a specific geography of wildfire incidents in Galicia. According to Pladiga 2023, there are 40 parishes in Galicia characterised by high fire activity. These parishes are identified by the Pladiga as Parishes of High Arson Activity (PAAI) and they have suffered, on average, seven or more fires in the last five years. Or, they have suffered two or more wildfires exceeding 200 hectares in the last ten years. Additionally, these parishes had an average fire-affected area exceeding 9 hectares per fire during the same period.

⁷ Source: Lois & Cidrás (2023).

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Predominantly located in the southern regions of Galicia, especially in the province of Ourense, these high-risk parishes require specific attention.

Table 3 - Wildfires and burned area in Galicia, years 2019-2022

Forest fires and burned area in Galicia				
Unit: Number of fires and area in hectares				
	Number of forest fires	Total surface area (hectares)	Wooded area (hectares)	No wooded area (hectares)
2019				
Galicia	1653	6835,53	3046,95	3788,58
A Coruña	421	2478,29	1775,6	702,69
Lugo	256	1280,21	469,92	810,29
Ourense	648	2631,22	626,36	2004,86
Pontevedra	328	445,81	175,07	270,74
2020				
Galicia	1527	14823,92	1959,06	12864,86
A Coruña	357	883,64	376,45	507,19
Lugo	216	422,3	204,74	217,56
Ourense	594	13084,2	1176,79	11907,41
Pontevedra	360	433,78	201,08	232,7
2021				
Galicia	950	4403,18	2270,07	2133,11
A Coruña	217	401,49	189,79	211,7
Lugo	153	2427,52	1439,46	988,06
Ourense	376	975,21	304,33	670,88
Pontevedra	204	598,96	336,49	262,47
2022				
Galicia	1713	51642,58	16766,14	34876,44
A Coruña	349	2694,1	968,01	1726,09
Lugo	277	14501,32	5962,13	8539,19
Ourense	636	32079,52	8110,62	23968,9
Pontevedra	451	2367,64	1725,38	642,26

Source: Consellería do Medio Rural

2 SWOT analysis

CO2 concentration is currently at 407.8 ppm (parts per million), a level unseen in the last three million years. Humanity is conducting a geophysical experiment on a planetary scale with unpredictable consequences. As we know, the climate system already senses changes in a carbonified atmosphere.

Galicia is no stranger to the New Climate Regime underway. Recent decades have seen an increase in extreme events, particularly heat waves and droughts. What is yet to come will depend directly on the capacity to reduce the carbon footprint, not only at regional but also at global level. In this sense, the scientific community is working with two scenarios: one optimistic and the other pessimistic (RCP 8.5). Each projection depicts a very different Galicia.

Strengths

1. Demographic Challenge Acknowledgment: Public recognition of the demographic challenge is a strength, as it indicates potential support for action.
2. Wind Energy Potential: Galicia's wind energy potential offers a sustainable energy transition opportunity.
3. Diverse Rural Environment: A diverse rural environment supports various initiatives catering to different needs.
4. Profitable Sustainability: The potential for profitability in sustainable practices encourages adoption.
5. Community-Driven Fire Reduction: Grassroots forest management initiatives reducing forest fire severity demonstrate community-driven and also nature-based solutions.

Weaknesses

1. Profitability Hurdles: Challenges in making sustainable practices profitable hinder adoption.
2. Undefined Rural Areas: Territorial complexity and Galician lack of clear rural definitions complicate addressing specific needs.
3. Conflict Over Modes: Coexisting traditional and post-productivist approaches create internal conflicts.
4. Rural Depopulation: Ongoing rural depopulation poses economic and social challenges.
5. Regulatory Complexities: Regulatory challenges, including Natura 2000 and land ownership, hinder sustainable development according to different stakeholders. Some stakeholders perceive Natura 2000 as too restrictive, impacting territory revitalization.
6. Housing Accessibility: Inaccessible rural housing contributes to depopulation.
7. Perception of Climate Change Impact: Galicia currently lacks widespread recognition as a territory significantly affected by climate change. This lack of awareness could potentially lead to increased vulnerability as climate change impacts become more pronounced in the future.

Opportunities

1. Market Demand for Sustainability: Stimulating market demand for sustainable products can drive adoption.
2. Rewarding Innovation: Administrations can reward innovative and sustainable initiatives.
3. Promoting Sustainability: Supporting sustainable activities can foster economic growth and habitability.

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4. Agriculture-Tourism Synergy: Aligning agriculture and tourism sectors can create collaborative growth.
5. Renewable Energy Transition: Leveraging wind energy potential aids in a sustainable energy transition.
6. Economic Momentum through Climate Action: Climate change adaptation and mitigation measures may generate new economic momentum, particularly in rural territories.
7. Industrial decarbonisation: an opportunity for the transformation of the Galician economy.

Threats

1. Sectors Incompatibility: Conflicts between agriculture, tourism, wind energy, urban policies, and Natura 2000 may threaten rural communities.
2. Land Ownership Challenges: Unknown land ownership complicates land use planning.
3. Regulatory Barriers: Excessive regulations can hinder development.
4. Climate Change Uncertainty: Potential impacts of climate change on forests may pose future threats.
5. Local Community Conflicts: Local conflicts over wind energy projects need dialogue.
6. Resource Export vs. Local Impact: Resource-exporting projects may not benefit local communities.
7. Climate change-induced weather instability threatens honey production in Galician rural areas.
8. Economically relevant sectors such as clam and mussel production are threatened by rising ocean temperatures.
9. Risk of soil erosion and land ownership challenges.

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3 Legal and strategic framework

3.1 Introduction

Regional planning policy in Spain is decentralised in autonomous regions, called Autonomous Communities. Indeed, each autonomous community has its own regional planning law. From January 8, 2021 Galicia counts with a new law on regional planning that replaces the previous law dating back to 1995.

3.1.1 Spanish Legal Framework

However, there is a new objective in regional planning processes that we will have to live with when determining new land uses —mitigation and adaptation to climate change— which has slightly altered the legislative framework. This objective has become the main focus of contemporary territorial public policies and, since May 2021, Spain has had a **Climate Change and Energy Transition Law**. This law, which is mandatory in all autonomous communities, has integrated the issue of climate change into spatial planning processes, making spatial planning a fundamental tool for mitigating and adapting to climate change. As Olcina and Farinós (2022) point out, Law 7/2021, of 20 May, establishes the integration of the risks derived from climate change in the planning and management of sectoral policies, such as hydrological, coastal, territorial and urban planning, urban planning, building and transport infrastructures.

This law not only reflects Spain's international and European commitments but also stands as a pivotal opportunity with far-reaching implications, spanning economic revitalization, modernization, and social equity. Operating on the European stage, it holds promise for economic growth and modernization, concurrently addressing social imperatives. The primary objective of the law is to streamline the modernization process of the country while ensuring an equitable distribution of wealth during the decarbonization journey.

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By prioritizing the battle against climate change and embracing the challenges of energy transition, this legislation positions itself as a cornerstone of political endeavours. It asserts itself as a critical catalyst, propelling both the economy and society towards a sustainable future and opening avenues for innovative socio-economic prospects. Essentially, the law establishes the institutional framework necessary for the gradual adaptation of the country's reality to the rigorous demands of climate action. Moreover, it guarantees the coordination of sectoral policies, fostering coherence and synergies essential for attaining the ambitious goal of climate neutrality. The obligation to limit emissions conditions sectoral policies and entails changes in consumption patterns. However, this transformation brings advantages related to the modernization of the production model and the energy system, offering opportunities for employment, business, and growth as long as a medium and long-term perspective is incorporated to facilitate the orderly decarbonization of the economy.

In short, this law aims to ensure Spain's compliance with the objectives of the Paris Agreement, adopted on December 12, 2015, signed by Spain on April 22, 2016, and published in the *Boletín Oficial del Estado* on February 2, 2017. Its purpose is to facilitate the decarbonization of the Spanish economy, fostering its transition to a circular model that ensures the rational and collaborative use of resources. Additionally, the law seeks to promote adaptation to the impacts of climate change and the implementation of a sustainable development model that generates decent employment and contributes to reducing inequalities. The General State Administration, the Autonomous Communities, and the Local Entities, within the scope of their respective competencies, will fulfill the objectives of this law, cooperating and collaborating to achieve its aims.

Regarding its guiding principles, the actions derived from this law and its development will be governed by the principles recognized in national law. This falls within the framework of the competences assigned to the State and the Autonomous Communities, aligning with European Union and international law relevant to energy and climate matters. Specifically, these principles are rooted in the United Nations Framework Convention on Climate Change (adopted on May 9, 1992, in New York), the Paris

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Agreement (adopted on December 12, 2015, signed by Spain on April 22, 2016, and published in the Official State Gazette on February 2, 2017), and the 2030 Agenda for Sustainable Development (approved by Resolution of the United Nations General Assembly on September 25, 2015).

In addition to these international agreements, the guiding principles also include adherence to the regulations of the European Union. The specific principles guiding the actions include:

- a) Sustainable development.
- b) Decarbonization of the Spanish economy, implying the pursuit of a socio-economic model devoid of greenhouse gas emissions.
- c) Protection of the environment, preservation of biodiversity, and application of the "polluter pays" principle.
- d) Social and territorial cohesion, emphasizing the harmonization and economic development of areas hosting renewable energy plants while respecting environmental values.
- e) Resilience.
- f) Protection and promotion of public health.
- g) Universal accessibility.
- h) Protection of vulnerable groups, with special consideration for children.
- i) Equality between women and men.
- j) Improvement of the competitiveness of productive sectors and certainty for investments.
- k) Precaution.
- l) Non-regression.
- m) Relying on the best and most recent scientific evidence available, including the latest reports of the Intergovernmental Panel on Climate Change (IPCC) of the United Nations.
- n) Ensuring the quality and security of energy supply.

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- o) Encouraging cooperation, collaboration, and coordination between Public Administrations.

According to Olcina and Farinós (2022), several provisions in the law emphasize the integration of climate change and its associated risks into territorial planning instruments.

Article 19 outlines the objectives of water planning and management in the context of climate change adaptation. The focus is on achieving water security for people, safeguarding biodiversity, and supporting socio-economic activities. This is to be done in alignment with the hierarchy of uses, aiming to reduce exposure and vulnerability to climate change while enhancing resilience. Planning and management, in concert with other policies, are required to incorporate climate change risks based on available information.

Article 20 directs the planning and management of the marine environment to enhance resilience against the impacts of climate change. Coastal planning and management are to adhere to the guidelines and measures outlined in the Strategy for Adaptation of the Coast to the Effects of Climate Change.

Article 21 pertains to spatial and urban planning, as well as interventions in the urban environment, buildings, and transport infrastructures for climate change adaptation. The objectives include considering climate change risks during preparation, ensuring coherence with related policies, integrating measures to promote progressive adaptation and resilience, and deploying renewable energies in a manner compatible with the conservation of natural heritage and appropriate land use planning.

Regarding ageing and depopulation, the Spanish Government has developed a State policy to combat depopulation and the demographic challenge, known as the Demographic Challenge.

Addressing the pressing issues of ageing and depopulation, the Spanish Government has instituted a comprehensive State policy known as the "Demographic Challenge." This policy aims to combat depopulation and demographic challenges through a strategic and collaborative approach.

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Demographic Challenge Approach:

1. Territorial Promotion and Structuring:

- Develop and implement a strategy for the promotion and structuring of territories, ensuring territorial balance, cohesion, and the functionality of Spain's municipalities.

2. Democracy-Centric Perspective:

- Approach the demographic challenge as a democratic challenge, prioritizing the effective fulfilment of population rights with a state vision that emphasizes territorial cohesion.

3. Foundations for Territorial Cohesion:

- Establish the necessary foundations and governance mechanisms to promote territorial cohesion in Spain. This involves collaboration across all levels of public administration and fostering public-private and social cooperation with all territorial stakeholders.

4. Rethinking the Territorial Model:

- Vertebrate the territory based on functionality and expanded vital possibilities for the population.
- Ensure equal access to services and opportunities.
- Enhance territorial functionality to reduce socio-territorial vulnerability.
- Improve interactions between urban and rural areas.
- Incorporate innovative and transformative formulas to activate opportunities in the territory.
- Enhance multilevel and multi-stakeholder governance mechanisms.

5. Territorial Focus:

- The strategy encompasses the entire national territory, with a primary focus on the rural sphere. However, recognizing the interdependence of urban and rural areas, both are integral to the success of this policy. The appropriate approach to this relationship is crucial.

6. Municipal Involvement:

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- This policy recognizes that municipalities of all sizes are essential contributors to the solution. The ultimate goal is not to impact a specific type of territory but to articulate a policy of territorial cohesion based on the diversity of Spanish municipalities to achieve overall territorial balance.

7. Implementation Strategy:

- Achieving the objective requires a dual perspective, addressing municipalities with the greatest demographic risk and structuring the territory through the creation of territorially complementary networks. Emphasis is placed on leveraging endogenous resources and fostering collaboration through networking.

The Demographic Challenge Policy is a holistic and inclusive initiative designed to address depopulation and demographic challenges in Spain. By prioritizing territorial cohesion, collaboration, and a multifaceted approach, the Spanish government aims to create a sustainable and balanced demographic landscape across the country.

It is worth bearing in mind that the Demographic Challenge initiative encompasses a comprehensive set of 130 actions strategically organized into 10 lines of action. These are designed to address a diverse range of objectives aimed at fostering equal opportunities and facilitating territorial structuring. Key focuses include:

1. Economic Diversification:

- Targeting the most disadvantaged areas to promote economic diversification.

2. Innovation Promotion:

- Initiatives to actively promote and integrate innovation.

3. Digital Connectivity:

- Ensuring full digital connectivity to bridge technological gaps.

4. Rural and Urban Link Strengthening:

- Strengthening links between rural and urban areas for comprehensive development.

5. Territorial Enhancement:

- Enhancing the overall quality and potential for growth within the territory.

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6. Endogenous Possibilities for Growth:

- Tapping into the endogenous possibilities for sustainable growth.

7. Provision of Basic Services:

- Ensuring the provision of basic services to all areas.

8. Incorporation of Demographic Perspective:

- Integrating a demographic perspective into the government's decision-making process.

This strategic framework underscores a holistic approach, recognizing the interconnectedness of these actions in achieving the overarching goal of addressing the demographic challenge while fostering balanced development and equal opportunities throughout the regions.

3.1.2 Galician Legal Framework:

As we pointed out in the introduction, the Galician government has full powers in the field of regional planning. Since January 2021, Galicia has had a new Spatial Planning Law, Law 1/2021, of 8 January, on regional planning in Galicia.

As emphasized in the introduction, the Galician government holds comprehensive authority in regional planning. Since January 2021, Galicia has enacted a new Spatial Planning Law—Law 1/2021 dated January 8—governing regional planning within the region.

The guiding principles of spatial planning in Galicia revolve around key pillars:

1. Sustainable Territorial Development:

- Emphasizing a sustainable, long-term approach to development.

2. Territorial Rationality:

- Recognizing land as a finite and exhaustible asset, promoting responsible usage.

3. Social and Economic Cohesion, Demographic Promotion, and Dynamization:

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- Ensuring a balanced and cohesive socio-economic landscape, actively fostering demographic growth and dynamism.

4. **Gender Perspective:**

- Integrating a gender perspective into spatial planning considerations.

5. **Ecological Connectivity and Restoration:**

- Highlighting the significance of ecological connectivity and restoration, aligning with the State Strategy for green infrastructure.

6. **Landscape Preservation:**

- Treating the landscape as an asset of special interest.

7. **Attention to Rural and Non-Urban Coastal Areas:**

- Acknowledging the pivotal role played by Galicia's rural and non-urban coastal spaces in the territorial dynamics of the Autonomous Community.

The law mandates territorial and sectoral planning by public administrations, aiming to ensure ecological connectivity, maintain ecosystem functionality, address climate change mitigation and adaptation, and restore degraded ecosystems. This includes specific measures to counteract the defragmentation of strategically important areas for connectivity.

Moreover, the law incorporates both state and Galician strategies for green infrastructure and ecological connectivity and restoration as foundational frameworks. These strategies, presently in development by both administrations, serve as essential references for the formulation of subsequent plans.

In addition, the Galician government is promoting the processing of a **Galician Climate Law**, the principles of which are already public:

1. Climate will become a top consideration within the framework of any other sectoral policy.

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2. Specific recognition of climate, not only reflecting a clear commitment to achieving climate goals but also facilitating planning and improving investment security.
3. Recognizing as a legal obligation the climate ambition to achieve neutrality by the year 2050. In other words, the amount of greenhouse gas emissions released into the atmosphere should be equal to the amount that can be absorbed by natural sinks (forests, seas, etc.) or offset by other actions.
4. Policies, strategies, action plans, and legislation developed after the publication of the law will consider their impact on climate change.
5. Including concerns for the long-term sustainability of the Galician social system, taking responsibility for future generations, and promoting measured growth and an orderly yet accelerated transition.
6. Prevention of damages to achieve greenhouse gas emission-detached economic growth and enhance resilience.
7. Incorporating mandatory planning for climate change, as well as evaluation and information mechanisms, including elements from the Galician Strategy for Climate Change and Energy 2050 and subsequent integrated regional plans as planning components.
8. Coordination mechanisms at the national and international levels, as well as avenues for local administration participation in climate policies.
9. Anticipating mechanisms for the participation and cooperation of Galician society through the Galician Climate Alliance.
10. Establishing mechanisms for compiling knowledge on climate change at the international, national, and regional levels.
11. Establishing the Climate Change Observatory and developing statistical activities and climate projection tools to monitor the evolution of climate change in Galicia.
12. Setting criteria for green public procurement and budgeting.

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13. Incorporating European principles for reviewing public spending linked to climate change policies and assessing the economic impact of climate-related risks.
14. Anticipating the integration of future European legislation on environmental due diligence.

But, beyond the current legal framework, how can we think in a more situated way about a resilient adaptation policy in Galicia? What other instruments and public policies are currently in place in Galicia that enable resilient adaptation processes to climate change and contemporary territorial challenges?

A conventional academic definition of resilience states that it is “the ability of a territorial system —and all its constituent socio-ecological and socio-technical networks, across temporal and spatial scales” (i) to maintain or rapidly return to desired functions in the face of a disturbance; (ii) to adapt to change, and (iii) to quickly transform systems that limit current or future adaptive capacity”. In this sense, resilient adaptation to climate change can be understood as the set of actions aimed at preparing our social and natural systems for the consequences of climate change.

Thus, a resilient policy is one that aims to promote the capacity of territories and communities to prevent, or minimise, the impact of natural and anthropogenic threats to which they are exposed. A type of policy that, in short, can strengthen us in this process of collective transformation that the planet imposes on our ways of inhabiting and living.

In this sense, we argue that the policy instruments that our institutions are generating must bring alternatives to the local territories with sufficient audacity to act in an uncertain world in which almost nothing can be taken for granted any more.

One of the most relevant initiatives being carried out in Galicia has to do with the recent **Galician Agrarian Land Recovery Law**.

The main objective of the Galician Agrarian Land Recovery Law is to fight against land abandonment and underuse and to provide a sufficient land base for those farms that

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need it, while at the same time trying to anticipate fires and ultimately working towards demographic recovery and improving the quality of life of the population in rural areas.

Bearing in mind that the Galician countryside is suffering from a process of land abandonment, on 21 May 2021 the new Galician Agrarian Land Recovery Law (Law 11/2021 of 14 May) was published in the Official Journal of Galicia (DOG). The main objectives of this law are to provide the necessary tools to improve the efficiency of agricultural and livestock farms, facilitate access to land, prevent the abandonment of land and its excessive fragmentation (smallholdings), thus contributing to a better use of land and greater efficiency in land management. According to Article 1 of the law itself, the objective "The purpose of this law is to establish the general framework for the management of agroforestry land, the organisation of its uses, the prevention and fight against its abandonment, the promotion of its recovery and the incorporation of young people into agricultural activity, in order to guarantee the sustainability of the agroforestry sector (...)".

In general, and given that these are private properties, the instruments provided by the law for the recovery of agricultural land in Galicia are entirely voluntary, so they will only be applied where the owners demand these actions. Their purpose is to encourage the use and mobilisation of land and avoid abandonment, contributing to better land management and also to prevent the spread of forest fires, especially in urban centres and farming areas.

Thus, the instruments of the new law are classified, according to their purpose, into the following:

1. Management and planning instruments
2. Mobilisation instruments
3. Recovery instruments
4. Instruments for promotion: fiscal and financial measures

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3.2 About the Agrarian Land Recovery Law

The Agrarian Land Recovery Law, as outlined, sets forth a comprehensive framework aimed at addressing multiple agricultural and land-related challenges. It encompasses a range of objectives and strategies to bring about tangible improvements. Let's delve into the law's provisions in a more argumentative manner.

- a) **Maintaining and Increasing Agroforestry Activity:** The law prioritizes the preservation and growth of agroforestry practices, recognizing their vital role in sustainable land management. By doing so, it not only encourages environmental conservation but also supports the economic well-being of rural communities.
- b) **Reclaiming Abandoned Land:** Abandoned land can be a detriment to both agriculture and the environment. The law takes a proactive stance by providing mechanisms to reclaim such land, thereby preventing its continued neglect and fostering productive agricultural use.
- c) **Expanding the Land Base:** An expanding land base is crucial for accommodating growing agricultural needs. This aspect of the law acknowledges the necessity of continually increasing the availability of cultivable land.
- d) **Preventing Farm Closures and Abandonment:** Farm closures and land abandonment are pressing concerns for rural communities. The law endeavors to halt this trend by creating incentives and opportunities for farmers to thrive, thus ensuring the long-term viability of agriculture.
- e) **Demographic Recovery:** Agriculture's success is closely linked to demographic stability in rural areas. The law recognizes the importance of revitalizing these communities and, by extension, securing the agricultural workforce.
- f) **Improving Quality of Life:** Agricultural communities' well-being is not just measured in economic terms. The law strives to enhance overall quality of life, recognizing that a thriving agricultural sector contributes to vibrant and resilient rural societies.

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- g) **Facilitating Access to Land:** Access to land is a fundamental issue for aspiring farmers. The law addresses this by creating pathways for individuals to enter the agricultural sector, which is crucial for its continued vitality.
- h) **Contributing to Food Security:** In a world where food security is a global concern, the law plays a vital role by supporting agricultural practices that contribute to a stable and sustainable food supply.
- i) **Proposals to Improve the Situation:** The law's proposals are multifaceted, encompassing planning, mobilization of land, intermediation tools, and new instruments for land recovery.
- j) **Ordering and Planning:** The law takes a methodical approach to ensure efficient land use. It initiates a comprehensive investigation of land ownership, cataloguing agricultural and forestry soils, and mapping agroforestry uses. This systematic approach lays the foundation for informed decision-making.
- k) **Procedures for Mobilizing Land:** To address underutilized or abandoned land, the law establishes clear procedures. Landowners are given options to either revitalize the land, transfer its use, or incorporate it into the Land Bank. This approach aligns with the law's objectives of maintaining the social function of property and reducing fire hazards.
- l) **Intermediation Tools:** The introduction of the Land Bank and Farm Bank serves as innovative intermediation tools, providing mechanisms for efficient land management and recovery. These institutions play a pivotal role in facilitating the law's objectives.
- m) **New Instruments for Land Recovery:** The law introduces new concepts such as model villages, agroforestry estates, and joint management groups. These innovative instruments offer promising avenues to revitalize agricultural land and promote sustainable practices. These mechanisms empower communities and organizations to actively participate in land recovery efforts, fostering local engagement and accountability.
- n) **Investigating Land Ownership:** The law mandates a rigorous process for investigating land ownership, ensuring transparency and accountability. Public

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exhibitions, official publications, and notifications are key steps in this process. Furthermore, land of unknown ownership is entrusted to the Land Bank, promoting responsible stewardship.

- o) **Ordering and Planning:** The law's approach to ordering and planning is comprehensive. It involves cataloging agricultural and forestry land, classifying land uses, analyzing suitability for agroforestry purposes, delineating productive soils, and prioritizing rural planning over urban development on rural land. This meticulous planning seeks to optimize land utilization.
- p) **Procedures for Mobilizing Land:** The law introduces a procedure for declaring land as abandoned or underutilized, with a dual objective of ensuring the social function of property and reducing fire risks. Landowners are presented with choices, reinforcing the law's commitment to responsible land use.

In conclusion, the Agrarian Land Recovery Law presents a well-structured and comprehensive approach to address various challenges in agriculture and land management. Its multifaceted strategies, transparent procedures, and innovative instruments collectively aim to improve the agricultural landscape, promote sustainability, and enhance the quality of life in rural areas.

4 Good practices & other experiences

4.1 Model villages

A model village is a type of valuable land reclamation tool, with the primary objective of sustainably revitalizing abandoned lands with significant productive potential. This initiative contributes significantly to the development of agricultural and livestock activities while simultaneously mitigating the risk of wildfires. In other words, a model village is a legislative instrument that seeks the activation of a village in a situation of abandonment through the demographic recovery and improvement of the quality of life of the village itself, in addition to the economic activity of the adjacent land, formerly used for agriculture, livestock and forestry. However, the Model Villages do not only focus on agricultural and livestock projects; in fact, many of their projects are becoming more diversified. The Model Villages carry out an integral recovery of the village, recovering the heritage, buildings and managing the adjoining forest areas.

Model villages, as defined by Law 11/2021, enacted on May 14th, aim to facilitate the recovery of agricultural land in Galicia. These villages, which play a significant role in the region's agricultural development, were originally introduced in the preceding legislation, Law 6/2011 of October 13th, focused on land mobility.

The process of designating a village as a model village is initiated by the local administration and requires approval from the governing council of the Galician Rural Development Agency (AGADER). To qualify as a model village, certain criteria must be met. Firstly, there should be a compelling case of abandonment in at least half of the village's area. Additionally, the land in question should possess favourable productive characteristics, and the residents of the village must express a genuine willingness to become a model village.

The primary objective of establishing model villages is to revitalize and reactivate productive land while simultaneously undertaking the rehabilitation of the village. These efforts are directed towards achieving several goals: stabilizing and potentially increasing

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the local population, attracting new residents, and fostering economic initiatives rooted in the region's unique values and resources.

Conditions:

- a) The targeted lands surrounding the village must exhibit signs of severe neglect while retaining substantial productive potential.
- b) The agreement of the landowners of at least 70% of the area is required.
- c) Landowners commit to incorporating their properties into the Land Bank for a minimum duration of 10 years.

Characteristics:

- a) Participation in this initiative is entirely voluntary; landowners who choose not to participate can opt out.
- b) The land parcels remain unaltered, preserving their existing boundaries.
- c) The plots are leased to the landowners through the Land Bank, so they retain their ownership.
- d) Emphasis is placed on the maintenance, preservation, and restoration of agricultural infrastructure, including fences and the network of internal roads.
- e) It is a respectful and sustainable action, fundamentally linked to traditional and preferably ecological production.
- f) They will be part of a Model Village Network to generate synergies and share knowledge.

4.1.1 "Agricultural experimentation areas" in the model villages

These areas are designated for the training and experimentation of agricultural activities within model villages that have not yet received viable production proposals. The objective is to facilitate the gradual inclusion of new participants, promote novel generational shifts within the agricultural sector, encourage innovative approaches to

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education, consulting, and knowledge transfer, serve as testing grounds for emerging ideas and projects, and support the advancement of: (i) Circular bioeconomy initiatives, (ii) Shortened marketing channels, and (iii) Agroecological models."

Agroforestry polygons

Agroforestry polygons are instruments for the recovery and production of land with a good productive capacity, which is in a state of abandonment or under-utilisation, or which is susceptible to optimisation, with the aim of constituting areas of exploitation that guarantee their profitability. Agroforestry polygons can be of public or private initiative and in both cases, there must be the agreement of the owners of more than 70% of the area of the polygon. At least 50 % of the area of the polygon must be abandoned or under-utilised unless the owners of more than 70 % of the area undertake from the outset to maintain or bring the land into production. The project for the industrial estates may include the restructuring of the property and, therefore, the grouping of plots to ensure a minimum profitable area, as well as the development of the plots and the necessary road infrastructures. Action can be taken from a minimum area of 10 ha and there is a mechanism to control land grabbing.

Owners of industrial estates can choose to:

1. Maintain or bring their land into production in accordance with the productive orientations of the project.
2. Lease to the polygon's allotment agent.
3. Sell to the polygon allotment agent.

The forest joint management groups

The purpose of a forest joint management group shall be exclusively one or more of the following:

- a) The mobilisation of forest land through joint management action.

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- b) The exploitation and joint use of forest land through sustainable and multifunctional management of forest products and services, contributing to increasing the profitability and quality of forest resources.
- c) The marketing, provision and/or joint production of forestry products and services, the carrying out of improvements in rural areas, agricultural promotion and development and the provision of common services that serve the same purpose.
- d) The active management and valorisation of consolidated stands of native hardwoods, taking into account the social and environmental benefits they bring to Galician society.
- e) Support for sustainable forest management in the framework of climate change mitigation and adaptation strategies and active decarbonisation policies, without forgetting its role as a refuge for biodiversity and its importance in providing essential services for life.
- f) Restoration and conservation of forest ecosystems.

4.2 Civil society initiatives: fire-fighting actions by communal woodland organisations

4.2.1 The Lebozán Commons Woodlands

In the context of the demobilization of forest communities and the proliferation of monoculture tree plantations consisting of pyrophytic species, this report seeks to shed light on a noteworthy community initiative. The Lebozán Commons Woodlands, situated in Beariz, Ourense, presents a commendable anti-fire orientation that warrants our attention as a model of exemplary practices. This initiative manages approximately 400 hectares within a rural region characterized by declining population trends and a historical record of wildfires.

Landscape Overview

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The Lebozán Commons Woodlands' landscape is diverse, with pine plantations dominating the uplands, interspersed with oak groves and extensive tracts of native forest in the midlands. Smaller areas are devoted to cultivation and fruit plantations near the valley's population centers. Considering this landscape, the Lebozán Commons Woodlands has chosen to revive the multifunctional utilization of its forests. Comprising around thirty dedicated community members, their primary focus is on pine forestry. Nevertheless, they remain committed to preserving the native hardwoods, which not only serve as recreational spaces but also offer various community benefits.

Restoration and Collaboration

In pursuit of their objectives, the Lebozán Commons Woodlands has entered into agreements with the regional government. These agreements primarily aim to enhance the management of *Pinus pinaster* stands and to restore the lower-lying lands as well as the remnants of native woodland. This combination of efforts yields a comprehensive array of benefits, recognized by the local residents as positive. It blends immediate advantages with long-term utilization possibilities designed to secure the community's future. The simultaneous utilization of pine forests alongside agroforestry practices facilitates a transition from a predominantly forestry-centered model to a more balanced and multifunctional one, as voiced by the community.

Fire Prevention and Economic Impact

This strategic diversification of land cover serves as a crucial measure to mitigate the virulence of wildfires, particularly in the uplands where pine monoculture had dominated the landscape for decades. This transition from a single-use to a multifunctional model is integral in the prevention of wildfires. It exemplifies a process in which a sectoral economic incentive, represented by agreements with governmental authorities, translates into actions with a holistic impact on the local landscape.

Conclusion

The Lebozán Commons Woodlands initiative offers a compelling case study in responsible land management and community-based fire prevention. By embracing multifunctional

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practices and sustainable forestry, this community sets a noteworthy example of balanced land use that not only protects against wildfires but also ensures long-term environmental and economic resilience. This report underscores the importance of such initiatives in fostering resilient and sustainable landscapes in regions facing similar challenges.

4.2.2 Conservation and Restoration Efforts in the Froxán Common Woodlands

The Froxán Common Woodlands, spanning 100 hectares (1 km²), are held in collective stewardship by the residents of the village of Lousame, Galicia. The woodlands have a rich historical significance, tracing their origins back centuries. Despite the challenges posed by invasive species, these woodlands encompass several priority natural habitats as defined by the EU Habitats Directive. Notable habitats include Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*, Temperate Atlantic wet heaths with *Erica ciliaris* and *Erica tetralix*, and Arborescent matorral with *Laurus nobilis*, as well as Galician oak woods with *Quercus robur* and *Quercus pyrenaica*.

In 2016, a large fire devastated pine and eucalyptus plantations, even threatening the village itself. Following this event, in 2017 the local community agreed to mobilise to restore the multifunctional nature of the forest and, in this way, achieve a rebalancing of uses and cover, so that the risk of fire events would be reduced. The main object of restoration would be the forest masses, so that priority is given to the elimination of productive pyrophytic species, mainly eucalyptus.

Conservation Efforts

In recent years, the Froxán Common Woodlands community has actively engaged with broader society to advance conservation initiatives. This involvement has primarily focused on collaborative projects with children, educational institutions, local families, and environmental organizations. The primary objectives of these initiatives have included:

- Reclaiming and rehabilitating areas adversely affected by mining activities and invasive species.

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- Implementing participatory reforestation projects utilizing native plant species.

Sustainability Programs

The community has embarked on a sustainable program known as *Montescola*, which serves as an ongoing platform for education and sustainable land management. This program exemplifies the potential of community-based approaches in addressing pressing environmental and social concerns. Key areas of focus within this program include:

- Mitigating the impact of climate change.
- Reducing the risk of wildfires.
- Combating invasive species.
- Addressing land and water contamination and degradation.
- Exploring alternatives to rural depopulation.
- Preserving cultural continuity among traditional rural communities in Galicia.

The Froxán Common Woodlands community has demonstrated commendable commitment and dedication to the conservation and restoration of their invaluable natural heritage. Through active engagement with various stakeholders and the implementation of sustainable land management practices, they serve as a model for addressing critical environmental and societal challenges. Their efforts offer valuable lessons and inspiration for communities facing similar issues, both in Galicia and beyond.

This report acknowledges the significance of the Froxán Common Woodlands as a beacon of environmental stewardship and cultural preservation, underscoring the importance of collaborative efforts to safeguard natural and cultural heritage.

5 Proposals for improvement

The Galician rural areas face an uncertain future in which, in addition to the uncertainties and challenges posed by climate change, there are two key conditions: ageing and depopulation.

A substantial part of the challenges we face can be addressed by deploying new and increasingly sophisticated spatial and environmental planning instruments that promote well-being and provide quality services in demographically ageing areas.

However, beyond the instruments, there are other elements at play, not exclusively technical, but cultural or subjective, which deserve to be considered.

How can we imagine and promote more desirable futures in rural areas that are currently suffering from ageing and depopulation? How can we not only imagine but make desirable lives possible in today's ageing, depopulated and depleted rural areas? How can we transform these horizons of social and economic decline?

Indeed, there is no single solution, no single initiative or public policy capable of re-enchanting disenchanted territories after decades of decline. However, as some of the stakeholders in this project point out, there is a heterogeneity of possible actions and experimental ongoing projects that can help to imagine and illuminate these spaces to come.

The climate crisis has left us bereft of many of the certainties we used to have to understand the present and look ahead. The future of rural territories is full of questions, but also of paths to explore. But we must bear in mind that the world is changing radically.

The relationship with work has been transformed (hand in hand with digitalisation), social structures and family models are more heterogeneous than ever and, in this framework, each territory, each local community can be a place of opportunities to lead a good life.

As Joan Subirats (2016) points out, the post-industrial society offers new opportunities in local spaces in a globalised context. If we accept, then, that the local sphere can play a

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new role - both in the context of the globalised world and in the framework of the climate crisis - and that the rural world can experience new forms of relevance in this new role, we can think of public policies for territorial resilience in two ways.

Firstly, by going beyond an exclusively administrative and operational vision of public policies. That is, public policies aimed at promoting increasingly heterogeneous agendas in the rural world.

Secondly, the need to move beyond self-sufficient action formats, policies that see themselves as closed or complete, in favour of more open devices capable of incorporating new citizen and institutional protagonists: social, economic and community actors that relate to each other in networked structures.

According to one of the project's stakeholders, the Galician countryside is a nuanced and diverse space, which can be thought of according to three different types of rural areas: rural areas in decline and abandonment, active rural areas, and urbanised and forested rural areas.

Each of the three types of rural areas defined has different performance variables, but which as a whole could be included in the following:

1. Enhance Sustainable Production:

- Prioritize advancements in the sustainable production of food and raw materials through innovative changes in production models.
- Foster the production of high-quality, sustainable food closely tied to the specific characteristics of each territory.

2. Optimize Territorial Planning:

- Attain effective territorial planning by refining the management of mountain lands and wood production.
- Propel diversification, transformation, and valorization of these lands through the implementation of meticulously designed long-term policies.

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- Expand crop and pasture areas, concurrently reducing reliance on imported agricultural inputs such as cattle feed.

3. Promote Family Reconciliation and Gender Equality:

- Facilitate societal progress by encouraging family reconciliation going beyond traditional gender roles, pivotal elements for stabilizing and increasing the population.

4. Institute Compensation Systems for Environmental Stewardship:

- Establish and improve compensation systems for agricultural, livestock, and forestry producers providing environmental services.
- Reward producers implementing practices yielding long-term environmental benefits, enabling inhabitants to derive economic returns from the natural capital they sustain. This is particularly crucial for a transformative shift in the forestry model and engagement in the CO2 market.

5. Foster Digital Advancements:

- Prioritize the improvement and implementation of digitization, connectivity, and broadband access.
- Recognize these elements as crucial for ensuring the competitiveness of companies in rural areas and enhancing the overall attractiveness of these territories to the population.

6. Promote Coordinated Multilevel Governance:

- Provide inhabitants with effective means of participation in decision-making processes.
- Foster coordination and participation through mechanisms that facilitate involvement in the definition and management of public policies.

7. Define Administrative Roles for Quality Service Provision:

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- Clearly articulate the role of administrations in the provision of high-quality public services.
- Develop and implement actions that support integration and community-building within these rural areas.

6 Conclusions

In accordance with the scientific consensus represented by the Intergovernmental Panel on Climate Change (IPCC), a United Nations body dedicated to assessing climate change science, we find ourselves on the cusp of an era fundamentally distinct from the modern world as we know it.

The empirical evidence unequivocally demonstrates that climate change is no longer a speculative, future threat. Rather, it is an urgent and present reality. The actions of industrialized societies have wrought significant alterations to the planet's thermodynamics, giving rise to unpredictable climatic patterns and an alarming increase in extreme weather events. These events include heatwaves, torrential rainfall, wildfires, prolonged droughts, and more. It is now widely acknowledged that a global temperature increase beyond 1.5°C or 2°C poses a grave threat to the planet's habitability.

In the past, our conception of habitability was intricately linked to notions of development and progress, underpinned by the assumption of limitless fossil fuel resources. However, we now find ourselves in an era marked by profound transformation. The prefix "geo" is no longer a passive backdrop against which we execute our projects; it has emerged as an active and unpredictable agent with which we must collaborate in shaping our initiatives.

In essence, being "down to earth" today entails an imperative for any endeavor aimed at fostering the prosperity of regions: it must incorporate the planetary question. Our actions must acknowledge that our planet operates within limits, and our modes of production should adhere to these boundaries. Put simply, the phrase "down to earth" underscores the inextricable link between economic production, social welfare, and the habitability of our planet. It is a call to align our initiatives with the conditions necessary for sustaining life on Earth.

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Throughout this report, these conceptual shifts are woven into various contexts. They permeate discussions on demographic challenges, public policy considerations, the SWOT analysis conducted with stakeholder input, and grassroots initiatives identified.

Galicia grapples with profound challenges, notably demographic shifts characterized by aging populations and depopulation, which cast doubt on the future of many rural areas. Simultaneously, climate change poses a suite of threats: milder cold spells, more frequent heatwaves, extended and warmer summers, prolonged droughts, devastating wildfires, emerging crop pests and diseases, the extinction of plant and animal species, and a precipitous decline in biodiversity.

The scenario of disrupted climates is not merely one among many scenarios; it heralds an era of uncertainty that will necessitate novel approaches to inhabiting and governing territories. However, as discerned during stakeholder consultations and through the analysis of ongoing territorial care policies and initiatives, Galicia boasts a tradition of rural innovation. This heritage of innovation holds the potential to be a cornerstone in the region's adaptation to the challenges presented by the "New Climate Regime."

In summary, the imperative of our times is to harmonize our actions and aspirations with the ecological and climatic realities of our planet. The "down to earth" ethos encapsulates the recognition that we must respect the limits of our environment while innovatively shaping our future. Galicia's capacity for innovation and adaptation will be pivotal in navigating the uncharted waters of the climate-impacted world that lies ahead.

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8 Annexes

On 12 July 2023, in the framework of this project, a meeting was held in Santiago de Compostela —at the headquarters of the Galician Agency for Rural Development (AGADER)— with the stakeholders of the *Down to earth* project in Galicia.

The participants of the meeting were:

- Luisa Boquete (Axencia Galega de Desenvolvemento Rural).
- Pablo Bazarra (Axencia Galega de Desenvolvemento Rural).
- Alfonso Ribas (Juana de Vega Foundation).
- Tania Gesto (Juana de Vega Foundation).
- Alberto Vázquez (General Director of Family, Childhood and Demographic Dynamisation of the Galician Government).
- Francisco Pedras (CIS Madeira-Galician Forest Industry Agency).
- Carmen Pereiras (General Director of Youth, Participation and Volunteering).
- Carmen Seco (Head of the Preventive Actions Service - General Directorate for the Defence of the Forest).
- María Lamelas (Galician Federation of Municipalities and Provinces).
- María Rodríguez Galdo (Universidade de Santiago de Compostela)
- Rubén Camilo Lois González (Universidade de Santiago de Compostela)* remote assistance.
- Paula Solla (Universidade de Santiago de Compostela)
- Brais Estévez (Universidade de Santiago de Compostela)
- Belén Rodríguez (PM4Gov)
- Alejandro Nieves (Association of Rural Development Groups of the Xunta de Galicia)
- Diego Cidrás (Universidade de Santiago de Compostela)
- Nerea María Otero Vale (Universidade de Santiago de Compostela)

In addition to providing a first meeting of the project stakeholders, the encounter was intended to be a workshop in which to develop a SWOT analysis that would situate Galicia in the policies of adaptation to climate change. However, due to the uncertainty of the issue; particularly the difficulty of thinking about a decarbonised economy and ways of life and inhabiting in the age of fossil fuels, the meeting did not manage to be completely accurate in developing the SWOT analysis.

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- For producers to adopt more environmentally friendly practices, they must be profitable. For example, an intensive chicken producer will not switch to organic farming if it is not profitable. The same applies to forestry. Therefore, the market must be stimulated so that the market itself demands this solution.
- It is very difficult to highlight the weaknesses of the rural environment by radically separating it from the urban environment. In Galicia the rural environment is not homogeneous, and we must make an effort to define what we understand today by rural areas.
- The coexistence of traditional modes of production and post-productivist initiatives are often in conflict.
- The process of rural depopulation in Galicia seems to have no end yet.
- The administration should reward good experiences that manage the territory in an innovative and sustainable way.
- There are conflicts between the agricultural and farm sector and the tourism sector, sometimes they seem incompatible, but they should not be.
- We must propose activities that promote sustainable management. A production that is attentive to guaranteeing the prosperity of families and the future of the conditions of habitability.
- We must promote alliances between extensive livestock farming and the prevention of wildfire.
- Another weakness has to do with how the Natura 2000 sites are managed. Too many restrictions are imposed on the people who live there and that should not be the objective. Often, good habitability in Natura 2000 sites depends on a more flexible interpretation of the regulations.
- One of the biggest weaknesses we face has to do with the fact that there is a lot of land in rural areas with unknown and abandoned ownership.
- The fact that the demographic challenge is on the public agenda constitutes a strength.