# The Problem of Rural Depopulation in Spain. Towards a Sustainable, Person-Centred Model of Repopulation

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*Article*

# The Problem of Rural Depopulation in Spain. towards a Sustainable, Person-Centred Model of Repopulation

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**Abstract:** For the first time in human history the majority of people no longer live in a rural environment. According to the United Nations, over 50% of the global population now lives in cities. The abandonment of the rural environment has grave consequences for society in general, as these areas are healthier places to live, produce the food we all depend on, and are an important factor for preserving biodiversity and environmental sustainability. In this paper we will provide a historical overview of rural repopulation models and analyse a number of models currently being applied in several countries in Europe and Latin America. We will also offer observations on a pilot repopulation project called "Habita Tierra" currently being developed. The common characteristics of different repopulation models prompted us to develop a model based on active listening and accompaniment of people and local agents as well as other important factors. Rural depopulation in Spain involves a number of interrelated problems, one of the most salient being the aging rural population. The average farmer in Spain is 61 years of age. There is also the problem of gender imbalance in rural areas, where women enjoy few opportunities or alternatives. In turn, low fertility rates, increasing stress on limited public healthcare, education and transportation resources, a lack of cultural activities and poor connectivity are also factors driving rural depopulation. The only group which is increasing the rural areas in Spain are immigrants, who now account for 10% of the rural population, often performing the agricultural, fishing and livestock farming activities abandoned by native residents. This group, along with young people, and women of all ages and the programs which support them may offer a solution to the challenge of depopulation. The paper concludes with a list of the key features of successful repopulation programs, drawn from a comparison of historic and contemporary models.

**Keywords:** rural territory; Spain; people; repopulation model; gender; immigration

## 1. Introduction

The growing concentration of populations in cities is a global phenomenon. At present, some 56% of the entire global population live in urban areas and this figure is expected to reach 68% by 2050 [1]. This is unprecedented in human history; until now the majority of the population has lived in rural areas. In developed nations the figures are even more worrisome: according to the World Bank, less than 20% of the population lives in rural areas.

Although human population has seen exponential growth around the world, a number of authors have noted that many rural areas have been progressively abandoned in recent decades [2]. The term 'depopulation' refers to the significant reduction of the size of a population in a given area. This problem affects many rural areas of Europe, including Spain [3]. The causes of this phenomenon are complex and manifold: demographic [4], psychosocial [5], environmental [6] and economic [7].

Depopulation is a challenging dilemma for Europe, where rural areas represent 83% of the total area of the European Union, including agricultural land, forests and natural areas. In the EU, these areas are home to only 30.6% of the total population according to data on rural development from the European Commission.

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In turn, the immigrant population of the EU, according to the official figures from Eurostat, now totals some 37.5 million people, 8.4% of total population. Data from Eurostat also indicates that, in 2021, the resident immigrant population was distributed across EU Member States as follows: 18% in Germany, 14.6% in France, 12.8% in Italy and 10.3% in Spain. Thus, the majority of immigrants in the EU reside in these four countries.

The majority of rural regions are among the most disadvantaged in the EU, where the percentage of those at risk of poverty and social exclusion is higher than in urban areas. The per capita GDP (Gross Domestic Product) of these regions is well below the EU average, with difficult access to public services and poor infrastructure.

Some of the most depopulated areas of the south of Europe are found in Spain, where depopulation has been caused by internal migration to urban centres. Between 1960 and 2000, it is estimated that some 20 million people emigrated from rural areas. According to census data from the INE (Padrón Continuo del Instituto Nacional de Estadística), see Figure 1, the Autonomous Communities with the largest rural population loss between 1996 and 2021 were: Asturias (89.9 %), Castilla y León (87.9 %), Extremadura (86.2 %) and Aragón (77.7 %). On the contrary, the regions seeing the highest population growth in Spain have been Madrid, Barcelona and Sevilla, among the largest cities in Spain.

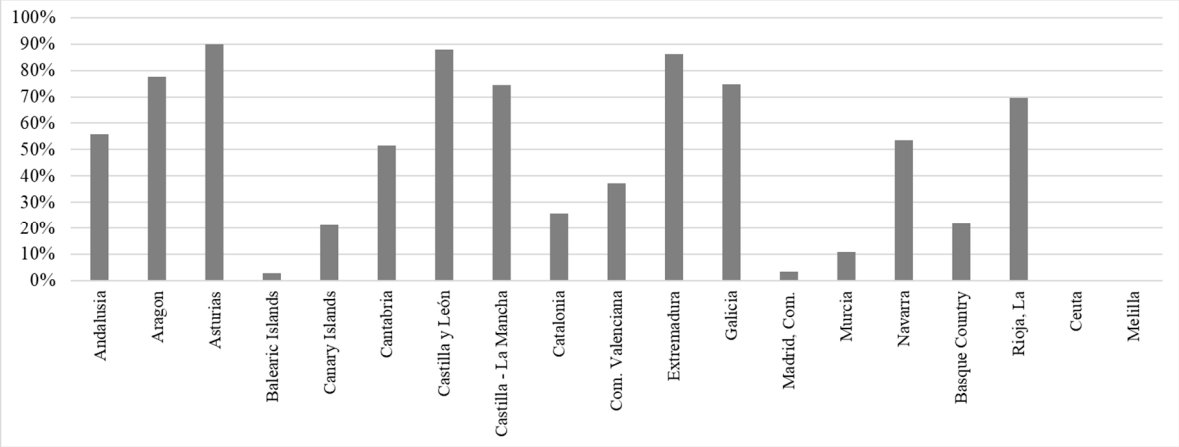


**Figure 1.** Percentage of municipalities by region with population loss (1996-2021). Source: the authors, INE Spain.

Immigration has been the principal driver of population growth in Spain since the early 21st century, with large numbers arriving until the economic crisis of 2008-2015 when numbers fell dramatically. Since 2015, immigration has increased, as shown in Figure 2, and has again become a determining factor in population growth to the present day; in fact, as of 2023 Spain's population totals 48,196,693 people, of whom 8.3 million were born elsewhere.

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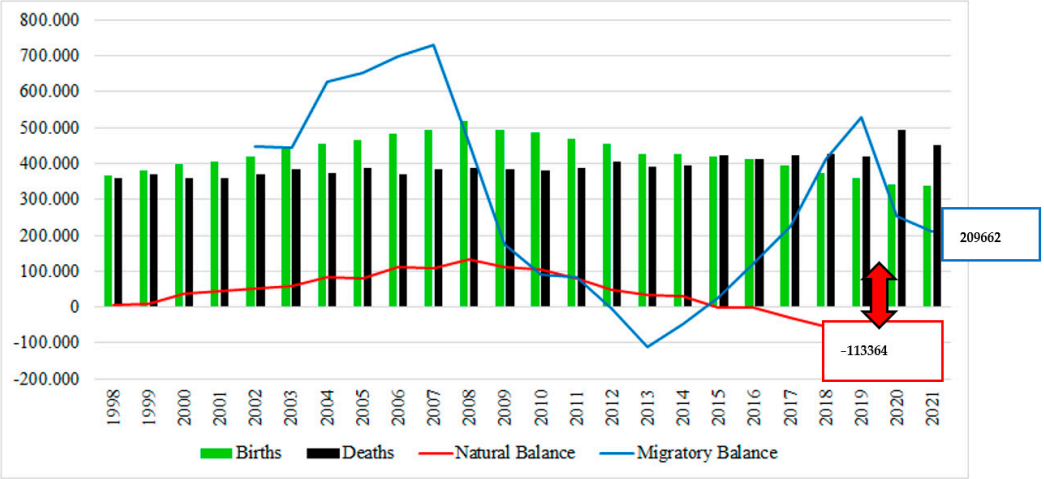


**Figure 2.** Natural and migratory balance of Spain (1998-20 21). Source: National Statistics Institute of Spain.

As can be seen in the graph above, since 2015, natural population growth of Spain is negative (more deaths than births), with a negative balance in 2020 of 152,461 people, compensated by the immigration of 252,393 people the same year. In 2021, the migratory balance of Spain was slightly better, due to a drop in mortality rates and increased migration to other countries, despite receiving over 138,000 new immigrants. Nevertheless, the Synthetic Fertility Index (ISF) is the figure which most clearly illustrates the problem: Spain has the second lowest fertility rate in Europe: 1.18 children per woman compared to the 2.1 necessary to counter population decline.

## 2. Materials and Methods

The purpose of this study is to identify strategies and models for sustainable and inclusive repopulation (with particular attention to women, young people and immigrants), person-centred approaches that can further rural development.

We conducted a systematic review of historical model of repopulation, as well as a review of current models. From this we will extract the key aspects which are the most common denominators in successful repopulation.

In our conclusion, we will provide a detailed description of the principal lessons that can be drawn from an analysis of the available models and programs.

## 3. Results

The results of this analysis is divided in 3 areas: Problems or rural depopulation; On population settlements; Defining repopulation and; Current models or rural repopulation.

### *3.1. Problems of Rural Depopulation*

Unlike in large cities, depopulation is most clearly evident in rural areas where some 42% of municipalities have seen their populations decline. According to the INE *(Instituto Nacional de Estadística de España*) some 45,000 people abandon rural communities annually. The process of rural depopulation brings with it a series of negative consequences, summarised below:

The public resources available in each municipality are reduced due to smaller and aging population:

Access to healthcare is a problem as there are fewer and more dispersed health centres, clinics and hospitals, requiring people to travel longer distances for care. This problem is even more acute given that an aging population has more healthcare needs and often with reduced mobility or autonomy.

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Schools and education present similar problems. With fewer children, individual schools need to serve a number of different communities requiring transportation to take students to larger local towns. For secondary and higher education options are even more limited and the majority of students must move to larger towns or cities far from home.

Other public services and administration, managing taxes, fees, etc. require local residents to travel to the provincial capitals, except where these services can be conducted online.

There are fewer and less frequent transportation options, and many towns remain without internet services (fibre optic networks).

There is less economic development with few young and qualified people. There is less diversity or choice in employment as local consumption shrinks with ever fewer businesses serving local communities.

The quality of governance suffers due to a lack of resources and distant connection to regional and national centres of power.

There is greater precarity and poor quality of life for rural women whose access to education, training and employment is limited, in addition to other inequalities which condition their circumstances and discourage remaining in rural areas (there are fewer women than men in rural communities in Spain) [9]. Contrarily, studies have suggested that the quality of life of women is higher in rural communities, where they then to enjoy better health and have more positive attitudes [10].

The abandonment of the land is endangering the preservation of biodiversity, increasing desertification and forest fires due to neglect of the environment. Agriculture, cattle farming and traditional rural trades and crafts are increasingly unattractive options for young people offering poor economic opportunities and a life of hard labour, along with the added uncertainties of a changing climate. The average age of rural farmers in Spain is 61.

The cultivation of certain native species is declining due to a lack of workers, leading to a reduction in food production.

Immigration is one of the few factors which may serve to increase rural populations. As noted, Spain has a positive migratory balance, mitigating the natural decline; the same can be said for rural communities. In fact, immigrants now account for 10% of the rural population, an ongoing trend over the last 20 years, as illustrated in Figure 3 below.

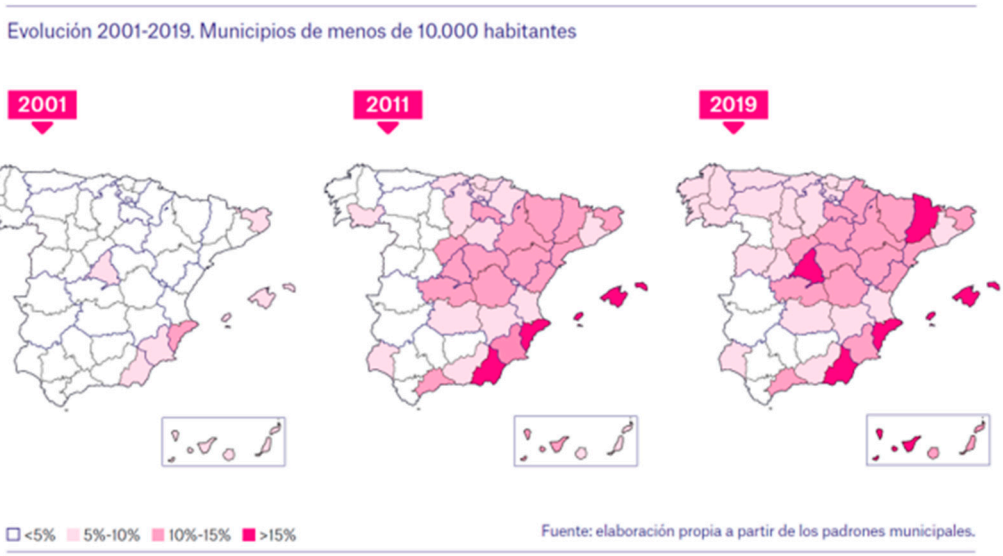


**Figure 3.** Percentage of rural population born abroad. Source: Observatorio Social La Caixa. https://elobservatoriosocial.fundacionlacaixa.org/dossier-inmigracion.

With this overview of the realities of rural depopulation in Spain, the problems it entails, and the key role played by immigration as the only population group experiencing growth, we shall now

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take a historical look at colonisation and repopulation efforts in Spain which may be instructive for the present.

*3.2. On Population Settlements: A Brief Historical Review of Rural Colonisation and Settlement Models in Spain*

Throughout history, the Iberian Peninsula has been subject to continuous demographic changes, colonisation, depopulation and repopulation. Settlements were conditioned by the complex and diverse geography of the region: the topography of the terrain, flat or mountainous, the abundance or scarcity of water relieve, surrounding vegetation or existing building techniques [11].

Colonisation can be dated back to the earliest prehistoric periods: migrations, contacts and settlements beginning in the Neolithic era, as suggested by findings of Cardium pottery in the east of the Iberian Peninsula, dated between the 6th and 5th millennium BC [12], and continuing to grow during the Metal Ages with the development of navigation. This explains the development of local cultures, such as Los Millares, during the Copper Age, 4th and 3rd millennium BC in the southeast of the Peninsula [13]; the Argar, Bronze Age, 2nd millennium BC in the southeast [14], and Megalithic art found especially in the west and southwest of the Peninsula dating from the 5th to 2nd millennium BC.

During Ancient times, Greek and Roman sources, such as Herodotus, Polybius and Strabo, told of the inhabitants of the Iberian Peninsula: Tartessians, 12th to 5th century BC, Iberians, 4th to 3rd century BC, and the arrival of Indo-European settlers and Mediterranean traders throughout the Levante.

During the 8th century BC, waves of migration brought Indo-European settlers to the Peninsula, including the Celts, who established themselves in the north, centre and Atlantic regions [15].

A significant role in colonisation was also played by the great trading civilisations of the Eastern Mediterranean from the 1st millennium BC, some drawn by primarily commercial interests, such as the Phoenicians (at their height in the 7th century BC), the Greeks (6th century BC) and the Carthaginians (3rd century BC) or, as with the Romans, by conquest, occupation, economic exploitation and Romanisation from the 3rd century BC.

Emigration and development led to an increase in the population density of the Peninsula, especially in areas where the growth in trade was greatest, urban centres as well as agricultural and livestock farming regions. The population rose from four million inhabitants in pre-Roman times, according to Pliny the Elder, to six million during the Roman era [16,17].

During the Middle Ages, there were significant migrations and processes of population and repopulation after the fall of the Roman Empire: the Visigoths, originating in the east of Germany, ruled over the Hispano-Roman majority in the ensuing power vacuum. They settled in largely abandoned or destroyed regions of Spain, creating an important agricultural and commercial centre in Baetica, establishing military garrisons on the frontiers to guard against incursions by other Germanic peoples [18].

In the Middle Ages, during the long process of advance and conquest of *Al-Andalus* by the Christian kingdoms, different models of repopulation and allocation of lands were applied at different times and in different regions. Between the 8th and 10th centuries, reconquest brought with it a significant repopulation of the Duero valley, previously a "*no man's land*".

From the 8th century, as the Muslims advanced across the Iberian Peninsula, the nobles and clergy fled north, abandoning the territory and leaving it not only a devoid of inhabitants but of authority and hierarchies as well. Initially, this was a spontaneous process, called the *Presura* or *Aprisio* in Cataluña, and then continued more formally by order of the king. In the 10th century, on the initiative of the kings of Asturias, monarchical power was reasserted through local authorities (nobles and clergy) who were granted extensive lands that were brought under cultivation, diversifying crops and livestock, extending and increasing the economic power and dominion of the Christian kingdoms in the north.

Over the course of the 11th and 12th centuries, the northern kingdoms undertook the repopulation of the lands between the Duero and Tajo rivers, creating local councils and towns with specific laws

and *Alfoces*: *Comunidades de villa y tierra*; generally with a central town fortified with perimeter walls or castle for defence.

This model of settlement was similar to that found in Italian region of Lazio, known as *incastellamento* [19] or 'encastlement', a form of purposeful social and economic organisation rather than a contingent development of military strongholds with regional jurisdiction.

During the 11th and 12th centuries, it would not be farmers or peasants but military orders which benefitted from lands conquered from the Muslims in the Tajo, Guadiana and Lower Ebro regions, materialised in *Encomiendas*, a form of manorialism through which the kings of Castilla granted agricultural land to these military orders, with the figure of the *comendador*, a knight of the order with authority and seignory over the region.

From the 13th century, in territories conquered from the Nasrids, the Guadalquivir Valley and Murcia, the models of resettlement were *Repartimientos* bringing settlers from Castilla to occupy the land abandoned by the Muslims, providing dwellings and land, and occasionally the creation of large estates, known as *Donadíos*.

A series of crises in the 14th century, the plague, demographic decline in rural areas and increasing urban population, changed the panorama dramatically, resulting in a reduction of *Repartimientos* and a growing concentration of lands in the hands of the nobility and a process of *seignorialisation* [20–22].

In the Modern Era, despite the domination of the Americas, the Spanish economy did not progress, experiencing a difficult transition from feudalism to capitalism.

From the late 16th century and throughout the 17th century, the quality of life of the Spanish people suffered, with instances of famine, epidemics (plague and smallpox), resulting in a drop in population, especially in certain agricultural regions. In the Levante, the region would be deprived of important resources with the expulsion of the *Moriscos* (1609), a demographic catastrophe causing the rural population to fall by up to 45%. This was in addition to high mortality rates due to war (Thirty Years War, followed by the War of Succession) and growing emigration to America. The result was a severe decline in the Spanish population [23,24].

In the 18th century, occasional repopulation efforts were carried out in some uninhabited regions of Spain in need of development or government control.

The first notable experiment in rural repopulation at this time was that of Nuevo Baztán, a colony conceived as a pre-industrial complex by Juan de Goyeneche, undertaken between 1709 and 1713. Imbued with a "Colbertist" spirit, Goyeneche create a company in the form of an urban complex and factory, with over eight hundred workers and various industrial activities, combining repopulation, industry, agriculture and commerce [25].

A short time later, a project by the king Carlos III, *Nuevas Poblaciones de Sierra Morena y Norte de Andalucía*, one of the most ambitious colonisation projects of the Enlightenment era, aiming to create a new and ideal agrarian society, free from the obstacles and burdens of the past. Homes, land, livestock and farming equipment was provided to over 6,000 Catholic colonists from Central Europe, Germany, Switzerland and Flanders [26].

Under the *Real Cédula para las Nuevas Poblaciones* of July 5, 1767, Olavide and Campomanes pursued their fundamental goal of repopulating the empty region between Valdepeñas and Bailén, providing security to a depopulated area plagued by banditry in middle of the *Camino Real de Andalucía* between Madrid and Cádiz, the principal port for commerce with the Americas. The project included the construction of new towns: *feligresías* or *aldeas*, which would spur the development of agriculture and livestock farming, *La Carolina* being the most notable example of this effort [27,28].

In more recent times, we must mention in relation to the exodus of rural inhabitants to cities the parallel phenomenon, under the Franco regime, of the creation of settlements and colonies in newly incorporated towns to repopulate rural areas.

The *Instituto Nacional de Colonización*, created in October 1939 and part of the Ministry of Agriculture, was created to colonise and repopulate the land. Over 300 towns were created in 27 provinces, proving homes and arable land to over 5,000 families, especially in Castilla, Andalucía and Extremadura. The goal was to create planned colonies to repopulate abandoned rural areas and bring

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dry land into cultivation in specific regions of Spain. These colonies only succeeded, and not always, when accompanied by large-scale irrigation projects [29].

An analysis of these historical and successive waves of colonisation, depopulation and repopulation in Spain offers important insights into the current challenges facing rural Spain and point the way towards a new model of rural development.

From a historical and sociological point of view, these projects shared a concern for economic diversification, aiming to develop not only agriculture in boosting the rural economy. Agriculture and livestock farming were combined with efforts to develop other industrial and commercial activities connected to the wider economy to reduce traditional dependence on self-sufficiency.

There was also an important effort to attract new settlers from surrounding regions and from abroad, offering economic incentives and opportunities for the newly arrived population.

Furthermore, improvements in infrastructure and basic services were also undertaken to address one of the key factors in depopulation: transportation links, irrigation systems, and quality housing to improve the life of rural inhabitants and attract new residents.

Colonies were connected to active administrative areas or included in more developed administrative structures, fostering public and private cooperative initiatives and community projects to strengthen the economic and social cohesion of these areas.

Equally, the modernisation of agricultural practices and techniques and general rural development more broadly helped these communities adapt to new challenges and opportunities.

### *3.3. Defining Repopulation*

A commonly used concept in the field of demographics is 'population replacement', based on the widely known replacement fertility rate of 2.1 children per woman [30]. The fall in fertility rates is one of the principal causes of depopulation. In rural areas, this is combined with the factors of an aging population and emigration to cities and other countries [31].

Given low fertility and mortality rates, the first repopulation proposals to incorporate specific migration and replacement rates was the Social Replacement Rate [32]. Several authors [33–35] [36–39] subsequently considered migratory factors in their population calculations, referring to reproduction rates and growth rates [40].

Faced with the problem of depopulation, Alejandro Macarrón [41] wrote of the "demographic suicide" of Spanish society, a term which dramatically highlights the problem. Sergio de Molino introduced the concept "Empty Spain" ("*España Vacía*" in his book of the same name [42]. These books have had a significant impact on Spanish society, precisely because they appear in literature, uncoupled from any specific political discourse or policies.

The concept of repopulation is most frequently used in the context of biology, such as forest repopulation, rather than referring to human geography and demographics. Nevertheless, these disciplines insist that "the repopulation of the rural environment must be one of the great socio-economic and environmental revolutions of the coming decades" [43]. So-called "neo-ruralism" first appeared during the 1970's and 1980's but was then considered as an almost utopian fantasy of a return to rural life [44]. However, a series of crises has demonstrated the unsustainability of the current territorial model, based on an ever-increasing concentration of populations in urban centres drawn by the search for a better life [45,46], as well as the unsustainability of a socio-economic model based on rampant globalised consumption which disregards ecological and social sustainability [47].

The term repopulation is also used in a model discussed below: the 'Compatibility Matrix for Repopulation' [48]. The concept of repopulation can be understood in a number of ways (see Figure 4). Firstly, we wish to consider its association with demographics and population growth through the notion of population settlements, especially in regions which are either depopulated or at risk of depopulation. Repopulation efforts in this case consider key demography dynamics such as families and immigration Secondly, repopulation can be linked to economics given the evident need for employment for local residents. The primary sector is clearly the most prominent in rural areas, and new settlements are often oriented towards agriculture, livestock farming or fishing, producing traditionally local products to drive economic development. Thirdly repopulation can be associated

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with the environment; that is, human settlement in a territory and care for the land can have a positive environmental impact, preventing desertification and forest fires while conserving and enhancing local biodiversity.

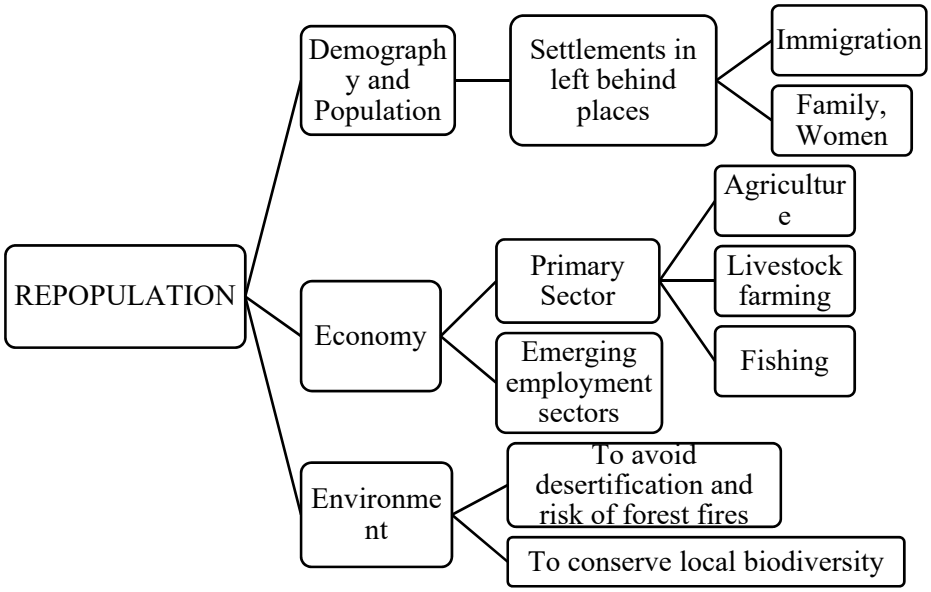


**Figure 4.** Conceptual map of repopulation. Source: the authors.

*3.4. Current Models of Rural Repopulation*

The demographic challenges facing a number of regions in Europe are such that Article 174 of the Treaty on the Functioning of the European Union, specifically refers to the importance of addressing "disparities between the levels of development of the various regions and the backwardness of the least favoured regions" and "particular attention shall be paid to rural areas (…) and regions which suffer from severe and permanent natural or demographic handicaps" [49].

In the following pages we will review the most significant repopulation models based on an examination of literature in Spain as well as international success stories (SSPA and WWP):

The SSPA Network (Southern Sparsely Population Areas) developed a repopulation model in 2017, taking a holistic approach, which was successfully applied in the Highlands and Islands of Scotland. Another model we will analyse is the WWP (Working With People) rural development and repopulation model, as well as the model developed to address "Empty Spain", a territorial model created in 2019 as a social movement for regional policy in various regions across Spain. The theoretical rural repopulation model "Compatibility Matrix for Repopulation" was developed in Valle del Genal, in the Spanish province of Málaga [48] (Ros, 2021). We will conclude with the experience of our own research team: the Habita Tierra repopulation program.

3.4.1. Highlands and Islands Enterprise, Scotland (HIE)

This is part of the TAIEX-REGIO Peer 2 Peer project, facilitating exchange between national and regional entities which manage and administer Regional Development Funds and EU Cohesion Funds.

This model is based on a holistic development project created by the Southern Sparsely Population Areas of Europe (SSPA Network) [50] in 2017, the first successful model of rural repopulation.

The principal features of the SSPA Network [50] which account for the success of the Highlands and Islands Enterprise, Scotland (HIE) are:

Autonomous and depoliticised organisation: this is a publicly funded agency with a board of directors appointed by the corresponding local governments. The agency is wholly autonomous from other public administrations able to develop comprehensive planning initiatives within the territory.

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Medium and long-term planning: planning is based on a comprehensive approach, taking into consideration geographical, economic, social, cultural, psychological, and other factors, creating a positive feedback dynamic with a holistic conception of rural development.

Presence and action on the ground: there is direct contact between technical personnel and local residents and collectives who work together to develop the projects, providing first-hand knowledge of local realities; the fact that local residents are empowered to be catalysts for community and/or business development initiatives is an essential aspect of the strategy, fostering a spirit of trust, optimism and entrepreneurial drive.

Culture of cooperation: the HIE is an agency created specifically to promote sustainable development in remote, mountainous and sparsely populated areas with significant structural deficits. From the first, the HIE has acted in cooperation with public institutions as well as private companies, rural communities, schools and research centres, European entities, etc.

Efficiency, responsibility and control: The projects to be funded must be approached from the perspective of their potential impact on economic and social activity of each rural community and its demographics. Appropriate planning and zoning are essential to the success of these projects and the reorganisation of rural areas.

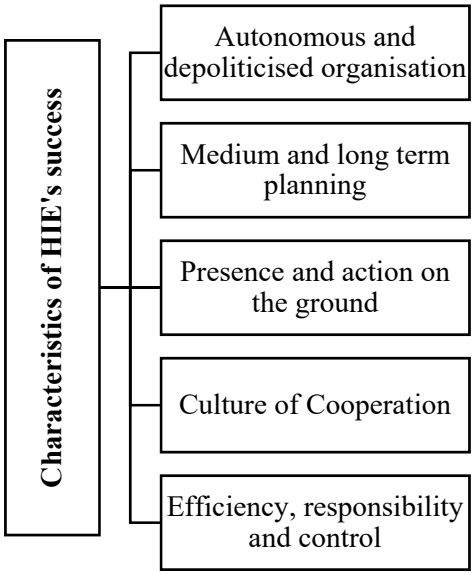


**Figure 5.** Characteristics to explain the HIE's success (Highlands and Islands Enterprise, Scotland). Source: the authors, based on SSPA (2017).

Any conception of rural development which focusses exclusively on the primary sector is and will continue to be doomed to failure. According to Eurostat, the primary sector accounts for only 2% of the GDP of the EU, and the population living in rural areas is less than 30% and falling. In fact, the poor viability of the primary sector led the HIE to discard it entirely from among its list of the seven sectors for growth which could serve to spur development and economic recovery [50] (SSPA, 2017).

A holistic development model must take into account the following essential components: that there is sufficient infrastructure, basic services and access to essentials; that housing options are both affordable and of sufficient quality; that basic services are available and accessible to serve the local community (education, health and social services, commercial centres or opportunities for cultural or recreational activities, etc.); connectivity and communications (internet and telephony); a regulatory framework that is appropriate and suited to the realities and needs of the rural environment (from local taxation to the exploitation of natural resources); presence and fostering of entrepreneurship (attract and retain talent to create new opportunities); presence of skilled individuals with the ability to attract human capital by offering appealing employment opportunities [50] (SSPA, 2017).

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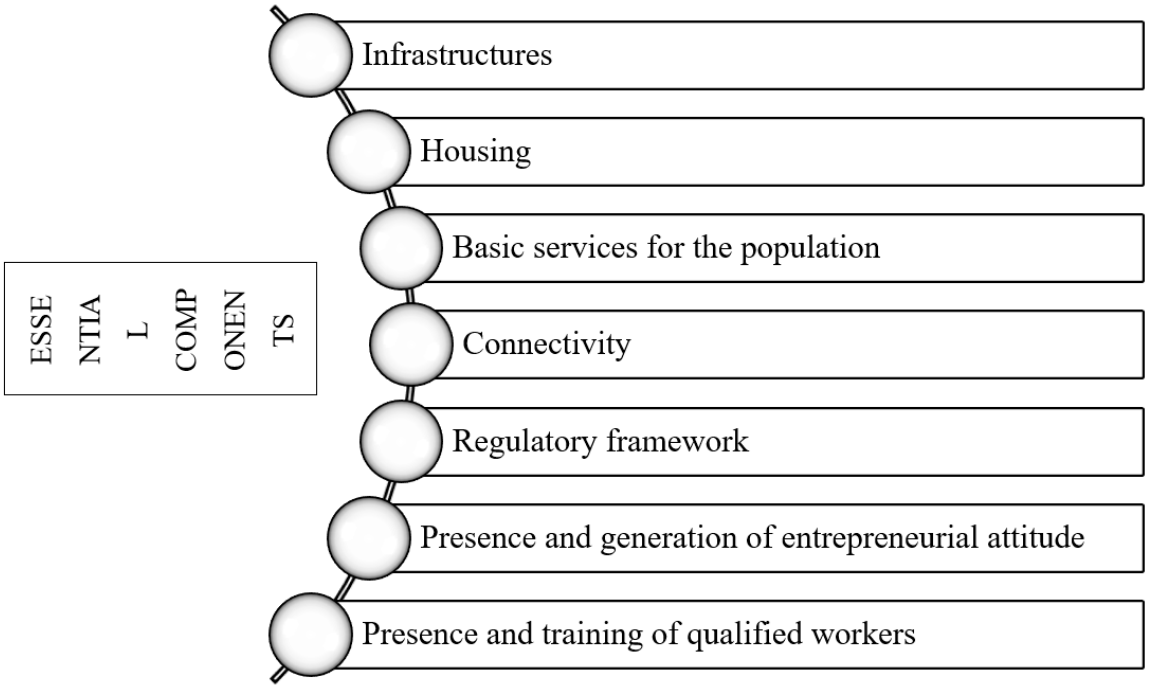


**Figure 6.** Essential components for the Holistic Development model (HIE). Source: the authors, based on SSPA (2017).

The holistic model of rural development highlights the importance of "ceasing to regard rural life as exclusively associated with farm labour" [50] (SSPA, 2017). It is important to consider that this is a vast geographical area in which inculcating entrepreneurship, associationism and empowering communities are all fundamental to the prosperity of these regions. All resources must be brought to bear, both material and human, in order to attract new talents and entrepreneurs (especially young people) that can ultimately benefit all of society. In order for a new rural settlement to be successful, it must have easy and rapid access to certain essential elements.

In the successful case of Scotland, the key was the creation of a specialised and independent agency, the reform of local government (reducing the number of municipalities and rationalising the administrative map, improved telecommunications infrastructure, the exploitation of the local economy (in this case, the petrochemical industry, fishing, tourism, etc), and structural funds and subsidies from the European Union. Additionally, it was necessary to analyse the migratory behaviour of young people and take actions to welcome new inhabitants from other parts of the United Kingdom who reversed the trend of population decline.

3.4.2. Working With People, WWP

This is a planning model for rural development which, by promoting the socio-economic development of rural areas, reinforces the options for population settlement. This is a valid model for the planning of rural development, with the beneficiaries participating from the initial design of the plan to its completion. The WWP has been widely studied and validated in different contexts [51] [52] where it has proven to be an effective model to boost rural prosperity.

The WWP offers a planning model based on social learning, that is, the participation of local actors throughout the entire process in an experience of continuous and mutual learning, both for planner and for local residents where their knowledge and experience are brought together and shared [53]. Thus, planners aim to connect knowledge and action in a shared project in which technical expertise works hand in hand with the people involved, valuing their participation and engagement, and judging the success of a project not on its technical sophistication but on its ability

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to improve the lives of those involved [54]. This model focusses on the contextual skills and behaviour of people and consists of four phases:

Phase one is institutional architecture, *political and contextual*, identifies the key actors for the implementation of plans or strategies, including social and political organisations and public institutions, with a subsequent formalisation of agreements and alliances to support implementation.

The two following phases are related to *ethical and social* dimensions:

Phase two is *territorial focus*, identifying the beneficiaries and infrastructure, with a socio-economic analysis of the area.

Phase three is the *design of a strategic plan*; an intervention plan that meets the identified needs of the community. This includes actions to build trust between the local population and institutions by engaging them in the process and being sensitive to the local feelings and concerns.

Finally, phase four is *technical-entrepreneurial* where the implementation, oversight and evaluation of the plan is carried out.


**Figure 7.** Working With People (WWP) Model. Source: Cazorla, A., De los Ríos, I., and Salvo, M. (2013).

Having implemented the *Working With People* program in a number of different rural development projects in various countries, one of its promoters, Ignacio de los Ríos, defines the key element in population resettlement plans: "the scientific basis of the methodology for population recovery is founded on an urban planning tradition called social learning" [55].

Settlement projects have been the least successful in achieving rural development. The cause of these failures is that these projects overlook or ignore the socio-economic and cultural complexities of new human communities, while also failing to establish a viable and productive economic base for the community [56].

In depopulated areas, people become the authentic heirs to past traditions and a cultural identity; they feel a duty to safeguard and cultivate this legacy.

It is essential that local inhabitants are welcoming and accepting of newcomers [57].

Successful settlement of new populations relies on the teamwork of experts in planning and development, as well as specialists in human geography and social sciences given their understanding of community structures and the dynamics of social change.

De los Ríos and Alier [55] have established a Welcome Plan for depopulated areas which emphasises the importance of carrying out an initial diagnostic or analysis of the following elements:

The physical environment and natural resources.

The local population and population loss.

Socio-economic factors, activities and employment in the area.

Available infrastructure, housing and social services.

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Participation of locals: this is a process of listening and learning, involving local inhabitants to dynamise the project.

This diagnostic concludes with:

An inventory and analysis of viable projects with the potential to generate employment.

Identification of the principal barriers to settlement.

Creation a database of potential settlers.

Establishment of criteria for the selection of new settlers.

Analysis of policies, financial support and incentives in each area (for example: tax incentives)

Identification of potential managers of the program.

3.4.3. Territorial Planning Model or Empty Spain Model ("España Vaciada")

This model is based on the need to reverse population decline while finding a sustainable territorial equilibrium.

It is structured and organised to further the territorial cohesion of "Empty Spain" [58], consisting of eight thematic blocks with 180 components and 82 platforms through Spain.

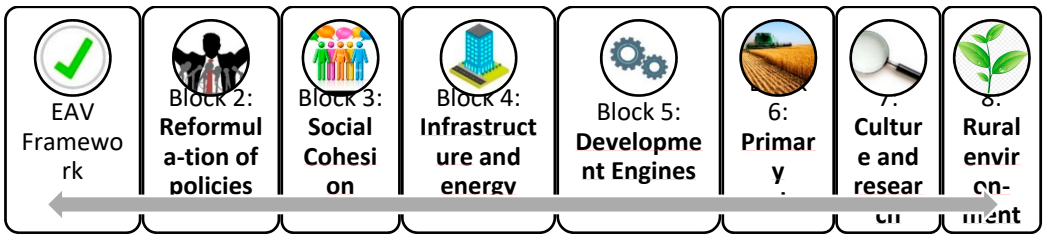


**Figure 8.** Thematic blocks/workshops for Territorial Planning Model. Source: the authors.

The model is designed for territorial action that can be applied throughout rural Spain, seeking to mobilise social platforms and organisations (which are becoming political movements presenting candidates for elections) and develop new policies in line with the graph above, including:

Prioritise value creation or the evaluation of economic value of each determinant factor in the policies to be applied.

Analysis of regional policies for territorial development to identify areas for innovation or reform.

It is essential to work with local people to build community and social cohesion.

A detailed analysis must be made of the existing infrastructure in the territory, identifying shortcomings, as well as the type of energy available and energy needs for future development.

An analysis of the interrelationship of different elements of the model for the effective coordination of development engines.

An evaluation of the primary sector, that is, agriculture, livestock farming or fishing to evaluate the current challenges and plan for the future.

The cultural development of the rural environment is an important factor in the wellbeing and education of local residents. This model highlights the importance of developing cultural programs and activities for small communities far from large cities. Research is another aspect of the model, contributing to understanding and finding innovative solutions to complex problems in the territory.

The final block is transversal, relating to policies for environmental sustainability and the preservation of biodiversity, factors which are increasingly important in rural development and often conditioned by policies enacted outside the territory or region.

3.4.4. Compatibility Matrix for Repopulation [48]

This research methodology is based on conducting a diagnostic of existing problems and possibilities for intervention to produce the changes Spain requires to face demographic challenges. This is a practical methodology for public administrations to advance strategies and policies which favour sustainable repopulation of rural areas. The goal is to create a territorial model which

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optimises natural and economic resources while conserving and enhancing environmental, social and cultural capital. This innovative model, the Compatibility Matrix for Repopulation (CMR), combines a quantitative approach with an analysis of qualitative and participatory processes within a specific territory, aiming to identify the compatibility between a territory and specific social groups [48].

The Compatibility Matrix for Repopulation (CMR) is a scientific tool that permits the characterisation of rural territories at risk of depopulation, identifying its compatibility with a possible influx of new inhabitants.

Figure 9 outlines the key factors studied with this matrix, beginning with socio-demographic factors, the starting point for any repopulation project and considering aspects such as the age and gender of local populations, demographic dynamics and trends, etc.

The matrix examines socioeconomic and sociocultural factors as well as healthcare, management and participation, skills and training, etc. which determine the indicators for various scales of territorial development, urbanisation and construction, etc.

| SOCIO-DEMOGRAPHIC |
| --- |
| •Age groups;<br>•Origin of the population;<br>•Educational level;<br>•Demographic dynamics;<br>•Other (gender indicators, etc). |
| **SOCIOECONOMIC** |
| •Economic sectors indicators;<br>•Unemployment;<br>•Social protection;<br>•Poverty, inequality;<br>•Gender;<br>•Qualified professionals;<br>•Economic support plans, etc.. |
| **SOCIOCULTURAL** |
| •Religion;<br>•Familiar size;<br>•Habits, customs. |
| **HEALTH** |
| •COVID-19 pandemic;<br>•Population >65;<br>•Mortality rates (disease);<br>•Immunisation rates;<br>•Healthcare expenditures;<br>•Healthcare workers;<br>•Health coverage;<br>•Other. |
| **MANAGEMENT AND PARTICIPATION** |
| •The regulatory framework;<br>•Urban and territorial planning;<br>•Local management and technical capacity;<br>•Resources;<br>•Associationism;<br>•Social participation;<br>•Public aid in the context of study. |
| **SKILLS** |
| In an exhaustive development of indicators, the initial proposed structure is organized:<br>•according to the territorial scale,<br>•the urban-community scale and<br>•the building scale. |

**Figure 9.** Key Factors of the Compatibility Matrix for Repopulation. Source: The authors, based on Ros (2021).

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3.4.5. Habita Tierra: A Humanistic Program for Rural Repopulation

Habita Tierra is a program for inclusive rural repopulation developed by the Universidad Francisco de Vitoria (Madrid) and the Fundación Altius. The program was designed in 2020, incorporating elements which, taken as a whole, facilitate the settlement of immigrant families in depopulated rural areas. The program is currently benefiting from the support of the Spanish Ministry for Ecological Transition and the Demographic Challenge, registration number REGAGE22e000 24700137.

This applied, person-centred research program analyses the development of a real project underway in the province of Ávila. The key aspects of the project are: the selection of young families with small children seeking to begin a new life in a rural environment, employment options, both in agriculture and other sectors, accompaniment by mentors and professors to help overcome the challenges new residents face, as well as measures to facilitate social integration.

The preliminary results of the program were drawn from surveys and interviews with participating families during the first phase of the Habita Tierra program. The following results were presented at the international Regions in Recovery Congress (March 2022) of the Regional Studies Association (RSA), the Global Conference of Economic Geography (GCEG Dublin, June 2022) and the Nation Congress on Migration (Madrid, September 2022):

The majority of families interested in starting a new life in a rural environment through the Habita Program were immigrants.

The process of integration of new inhabitants in a rural environment takes time. Various families have been participating in the program for over one year and we believe their integration as 'just another neighbour' has not yet been achieved.

The program has not identified any significant barriers to integration into the rural environment due to the fact they are immigrants. The children of immigrant families have been welcomed into their schools as any other children, without any reports of incidents of discrimination due to their origins.

Agricultural work requires both skill and vocation, something not everyone possesses. This was confirmed by the participants. Although training was provided, not everyone is suited for this type of work, which is also highly vulnerable to changing weather patterns, drought, etc.

The opportunities for employment in a rural environment are growing, diversifying beyond agriculture and livestock farming. The Habita Tierra program found that the most common, stable employment is found in healthcare, hospitality, construction and services.

Adequate housing and a reliable vehicle were found to be two key factors in successful settlement.

The accompaniment provides to new inhabitants through the program was vitally important. Active listening to the challenges and difficulties these families faced, as well as their successes, served to reinforce their determination and efforts to adapt and integrate into their new environment. The results of the interviews and surveys show that it is vitally important for new inhabitants to have frequent and close contact with external entities to further successful integration.

## 4. Discussion: Selecting Elements for a Repopulation Model

With this analysis of different repopulation models, we have identified a number of key elements or factors in success repopulation which we hope will serve to develop an effective program to address the demographic challenge. We found that all of the analysed models and programs incorporate a series of intervention measures, clearly indicating that repopulation initiatives cannot depend on one or two isolated actions but must consist of a comprehensive, holist model addressing a number of fundamental and interrelated factors. Additionally, as shown in Figure 10 below, all models were person-centred, and we therefore refer to this type of system as a "Integral Humanistic Model". Figure 10 shows the aspects which repeat in each different model, indicating the extent to which these aspects are emphasised.

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| MODELS/ ELEMENTS | SSA | WWP | Empty Spain (España Vaciada) | MCR | Integral Humanistic Model (Habita Tierra) |
|---|---|---|---|---|---|
| **Employment** | Diversified (not only agriculture) | Adapted to the existing local resources | Principally agriculture and livestock farming | Adapted to the existing local resources | Diversified (not only agriculture) |
| **Participation and accompaniment of groups and individuals**. | Yes | Yes, throughout the project | Yes | Yes | Yes, with an accompaniment program designed especially for newly arrived families and local residents. |
| **Integration and welcoming of newcomers** | Yes, focus on welcome | Yes | Yes, focus on social cohesion | Yes | Yes, with special attention to interculturalism |
| **Environmental sustainability** | Yes | Yes | Yes | Yes | Yes |
| **Long-term planning** | Long-term results | Necessary | Not defined | Yes | Yes |
| **Public and/or private programs** | Private initiative with public support | Private initiative with public support | Private initiative but becoming a political platform | Public intervention | Private initiative with public support |

**Figure 10.** Comparative table of repeated elements in repopulation models.

From the above, six common elements can be identified as particularly important to each model:

1. Agriculture cannot be the only employment opportunity.
2. Participation and accompaniment throughout the process are essential to repopulation project, involving individuals, families and local groups.
3. The welcome and integration of newcomers must be planned, especially in the case of people of foreign origin.
4. Environmental sustainability and the preservation of biodiversity are essential components of all actions.
5. All projects must be planned over the long-term, providing time to observe results and evaluate the integration of newcomers.
6. It is essential that private initiatives work with public authorities and administrations.

## 5. Conclusions

From the foregoing analysis, a number of conclusions can be drawn:

Rural depopulation in Spain is a serious problem for rural communities which generally have lower incomes, greater risk of social exclusion, limited access to public services, greater need for public services due to the aging population and unequal and/or limited opportunities for women.

Depopulation in Spain is primarily due to the very low birth, experiencing negative natural population growth since 2015. Since then, population growth has been due entirely to immigration.

These problems have a negative impact on Spanish society as a whole, given that rural regions are the primary source of food, produced by a shrinking number of people; further, these regions contain the highest levels of biodiversity, an essential factor in the health of the planet.

Given the need to increase the rural population and address the challenges these regions face, we have looked to history for past models of repopulation in Spain. Beyond the strategic objectives of development or security, we found a number of shared characteristics, including the concern for promoting diverse economic activities, not only agriculture; the search for new colonists or settlers from other countries; investment in improving local infrastructure and access, providing public services and administration and improving production techniques and forms of wealth generation.

We selected and analysed some current repopulation models, identifying certain elements which appear to be the key to future successful rural development:

People are the heart of the problem and people are the heart of the solution. Simply put, the phenomenon analysed here is the falling number of people within an environment which is essential for the future of humanity: the rural environment.

Welcoming, listening, caring and accompanying people over time is a central element in the success of repopulation programs.

There are other key aspects, including the preservation of the natural environment (sustainability) and biodiversity, food production, social and recreational activity for the healthful enjoyment of nature.

Thus, the primary elements for a comprehensive model of repopulation are people, in the centre, and environmental sustainability.

Other key elements of successful repopulation efforts and the maintenance of rural population is associated with fertility, the birth of children, which is closely associated with the family as an institution and the need for the improvement of women's circumstances in the rural environment.

The problem of an aging population is closely associated with the previous point, the falling numbers of children and young people. Support for families, fertility and programs to attract young people are part of the solution. There is also the need to address the needs of the elderly in rural areas, including access to healthcare, accompaniment, etc.

Another fundamental aspect of current repopulation and rural development models is the diversification of the economy, developing alternatives to an exclusive dependence on agriculture. While agriculture and livestock farming are essential aspects of environmental sustainability and biodiversity and must remain part of the future of rural communities, they cannot be the sole economic activities and efforts must be made to diversify opportunities.

Immigrants are the only population group which is currently slowing or reversing the trend of depopulation and so must be considered as a key factor in any repopulation model. The integration of newcomers into local communities is a challenge which requires encounter and engagement, to be fostered by public entities through specific integration plans and programs which have proven effective in the past. The living together in community of people from different cultures based on mutual respect and shared values, always within the scope of the Spanish Constitution, should become a hallmark of future rural communities.

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