ANALYZING RURAL AREAS IN A POSITIVE WAY
Introducción: Local Action Groups, on square one to turn rural zones into intelligent territories

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LOCAL ACTION GROUPS, ON SQUARE ONE TO TURN RURAL ZONES INTO INTELLIGENT TERRITORIES

After analyzing, investigating, comparing measures, attending events, listening to media and even influencers... we have come to the conclusion that depopulation is a tendency, it is a social phenomenon; it has been very close to placing itself in a prominent position on the political agenda, but, so far, the conclusion is that it does not fit into generalist political perspectives. Proof of this has been the publication of the New Regulation of Common Provisions for regional and cohesion policy (2021-2027), which expressly does not address this capital problem that rural areas across Europe face with extreme urgency.

The problem of rural depopulation is one of the greatest scourges suffered by rural territories throughout Spain. Of the 8,125 villages that exist in our country, 4,955 have less than 1,000 inhabitants, according to the latest data published in the INE. That means that more than half of the rural municipalities are at risk of disappearing, a situation that is obviously untenable in the long term. Faced with this worrying situation, there are several voices that have been raised with the aim of finding solutions and trying to reverse that dramatic situation that lives in the rural environment, which ultimately represents 80% of the national territory.
The difficult situation in which the rural environment finds itself due to depopulation is becoming more and more relevant in designing the rural policies of the future, because it is a problem that dramatically affects the rural territories of Spain and from the rest of the EU. However, it is not enough: it must be high on the political agenda. When it is commented that rural development policies have not been effective against depopulation in rural areas, that they have had a dusting effect, that they have not translated into positive results in rural society... perhaps the difficulty and the double challenge of articulating the application of demographic and rural development policies in a homogeneous manner, which are very complex due to their structural difficulty, have not been taken into account. Maybe this lack of tangible results is due to interventions that are not adequate to the plurality of territories, to the non-linear situation of rural areas and that the real needs of citizens have too often gone into the background on the part of the Authorities.

Entities, Associations, Provincial Councils, Local Action Groups... have prepared reports, organized Congresses, participated in seminars, etc., with the aim of making this worrying situation more visible for the rural environment. From the Spanish Rural Development Network (REDR) we defend that we can not lose this momentum, and we continue insisting that rural depopulation in Spain must be considered permanently as a State problem and that the appropriate solutions are found so that this threat does not end up destroying the socioeconomic fabric of the rural environment. It is time to position yourself on such a hot topic, in vogue and on the political and social scene in recent months: the need to establish a public, vertebral, multidisciplinary and holistic policy.

We believe that, in order to mitigate depopulation (not to end it because it is impossible to eradicate a social trend so pronounced and extended over time), it is necessary to design and apply a multilevel policy and a multisectoral, multidisciplinary and multi-citizen application but, far from focusing only on that way - which is feasible, but depends on factors that we can not control-, we want to launch a disruptive, objective proposal that is closer to the reality of the 21st century.

### LETS OPTIMIZE OUR RESOURCES

By 2020, 70% of the world population will live in cities, and that is something that as Networks, Local Action Groups and rural citizens we will not be able to reverse. The rural environment has to deal with this growth and accept its consequences, without looking the other way, proposing alternatives to make our towns more attractive places where citizens can carry out their vital projects. The rural environment must emerge strengthened from this struggle: the sooner we understand that rural areas do not need to compete with urban areas, but know how to relate in a fairer way, how to learn from each other and live together in a sustainable way, better rural policies and investments will be planned.

We have the opportunity to reorient rural and urban society, depopulation requires a new way of thinking and represents a huge potential opportunity to rethink many of the paradigms that have surrounded rural areas throughout the past century. Being aware of the real situation and accepting it can help to reorient rural policies and investments to grow in a more ecological, sustainable and local way and allow rural territories to be open to innovation and modernization of governance and public services employing holistic, proactive and local strategies coherent with the reality of the 21st century.

This requires a planned strategy and an equitable and distributive management of funds. The instruments of public intervention in rural development and now demography (development programs, strategies, guidelines, measures... exist, but they suffer, in most cases, from disconnection, convergence and, in turn, of atomization. To date, there is no public rural policy that informs, that communicates these instruments and less if it is possible to complement them with the citizen contribution. Going further, there is no public policy that measures the impact (rural proofing) and the result of these instruments and, in some cases, if the result is positive does not guarantee its continuity, mainly due to the short legislative processes in the political calendar. These have been based on programmatic proposals with limited time frame addressed without asking or consulting citizens who suffer in their day to day the phenomenon of depopulation, desolation and the scourge of lack of services.

"We have the opportunity to reorient rural and urban society, depopulation requires a new way of thinking and represents a huge potential opportunity to rethink many of the paradigms that have surrounded rural areas throughout the past century."
People have much to gain by approaching the Smart Cities approach. If we have already seen that the trend towards population concentration in urban areas is irreversible, it is an equally incontestable fact that rural territories contribute multiple goods and intangibles to cities, which they need from rural areas and that we are both mutually dependent. This is the message we want to see in both rural and urban society for the coming years: if we match the conditions of life or equate them as much as possible; if we improve the quality of health, education, logistics services; if we shorten distances and times and promote communications; in short, if we make the quality of life of the inhabitants of rural areas equal to that of cities, we will be giving an opportunity to our rural territories. Let us transform our peoples socially and economically; let us direct protagonists to their citizens; let’s make human and environmental capital our main assets; let’s learn together and establish a joint path of improvement for all; let us co-create by the hand, share ideas, reflections, and above all technologies and digitalization of processes.

To put an end to this urban-rural dichotomy, let’s break this barrier and begin to empower our rural territories by equipping them with tools that erase that barrier with urban areas, so that at least citizens are the citizens who choose the rural option as a means of life without restrictions or conditions.

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1. Documentary / legislative and resource management analysis in the field of public services to rural areas at national and European level
THE EUROPEAN PROGRAMS, ACCESSIBLE FOR EVERYONE

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1. TOPICS OF THE EUROPEAN UNION

The European Union is in charge of very diverse policies to try to guarantee the well-being and the protection of the rights of the different groups and states that integrate it. European policies are grouped into 36 major themes:

- Climate action
- Customs
- Farming
- Extension
- Economic and monetary affairs
- Institutional matters
- Maritime Affairs and Fisheries
- Humanitarian Aid and Civil Protection
- EU citizenship
- Commerce
- Competition
- Consumers
- Culture
- Sport
- Human rights
- Development and cooperation
- Economy and digital society
- Education, Training and Youth
- Employment and social policy
- Company
- Energy
- Space
- Taxation
- Research and innovation
- Justice and Home Affairs
- Fight against fraud
- Environment
- Single market
- Multilingualism
- Foreign and security policy
- Regional policy
- Budget
- Health
- Audiovisual and media
- Food safety
- Transportation

2. FINANCING OF THE EUROPEAN UNION

In general, there are two types of programs, those of direct management, assigned and managed by the European Commission itself and which can be requested by any grouping (“partnership”) of public and private social agents. On the other hand, there are indirect management programs, which are requested by national or regional administrations to the European Commission, and then managed by them in their territories. The 28 European Commissioners are collectively responsible for ensuring that EU funds are spent appropriately. However, since most of the funds are administered in the beneficiary countries themselves, it is their governments that are responsible for annual controls and audits.

More than 76% of the EU budget is managed jointly with national and regional administrations through a system of “shared management” (or indirect management) and mainly through five major funds: the Structural and Investment Funds. These funds are oriented towards the implementation of the Europe 2020 Strategy, which is the agenda that establishes the growth objectives for all the countries of the Union. The Structural and Investment Funds are five and address different areas of growth:

- European Regional Development Fund (ERDF): regional and urban development
- European Social Fund (ESF): social inclusion and good governance
- Cohesion Fund (CF): economic convergence of less developed regions
- European Agricultural Fund for Rural Development (EAFRD)
- European Maritime and Fisheries Fund (EMFF)

Of the above, Spain is the beneficiary of all except the Cohesion Fund, which is aimed solely at member states with a Gross National Income below 90% of the EU average. The following graphs show the proportional allocation of resources to each fund in the European Union and in Spain:

In the 2014–2020 programming period, in addition, the possibility of combining funds through the Integrated Territorial Investments (ITI) has been introduced. This mechanism allows the elaboration of more complete intervention strategies concentrated in territories with specific characteristics and needs. In the field of rural development, it is especially useful to create urban-rural synergies and develop the concept of Smart Villages. However, it is still in an incipient phase and it is expected that in future programming periods the administrative process will be simplified and clarified to request and start it.

In addition, there are other funds that the EU manages directly and that are allocated in the form of:

- Grants for specific projects related to EU policies, which are generally granted after a “call for proposals” has been published. These grants are included in the various direct management programs of the EU (Erasmus+, Horizon 2020, etc.). Funding comes partly from the EU and partly from other sources.

- Contracts published by the European institutions for the acquisition of goods, services or works that they need to function: studies, training, conference organization, computer equipment, etc. The contracts are awarded through tender.
EU policies are structured in periods of seven years, for which specific and quantifiable objectives are established and different tools - funds and programs - are made available to member countries to achieve them. Currently, we are in the multi-year financial framework 2014-2020 and are already laying the foundations that will govern the 2021-2027 period.

### 3. PROGRAMS FINANCED WITHIN THE MULTI-YEAR FINANCIAL FRAMEWORK 2014-2020

The multiannual financial framework of the European Union for the period 2014-2014 revolves around five axes or headings: 1) Smart and inclusive growth: competitiveness for growth and employment; 1bl Intelligent and inclusive growth: economic, social and territorial cohesion; 2) Sustainable growth: natural resources; 3) Security and citizenship; and 4) Global Europe. In addition, a budget line is included to cover the administrative expenses derived from the operation of the European institutions and another line of compensation, to avoid that the new member states have to contribute to the European funds during the first year.

The European Commission offers a wide variety of financing instruments that could contribute to improving the quality of life and rural economies. Although in Spain rural development strategies have relied almost exclusively on indirect management programs, direct management programs also have great potential to revitalize rural areas.

The direct and indirect management programs offered by the EU in the current programming period are listed below:

#### 1. Smart and inclusive growth: competitiveness for growth and employment

- **Connecting Europe Facility (CEF)**
  - Budget 2014-2020: c 21,918,750,000
  - Direct management program.
  - It offers support to transnational projects in infrastructures in three branches: transport, energy and telecommunications. Among the subprograms that are included within CEF, include WiFi4EU (2017-2019), which aims to ensure free Wi-Fi connection for Europeans. The WiFi4EU system will be open to public sector organizations: municipalities, libraries, health centers, etc. The program finances the material and installation costs (internet access points), while the beneficiary must pay for the connection (internet subscription) and the maintenance of the material for at least three years. Local authorities are encouraged to create and promote their own digital services in areas such as administration, health and electronic tourism, through a specific application. The WiFi4EU system will be granted through simple and non-bureaucratic procedures such as online applications, bonus payments and light control requirements.

- **Competitiveness of Enterprises and SMEs (COSME)**
  - Budget 2014-2020: c 2,298,240,000
  - Direct management program
  - **Beneficiaries**: Local and regional authorities, corporations, federations, state administrations, chambers of commerce, agencies, SMEs. COSME is the EU Program for the Competitiveness of Enterprises and SMEs, which helps entrepreneurs and small and medium-sized enterprises to start operating, access financing and internationalize, as well as supporting the authorities to improve the business environment and facilitate economic growth in the Union. It supposes the continuity of the Program for the Business Initiative and Innovation developed in 2007-2013, except in matters of innovation, which is now included in the Horizon 2020 Program. The objectives of the Program are:
    - Improve the access of SMEs to financing in the form of capital and debt through financial intermediaries.
    - Improve the access of companies to markets. The Europa Europa Network will provide support services to facilitate the expansion of companies within and outside the EU and will finance international industrial cooperation to reduce the differences between the EU and its main trading partners.
    - Improve the general conditions for the competitiveness and sustainability of companies, particularly SMEs, included in the tourism sector.
    - Promote entrepreneurship, developing entrepreneurial skills and attitudes, especially among new entrepreneurs, young people and women.

Apart from the general announcements published by the General Directorate of Companies for intermediary organizations, there are also a number of financing methods for SMEs, such as:

- **Risk capital fund / Equity Facility for Growth**: A part of the COSME budget will be invested in funds that offer risk capital to SMEs in the expansion phase with the greatest growth potential, and in particular to those that carry out cross-border activities.
- **Loan Guarantee Facility**: The COSME Program will work in the form of financing guarantees to help banks grant more loans and financial leases to SMEs.

In addition, outside of COSME there is the “SME Instrument” under the Horizon 2020 Program, which supports SMEs that develop highly innovative projects of high European interest.
• **Employment and Social Innovation Program (EaSI)**
  
  Budget 2014-2020: €91,470,000
  
  Direct management program.

  Beneficiaries: Depends on the axis in which we find ourselves, however, in general terms, national, regional and local authorities, employment services, social partner organizations and other interested agents may access funding.

  Support to the member states in their efforts to design and implement social and labor reforms at European, national, regional and local levels, coordinating the different measures and analyzing and sharing good practices. Special attention will be given to vulnerable groups, such as young people, equality between men and women; fight discrimination; promote sustainable and quality employment; guarantee social protection; and combat long-term unemployment, poverty and social exclusion.

  Its purpose is to contribute to the implementation of the Europe 2020 Strategy by providing financial support for the Union’s objectives in terms of promoting a high level of quality and sustainable employment, ensuring adequate and dignified social protection, the fight against social exclusion and poverty, and the improvement of working conditions. Its general objectives are:

  - Strengthen adherence to EU objectives and the coordination of actions at national and European level in the fields of employment, social affairs and inclusion.
  - Support the development of social protection systems and adequate labor market policies through the promotion of good governance, mutual learning and social innovation.
  - Modernize EU legislation and ensure its effective implementation.
  - Promote geographic mobility and enhance employment opportunities through the development of an open labor market.
  - Increase the availability and accessibility of microfinance for vulnerable groups and micro-enterprises, and increase access to financing for social enterprises.

  In addition, the Program will be composed of the following three complementary axes:

  - The "Progress" axis, aimed at improving the Union’s policies on employment, social protection and inclusion and working conditions.
  - The "EURES" axis, aimed at strengthening the EURES labor mobility network.
  - The "Microfinance and social entrepreneurship" axis, aimed at increasing the availability of individual microcredits to create or develop small businesses.

• **Erasmus +**
  
  Budget 2014-2020: €14,774,520,000
  
  Direct management program.

  **Beneficiaries:** The target population of the program consists mainly of people active in the fields of education, training, youth and sport (students, scholarship holders, apprentices, students, youth, volunteers, teachers, trainers, professionals of organizations, etc.). However, the program reaches these people through organizations, institutions, universities, education and training centers and groups that articulate such activities.

  Erasmus + aims to improve training and employability. The program will increase the quality and relevance of European education systems, financing the professional development of teaching staff, as well as young workers and cooperation between universities, colleges, schools, companies and NGOs.

  Erasmus + is the mobility program of the European Union that encompasses all the subprograms that existed in the previous period (Erasmus, Leonardo da Vinci, Comenius, Grundtvig, Youth in Action, Erasmus Mundus, Alfa III, Tempus and EduLink). With Erasmus + we intend to create a great program that manages all mobility modalities in Europe, providing European citizens with the possibility of studying, teaching, doing internships or volunteering in European countries. The specific objectives of Erasmus + are, among others:

  - Help young people to acquire skills through study and training abroad.
  - Improve the quality of education in the EU and beyond.
  - Modernize education and vocational training systems.
  - Promote the participation of young people in society.
  - Support European grassroots sport.

To fulfill its objectives, the Erasmus + program carries out the following actions:

  - **Key action 1:** Mobility of people: Mobility of students and staff, joint master’s degrees, guarantee of loans for master students, etc.
  - **Key action 2:** Cooperation for innovation and exchange of good practices: Transnational partnerships, alliances between institutions, capacity development projects, ICT support platforms, etc.
  - **Key action 3:** Support for policy reform: Prospective studies, cooperation with international organizations, support for European policy instruments, etc.
  - Increase the availability and accessibility of microfinance for vulnerable groups and micro-enterprises, and increase access to financing for social enterprises.
Horizon 2020 (H2020) was born to support development, demonstration and innovation of clear initiatives and projects of research, technological development of the period 2014-2020, as a continuation of the VII Framework Program for Research and Development of the previous period. The actions it finances are initiatives and projects of research, technological development, demonstration and innovation of clear European added value. H2020 was born to support researchers and experts from different countries working on specific topics. Although it does not fund research as such, COST helps fund the networking of nationally funded activities by supporting meetings, conferences, short-term scientific exchanges and advocacy activities. Another subprogramme is Eurostars 2 to support the development of market-oriented transnational projects in the field of research and development.

In the 2014-2020 period, Spain has been the fourth country that has received the most funds from this program, amounting to €2,816,000 among all the financed projects. Among the Spanish beneficiaries, companies are the organizations that contribute most to the return, collecting 38.3% of the funding obtained by our country. The rest of the Spanish subsidy is distributed among universities (20.1%), public research centers (11.6%), research associations (10.6%), technology centers (10%), Public Administrations (5%, 5%), associations (3.9%) and European organizations (0.1%). Regarding the distribution of projects by autonomous communities, there is a significant imbalance by autonomous communities according to data from the Center for Industrial Technological Development, public entity that manages the H2020 program in Spain, on the distribution of the budget by regions:

- Excellent science, to reinforce the scientific excellence of the Union worldwide.
- Industrial leadership, to accelerate the development of technologies, mainly: ICT, nanotechnology, advanced materials, biotechnology, advanced manufacturing and transformation and space technology; to help European innovative SMEs become leading companies in the world and to facilitate risk financing in research and innovation activities on their arrival in the market.
- Social challenges, to provide a direct response to the political priorities and challenges identified in the Europe 2020 strategy, such as security, energy, transport, climate change and effective use of resources, health and aging, the production methods respectful of the environment and the management of the territory.

One of the subprograms included in H2020 is European Cooperation in the Field of Scientific and Technical Research (COST), which brings together researchers and experts from different countries working on specific topics. Although it does not fund research as such, COST helps fund the networking of nationally funded activities by supporting meetings, conferences, short-term scientific exchanges and advocacy activities. Another subprogramme is Eurostars 2 to support SMEs in the development of market-oriented transnational projects in the field of research and development.

It is designed to facilitate efficient and effective electronic interaction between European public administrations and citizens. It also has three pillars:

- Investment Plan for Europe “Juncker Plan”
- Interoperability Solutions and common frameworks for European public administrations, businesses and citizens (ISA2)
- Copernicus

The plan has three objectives: eliminate obstacles to investment, give visibility and offer technical assistance to investment projects and make smarter use of financial resources. It also has three pillars:

- European Fund for Strategic Investments: offers an EU guarantee to mobilize private investment, and in which the Commission works together with its strategic partner, the European Investment Bank (EIB).
- European Investment Advisory Center and the European Investment Projects Portal: provide technical assistance and greater visibility to investment opportunities for investment projects to become a reality, and where the Center is a joint venture with the Investment Group (BEI).
- Improvement of the business environment by eliminating regulatory obstacles (both national and European) to investment.

Copernicus

Budget: 4.294.480.000
Copernicus is a European System to monitor the Earth on a regular basis: the atmosphere, the oceans and the continental surfaces, offering reliable and validated information and contributing to the decision making in matters that go from the environment to security.
• **Customs, tariffs and fight against fraud**
  Budget: € 908,010,000
  Within this line, four sub-programs are included: Customs 2020, aimed at supporting the operation and modernization of the EU Customs Union; Fiscalis 2020 to support EU tax systems, and especially combat tax fraud, tax evasion and aggressive tax policies; Pericles 2020 to combat counterfeiting in Europe and the world; and the Hercule III program dedicated to the fight against fraud, corruption and all those activities that affect the financial interests of the EU.

• **European Solidarity Corps (ESC)**
  Budget: € 341,500,000
  This instrument seeks to promote cooperation and progressive economic integration between the EU and its neighboring countries.

• **Euratom Research and Training Program**
  Budget: € 1,603,300,000
  This program, in operation between 2016 and 2018, complements the Horizon 2020 program in the field of research and training in the field of nuclear energy. It is mainly aimed at improving security measures and protection against radiation and contributing to the progressive decarbonisation of energy systems in the long term.

• **Galileo and EGNOS**
  Budget: € 7,071,730,000
  The Galileo program is the European initiative for the creation of a state-of-the-art global satellite navigation system, offering high-precision localization services for civilian use. For its part, EGNOS (European Geostationary Navigation Overlay Service) is a satellite navigation service that is already operational and could be enriched in the future thanks to the technology developed under the Galileo program.

• **ITER**
  Budget: € 2,985,620,000
  It is a collaborative international project (EU, USA, China, Japan, India, Russia and South Korea) to demonstrate the potential of nuclear fusion as a source of energy.

• **Assistance program for the dismantling of nuclear facilities**
  Budget: € 967,260,000
  Assistance in the closure and subsequent management of some nuclear power plants in Bulgaria, Lithuania and Slovakia.

**1b. Smart and inclusive growth: Economic, social and territorial cohesion**

**Programs financed by the European Regional Development Fund (ERDF / ERDF)**

**ERDF Total Budget 2014-2020:** € 199,044,407,585 (including co-financing of the Member States is added).

**ESF Budget Spain:** € 29,108,239,710

**Regional ERDF Operational Programs**
Indirect management programs requested and managed by regional administrations. There is a program by Autonomous Community and two more for Ceuta and Melilla

• **Operational Technical Assistance Program**
  Indirect management program requested and managed by the member states.
  **Budget 2014-2020:** € 49,366,393 (Spain)

• **Youth Employment Initiative - YEI**
  **2014-2020 Budget:** € 10,368,478,026 (including co-financing from the member states), of which € 2,963,614,592 correspond to Spain, amounting to € 4,198,172,298 with the contribution of the ESF. Indirect management program requested and managed by the member states.
  It gives support to young people who are not working, studying, or training in those European countries with a youth unemployment rate above 25% (in 2012).
  The initiative focuses on integrating these young people into the labor market, especially through the Youth Guarantee plan. From the point of view of financing, it is peculiar because it is partly financed through the ESF and also has its own fund.

• **European Globalization Adjustment Fund (EGF)**
  Maximum annual budget between 2014 and 2020: € 150,000,000
  Direct management program.
  This fund is created to support people who have lost their jobs as a result of major changes on a global scale, for example, when a large company closes or moves its production outside the EU, or because of the economic and financial crisis.

**Multi-regional ERDF programs**

• **SME Initiative**
  Indirect management program requested and managed by the member states.
  **Budget 2014-2020:** € 800,036,600 (Spain)

• **Sustainable Development Program**
  Indirect management program requested and managed by the member states.
  **Budget 2014-2020:** € 14,287,807,989 (Spain)
• European Territorial Cooperation Programs - INTERREG

• ESPON
  Budget 2014-2020: €48,678,851
  The objective of the ESPON 2020 cooperation program is to support the strengthening of the effectiveness of the EU’s cohesion policy and other sectoral programs and policies within the framework of the European Structural and Investment Funds (ESIF), as well as the policies of national and regional territorial development, through the production, dissemination and promotion of territorial data covering the entire territory of the 28 Member States, in addition to the four associated States of Iceland, Liechtenstein, Norway and Switzerland.

• Interact
  Budget 2014-2020: €46,344,229
  The program seeks to reinforce the effectiveness of cohesion policies by promoting the exchange of experiences, the transfer of good practices and the dissemination of innovative approaches between territorial cooperation programs and partners.

• Interreg Europe
  Budget 2014-2020: €426,309,618
  The objective of the program is to improve the cohesion policy through the exchange of experiences, the transfer of good practices and joint initiatives.

• URBACT III
  Budget 2014-2020: €96,324,550
  Exchange and learning program to promote sustainable urban development.

• Interreg V-A - Spain-Portugal - POCTEP
  Budget 2014-2020: €484,250,377
  This cooperation program addresses the challenges related to the implementation of the Europe 2020 strategy in the border areas between Spain and Portugal.

• Interreg V-A - Spain-Portugal (Madeira-Açores-Canarias) - MA
  Budget 2014-2020: €148,831,183
  This program is aimed at implementing the Europe 2020 strategy in these three adjoining archipelagos.

• Interreg V-B - Atlantic Area
  Budget 2014-2020: €185,366,492
  The program promotes cooperation between 37 Atlantic regions of 5 member states: France, Spain, Portugal, Ireland and the United Kingdom. It focuses on innovation and the commitment to create an efficient economy and a sustainable and integrated approach to territorial development.

• Interreg V-B - Mediterranean
  Budget 2014-2020: €264,898,514
  The program seeks to contribute to growth in the Mediterranean area, promoting innovative concepts and practices (technologies, governance, services...). It also promotes the sustainable use of natural and cultural resources and support for social integration, using an integrated and based approach in territorial cooperation.

• Interreg V-B - South West Europe
  Budget 2014-2020: €141,879,979
  This cooperation program addresses the cross-border challenges related to the implementation of Strategy 2020 in the Pyrenees area.

Programs financed by the Cohesion Fund Total Budget FC:
€75,427,219,276

The Cohesion Fund aims to reduce economic deficits, as well as to provide stability to the economy of Member States whose GDP per capita is below 90% of the EU average. Spain, therefore, can not benefit from this funding source during the 2014-2020 programming period.

2. Sustainable growth: natural resources.

• Life program
  2014-2020 Budget: €3,456,640,000
  Direct management program.
  This program seeks to improve the implementation of the EU’s environmental and climate policy. In particular, it will contribute to creating an economy that is resource efficient, low in emissions and climatically resilient, for the protection and improvement of the environment and the preservation of biodiversity.

• Common Agricultural Policy (CAP)
  Budget 2014-2020: €312,735,000,000 (Pillar I, financed by the EAFR) + €99,343,257,865 (Pillar II, financed by the EAFRD through the Rural Development Programs)
  The CAP aims to ensure a decent quality of life for farmers and ranchers and offer consumers a stable and safe food supply at affordable prices. This program consists of two pillars: the first is to contribute to the income of agricultural workers through direct payments and market support measures, while the second is aimed at improving the competitiveness of the agricultural and forestry sector, protecting the environment and the natural environment, improve the quality of life, diversify rural economies and support rural development from a local approach. The second pillar is financed through the European Agricultural Fund for Rural Development (EAFRD) and is organized through the national and regional Rural Development Programs. The budget foreseen for the total of the RDPs in Spain is €12,311,400,486 (counting with the co-financing of the state and regional administrations).

• Common Fisheries Policy (CFP)
  Budget 2014-2020: €7,988,590,111, of which Spain is expected to receive €1,558,280,753
  It consists of a series of rules and measures to manage European fishing fleets and to conserve fish stocks. The actions included here are financed by the European Maritime and Fisheries Fund through the Maritime and Fisheries Programs of each Member State.
3. Security and citizenship

- **Third Health Programme**
  Budget 2014-2020: €449,390,000
  Direct management program.
  It seeks to respond to the economic and demographic challenges faced by the health systems of member countries and improve the general health status of the population. The priorities during the 2014-2020 programming period are: a) employment, growth and investment (health as an essential part to maintain and improve productivity); b) internal market (pharmacies, medical devices, cross-border health guidelines and evaluation of health technologies); c) digital single market and e-health; d) justice and fundamental rights (fight against inequalities in access to health); e) migration policies; security (preparation for and management of cross-border threats to health).

- **Creative Europe**
  Budget 2014-2020: €1,462,720,000
  Direct management program.
  Support for cinema and the cultural and creative sector in Europe. Artists, cultural professionals and associations in the sectors of performing arts, fine arts, publishing, film, television, music, interdisciplinary arts, heritage and the videogame industry can benefit from it, allowing them to operate throughout Europe, to reach new audiences and develop necessary skills for the digital age. In addition, by spreading the work of the authors in other countries, the program helps to safeguard and promote cultural and linguistic diversity in Europe. It consists of two sub-programs -Culture and Media (audiovisual sector)- and a transversal program (Cross-sector).

- **Europe for Citizens**
  Budget 2014-2020: €185,470,000
  Direct management program.
  Support for actions so that citizens can better understand the EU, its history and the values it promotes. It also seeks to involve people in civic and democratic activities through debates and discussions on issues related to the EU.

- **Rights, Equality and Citizenship**
  Budget 2014-2020: €439,470,000
  Direct management program.
  It will help to make effective the rights and freedoms of the people. Among others, it will promote the rights of children and the principles of non-discrimination (racial or ethnic origin, religion or belief, disability, age or sexual orientation) and gender equality (including projects to combat violence against women and children).

- **Operational Program of the European Aid Fund for the Most Disadvantaged - FEAD**
  Budget 2014-2020: €662,835,588 [Spain]
  The Fund will finance projects that aim to strengthen and develop all aspects of the common European asylum system, including its external dimension, also support legal migration to Member States in accordance with their economic and social needs, such as the needs of their labor markets, while safeguarding the integrity of the immigration systems of the Member States, equally, promoting the effective integration of third-country nationals, as well as the development of equitable and effective return strategies in the Member States contribute to the fight against illegal immigration, emphasizing the sustainability of return and effective readmission in countries of origin and transit, and finally, increasing solidarity and sharing of responsibilities between Member States, in particular towards most affected by migration and asylum flows, also average nte practical cooperation.

- **Civil Protection Mechanism**
  2014-2020 Budget: €223,780,000
  This program coordinates the EU response to natural or human disasters (such as epidemics) inside and outside the Union.

- **Consumer program**
  Budget 2014-2020: €188,830,000
  Types of eligible actions:
  This program finances the following actions: scientific advice and analysis of risks related to consumer health and safety in the field of non-food products and services; creation of a documentary base for the development of policies that affect consumers; the preparation by the Commission of legislation for the protection of consumers, monitoring of transposition by the Member States and subsequent evaluation of their impact; and preparation of joint measures with public bodies or non-profit entities.

- **Food safety policy**
  2014-2020 Budget: €1,891,940,000
  The budget allocated to this area, is aimed mainly at the eradication of animal diseases and the EU Emergency Veterinary Fund, however, it also funds actions aimed at the promotion of traditional and quality foods, reducing pollution of food, precaution and scientific advice, etc.

- **Internal Security Fund**
  Internal Security Fund
  Budget 2014-2020: €3,764,230,000
  This funding mechanism supports the implementation of the Internal Security Strategy and the EU approach to cooperation in law enforcement, including the management of the external borders of the Union.

- **Justice Program**
  Budget 2014-2020: €377,600,000
  The general objective of this program is to contribute to the creation of a European area of justice through the promotion of judicial cooperation in civil and criminal matters.
4. Global Europe

- **Common Foreign and Security Policy**
  Budget: € 2,338,720,000
  The role of the EU’s foreign policy is to preserve peace and strengthen international security, promote international cooperation and develop and consolidate democracy, the rule of law and respect for human rights.

- **Development Cooperation Instrument**
  Budget 2014-2020: € 19,661,645,000
  This program focuses on fighting poverty in developing countries. It also aims to promote sustainable economic, social and environmental development, as well as democracy, the rule of law, good governance and respect for human rights.

- **EU Aid Volunteers**
  EU Aid Volunteers
  Budget 2014-2020: € 147,940,000
  This European program offers practical training for volunteers and ensures their assignment to humanitarian aid operations financed by the EU around the world.

- **European Center for the Coordination of Emergency Response and Civil Protection Operations of the EU**
  Budget 2014-2020: € 144,650,000

- **European Instrument for Democracy and Human Rights**
  Budget 2014-2020: € 1,332,750,000
  This program is designed to promote democracy and human rights in countries outside the European Union.

- **European Neighborhood Instrument Budget 2014-2020**
  This program seeks to promote better political cooperation and progressive economic integration between the EU and neighboring countries.

- **Guarantee fund for External actions**
  Budget 2014-2020: € 1,193,070,000
  This fund covers loans and guarantees granted to countries outside the EU or to projects developed in them.

- **Humanitarian Assistance Program**
  Budget 2014-2020: € 147,940,000

- **Instrument for Nuclear Safety Cooperation**
  Budget 2014-2020: € 225,320,000
  This program funds measures to achieve a higher level of nuclear safety, radiation protection and more effective and efficient security measures in countries outside the EU.

- **Instrument for Pre-accession Assistance Budget 2014-2020**
  Budget 2014-2020: € 11,698,670,000
  This program offers support for the growth of the aspiring countries to join the European Union.

- **EU Instrument contributing to stability and peace**
  Budget 2014-2020: € 2,338,720,000
  This is one of the key instruments of external assistance that allows the EU to take the initiative to help prevent and respond to crises around the world.

- **Macro-financial assistance**
  Budget 2014-2020: € 564,560,000
  It is an exceptional instrument for responding to crisis situations in the EU. It offers loans and aid to neighboring countries that face serious budgetary difficulties and, generally, in the short term.

- **Partnership Instrument (PI)**
  Budget 2014-2020: € 954,760,000
  The overall objective of this program is to promote EU interests by supporting the external dimension of domestic policies (for instance, competitiveness, research and innovation, migration) and to address major global challenges (such as energy security, environment and climate change).
3.2. PROGRAMS FINANCED WITHIN THE MULTI-YEAR FINANCIAL FRAMEWORK 2014-2020

- Research and development program Assisted and active daily life - AAL

This funding program (2014-2020) aims to improve the living conditions of older people and create international industrial opportunities in the field of information and communications technology. Funds transnational projects with a minimum of three countries involved, involving SMEs, researchers and user organizations (elderly).

- Eurodyssée program for exchange between young workers

Created in 1985 by the Assembly of European Regions, the Eurodyssée program allows for exchanges between young workers in European regions participating in it, which enable them to benefit from language training and an internship in a company foreign in Spain, Catalonia and the Valencian Community participate.

- University Research Initiative of the European Investment Bank

The European Investment Bank has decided to channel most of its institutional relations with universities through an EIB-Universities Research Initiative, offering scholarships (EIBURS and STAREBEI) students and teachers to work research area of applied economics in the European framework.

- Subsidies from the Secretariat of State for the European Union “Talk of Europe”

Annual subsidies from the Secretariat of State for the European Union for the holding of congresses, seminars, conferences and other activities of a similar nature. The purpose of these grants is the dissemination and expansion of information on issues related to formulation and execution of Spanish foreign policy in the field of the European Union.

- Common Enterprise for Bioindustries (2014-2024)

It has as a goal to create a sustainable carbon economy that makes more efficient use of resources and increases economic growth and employment, particularly in rural areas, through the development of sustainable and competitive bioindustries in Europe, based on advanced biorefineries that obtain the biomass they need sustainably.

- ECSEL Joint Undertaking [components and electronic systems for a European leadership] (2014-2020)

Its objectives are, among others, to contribute to the development of a solid and competitive electronic components and systems industry worldwide in the EU. It has its own legal personality and headquarters in Brussels.


Its objective is to place Europe at the forefront of the technologies of fuel cells and hydrogen and to allow the commercial advancement of these technologies. The FCH Joint Undertaking will be a community body and will have legal personality.


Support for collaborative research to improve the whole process of developing new medicines and make it more efficient, accelerating patients’ access to better and safer medicines. Its function is none other than to promote the development of medicines, facilitating open collaboration in research.

- European Metrology Program for Innovation and Research (EMPIR) (2014-2020)

The objective of the European Metrology Program is to provide suitable metrology solutions, integrated and adjusted to their purpose, which serve as support for innovation and industrial competitiveness, as well as measurement technologies that address social challenges such as health, environment and energy, including support for the development and implementation of policies and the creation of an integrated European metrology research system, with a critical mass and active engagement at regional, national, European and international levels.

- Community action European Capital of Culture

This program seeks to protect and promote the diversity of cultures in Europe and to highlight the common characteristics they share, as well as to intensify the feeling of citizens belonging to a common cultural space and to encourage the contribution of culture to long-term development of the cities, according to their respective strategies and priorities. For this, each year two cultural capitals of Europe are chosen in which different activities will be developed.
3.3. MAIN NEW DEVELOPMENTS INTRODUCED IN THE PROGRAMMING PERIOD 2021-2027

For the next EU funding period (2021-2027) the European Commission wants to simplify and standardize the procedures for requesting and obtaining European funding. To do this, it proposes to reduce the number of programs from 58 to 37, advocating the integration of programs and funds. In addition, in an attempt to improve the efficiency of European investments, the Commission has proposed a reduction of the budget for the Common Agricultural Policy and the Cohesion Policy of around 5%. These policies will be modernized to ensure that the same areas of action are covered and even address new needs.

On the other hand, the Commission proposes to continue reinforcing the social dimension of the Union with a renewed European Social Fund, the "European Social Plus Fund" (ESF), and a reinforced and more effective European Globalization Adjustment Fund (EGF); specifically, the allocation of the European Social Fund Plus for this period will be €101,200,000,000, and that of the Globalization Adjustment Fund of €1,400,000,000. On the other hand, the Justice, Rights and Values Fund will have a budget of €947 million over seven years, the budget of the Erasmus + program will amount to €30,000,000,000 and the funding of Creative Europe will also be increased to €1,850,000,000.

In addition, for the next budget 2021-2027, the Commission proposes to create the InvestEU Program, with the aim of grouping the financing of the EU budget in the form of loans and guarantees in the same structure. The InvestEU Program will group the multitude of financial programs currently available and expand the model of the Investment Plan for Europe, the "Juncker Plan". This tool will support four areas of action: sustainable infrastructures; research, innovation and digitalization; small and medium businesses; and social investments and qualifications. In addition, InvestEU will be flexible -it will have the capacity to react to market changes and the evolution of strategic priorities over time and will be endowed with a unique and coherent governance structure- a single fund will integrate the numerous instruments existing financial systems at EU level. Member States will be able to transfer part of the funds allocated to them under the cohesion policy to InvestEU’s budget guarantee. The funds transferred to the Fund will enjoy the Union guarantee and its high credit rating, which will increase the effectiveness of national and regional investments.

With regard to the development of rural areas, there will be three significant developments in the next programming period:

- **Common Agricultural Policy**
  The next PAC is based around the idea of achieving an intelligent, resilient and competitive agricultural sector. With a budget of 365,000 million euros, the proposal seeks to modernize and simplify the CAP introducing four major changes in the period 2021-2027:
  - **New way of working:** to make budget administration more flexible, Member States will have the option of transferring, within their CAP allocation, up to 15% of direct payments to rural development, and vice versa.
  - **Fairer treatment:** priority will be given to supporting small and medium-sized farms and helping young farmers. In addition, maximum direct payments to farmers will be limited.
  - **Environment and climate action:** higher ambitions will be set in this area, establishing cross-cutting minimums for the different measures of the CAP that guarantee respect for the environment. On the other hand, in addition to the possibility of transferring 15% between pillars, member states may also transfer an additional 15% from pillar I to pillar II for spending on climate and environmental measures (without national co-financing).
  - **Knowledge and innovation:** 10,000 million euros will be reserved from the Horizon Europa program for research and innovation projects in food, agriculture, rural development and the bioeconomy. On the other hand, we want to accelerate the process of digitalization of rural life, for example by expanding access to broadband in rural regions, thus improving the quality of life and competitiveness in these areas. Finally, the use by the Member States of big data and new technologies for control and monitoring purposes will be encouraged, thus reducing on-the-spot checks.
A new generation of European partnerships and more collaboration with other EU programs: this program will streamline the number of partnerships that the EU programs or finances together with partners such as industry, civil society and funding agencies with a view to increasing their effectiveness and impact. In addition, Horizon Europe will promote effective links with other future EU programs such as, for example, cohesion policy.

The Joint Research Center (JRC), the scientific and technical service of the Commission, will continue to make its contribution, through scientific advice, technical support and specific research.

**Erasmus+ 2021-2027**

With the proposal for the next Erasmus+ program, which will have twice the budget than in the current period, it is intended to promote synergies between different programs and simplify administrative procedures in the fields of education, culture and the media, youth and solidarity, employment and social inclusion, research and innovation, industry and business, agriculture and rural development, paying special attention to young farmers, cohesion, regional policy and cooperation and international development.
Rural Development Programs (RDPs) can contribute to the creation and maintenance of smart villages, since they offer a versatile toolbox, backed by substantial funds that can finance, enable and extend innovation in the field of rural services in All Europe.

This chapter explores how national and regional Managing Authorities (AGs) are using RDPs to generate a multiplier effect on other European, national and private funds, and to support smart rural development in fields ranging from renewable energy to broadband or mobility. In the future, these initiatives can be reinforced by political measures such as rural proofing.

When analyzing smart villages, this edition of EU Rural Review is limited to the dimension of social and digital innovation in rural services. To learn about economic and business initiatives, see previous editions of this publication.

- SEEDS FOR LOCAL INNOVATION
- SMART VILLAGES AND THE PDR TOOLS
- ONE + ONE = THREE
SEEDS FOR LOCAL INNOVATION

Smart villages are about people. They deal with rural citizens, finding practical solutions to the challenges they face, but also and importantly, discovering new opportunities to transform the rural environment. Therefore, the smart villages are the communities that are shaping the initiative and the PDRs can play a decisive role in making this change possible.

A characteristic that defines the European PDRs is that they are based on the needs of the rural population and the millions of small businesses, municipalities and social organizations that make up the rural social fabric.

When it comes to supporting social and digital innovation in rural services, there are three particularly relevant measures: Measure 7 (M7) for basic services and population renewal in rural areas; M19: support for local LEADER / CLLD development; and M16: Cooperation.

M6: Development of agricultural and business farms (and specifically sub-measures M6.2: aid for the creation of companies for non-agricultural activities, and M6.4: support for investments in creation and development of non-agricultural activities) can be used to help the development of rural services businesses. (1)

Together, the first three measures have a total budget of 24 billion euros (2).

SMART VILLAGES AND THE PDR TOOLS

The RDP measures can be used individually to make improvements in rural infrastructure, buildings, business and human capital related to rural services. However, the added value of the measures emerges when they are combined strategically in order to promote smart village initiatives for change, for example, from the initial idea until it is reproduced on a large scale.

![Figure 1. PDR support for social and digital innovation](source: SFC data, April 2018)

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Bottom-up planning and community involvement

For example, LEADER Local Action Groups (LAGs) often play a vital role in the initial phases of bringing local communities together, motivating them and helping them to plan and prioritize later phases. Measure 7.1: “Support for the preparation and updating of plans for the development

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(1) The total public expenditure planned for the M6 was 10.6 trillion euros. However, slightly more than half of these investments are directed to young farmers and small farms, therefore that part has not been included in Figure 1.

(2) All the graphics that refer to the expense are expressed in terms of total public expenditure unless otherwise specified.

(3) This is not an exhaustive list. It refers to the main measures that can be specifically targeted at rural services. Other measures - such as M4: Investments in physical assets - are vital to boost innovation more generally in the food and agriculture sector. The M1 (Transfer of knowledge and information activities) and M2 (Advisory services, management and replacement of agricultural holdings) can also serve as support for the development of SMEs in rural areas.
of municipalities and towns in rural areas, as well as their basic services” can be used effectively to support development plans for towns and municipalities. Both Austria and Finland have shown how this sub-measure can improve the effectiveness of subsequent investments.

**Animation and technical support**

To be successful, innovation usually follows a few steps. There is an initial trigger - often a problem or crisis - that leads to devise a solution and generates enthusiasm. However, the idea usually requires support from various sources, as well as technical and business advice to develop a sustainable activity. Both the LEADER measure (M19) and the Cooperation measure (M16) can be used to adapt this type of aid to the needs of the inhabitants.

**Flexible financing for innovative projects**

Innovation carries a risk and a large proportion of innovative projects fail. But both public and private financing usually take time to arrive and do it in a single payment. This can demoralize the local population or encourage them to invest more at certain times. However, several EU member states have used the M7, M19 and M6 to launch small-scale pilot projects that, if successful, can attract larger investments. In these cases, several financial instruments can be used to make use of private capital.

**Coordination and integration with other policies and funds**

Successful pilot projects and good practices should be broadened and made known following a sustainable business model. There are many examples of the use of RDPs to attract European, national and private funding (including crowdfunding). If smart villages are going to sprout and grow in Europe, this is precisely the area in which more attention needs to be paid.

### Key measures of the PDRs

#### LEADER/CLLD(M19)

LEADER has a budget of 9.8 trillion euros of public spending and represents 6% of the total expenditure foreseen for the RDPs (4). In the 2014-2020 period, it is estimated that there are 2,562 LAGs in the EU. In four countries - France, Germany, Poland and Spain - the geographical scope of LEADER is important, with more than 200 LAGs per member state. These groups can be of inestimable value when it comes to initiating, informing or contributing to the growth of smart villages.

The LEADER measure is the most versatile source of funding for smart villages: the Local Development Strategies (EDLs) developed by LAGs often include smart initiatives that cover several fields of intervention, such as energy, mobility, care, inequalities territorial or climate action. When properly managed, LEADER funding can be used to offer integrated support itineraries to help project promoters shape and launch their projects, as shown in Figure 2.

The individual budget of the LAGs varies substantially among the EU member countries. They oscillate between less than 1 million euros for the whole period, up to more than 9 million euros (in Greece or Ireland) or 15 million euros in Saxony (Germany), where approximately 40% of the PDR is implemented through LEADER (see Figure 3).

#### FROM LEADER TO THE CLLD

In the 2014-2020 programming period, the LEADER methodology has been extended under the more general term of Local Community Development (CLLD) to open up the possibility of recourse to additional European funding (FEMP, FEDER, ESF).

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(4) Total public expenditure = EAFRD + co-financing from Member States + additional national funding. The data includes the modifications in the PDRs until April 2018.
In some cases, such as the one in Wales (United Kingdom), LAGs only participate in planning and as facilitators but do not make capital investments. Instead, they prepare the ground for investments from other measures, such as the M7. At the other extreme, LAGs with significant budgets have funds to invest directly in services and small infrastructures.

Even in these cases, the funds available for LEADER are usually not sufficient by themselves to meet the financing needs of rural areas. However, it is when they are combined with other measures, and other funds or when several LAGs cooperate and join forces, when they become a powerful tool.

For example, in the south of Lower Saxony, the Landkreis Göttingen LAG has focused on energy efficiency and climate action. It has launched an integrated bioenergy model implementing Measure 19.2 and involving 34 municipalities (see Figure 4).

Five villages decided to continue with the project. The business model of each town involves an investment of 2.5 million euros for the design and creation of a set of a biogas plant and a wood chip kiln, both connected by a common heat network. LEADER has invested around € 200,000 in each village to develop some functions (especially project design and planning) by combining other funds to organize agricultural workers and the rest of the rural population into a sustainable cooperative for renewable energy.

Also under M19.3 for cooperation, LEADER is promoting local entrepreneurship, offering new ways of working in Tarragona, Spain. Four LAGs came together to form a single co-working platform: COWOCAT (6). In a period of two years (2014-2016), 14 co-working spaces were created,
welcoming between 60 and 65 workers each. Local entrepreneurs not only use the space to work, they also stimulate cooperation between projects within local communities, creating synergies and trying to attract new businesses.

Basic services and population renewal (M7)

At the EU level, the estimated expenditure for this measure is 11.3 billion euros (7), which represents 7.3% of total RDP spending. Germany is, by far, the country that is dedicating the highest amount to this measure, with 2.95 trillion (18% of the total budget of its RDPs). For example, the Sachsen-Anhalt region in Germany has decided to invest 39% of its RDP on basic services and population renewal. France, Poland, Romania and Italy also make high financial forecasts under this measure, and Bulgaria has allocated 22% of its RDP budget to it.

A large part of these investments goes to infrastructure and basic services (e.g. infrastructure for water or waste or local roads) in some of the poorest regions of the EU. For example, the French region of Guyana devotes 43% of the budget of its RDP to the M7 and Romania plans to spend 1.3 trillion euros on the M7, which represents 14% of the public spending foreseen in the RDP.

When the M7 is used strategically in combination with other measures or to complement national policies, it becomes a very interesting opportunity to finance essential innovations in rural services. Sweden, for example, estimates that 46% of its rural population would benefit from improvements in services or infrastructures made through local development actions and another 5% thanks to ICT measures. The first four sub-measures of the M7 have the greatest potential to support the smart villages initiatives (see the table above).

Sub-measure 7.1: Support for the elaboration and updating of plans for the development of municipalities and villages in rural areas, as well as their basic services, and of protection and management plans related to areas of the Natura network 2000 and other areas of great natural value

Often, M7.1 focuses on providing support to prepare or update management plans for Natura 2000 sites and other natural protected areas. However, it is also used to plan the implementation of renewable energies and access to ICT. Some RDPs in Germany and Austria also include plans for communities.

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(6) [www.cowocrural.cat](http://www.cowocrural.cat)
(7) Ibid note 1
USES OF MEASURE 7

1. Austria is implementing an integrated strategy that envisages the involvement of the community during the planning phase.

2. In Germany, Saxony-Anhalt focuses on broadband investment and ICT, Hessen and Lower Saxony and Bremen support community groups and municipalities, and Mecklenburg-Vorpommern focuses on social services and development of nature and renewable energies.

3. Greece focuses on broadband infrastructures.

4. Hungary has a strategy aimed at social care, mobility, employment services and the development of community spaces.

5. Sweden has planned the cooperation between EAFRD and ERDF to improve the coverage of broadband services.

In the Austrian RDP, 779 million euros are allocated to the M7 (8). In 2017, the Austrian Ministry of Agriculture, Forestry, the Environment and Water Management established a master plan for participatory rural areas. This includes a series of tools to support municipal plans.

**Sub-measure 7.2: Investments in the creation, improvement or expansion of all types of small infrastructures, including investments in renewable energies and energy savings.**

In general, M7.2 is designed to improve basic living conditions in rural areas and their connections with other areas. In some EU Member States, there is a strong emphasis on building or improving local roads and basic infrastructure for water. However, in others, such as Austria and Finland, it has been used to support renewable energy and circular economy projects. (9)

**Sub-measure 7.3: Support for broadband infrastructures, in particular their creation, improvement and expansion, passive broadband infrastructures and the offer of access to broadband and electronic public administration solutions.**

M7.3: although hardware is given priority, some RDPs also support the development of e-government services and the use of broadband. However, only 46 RDPs have decided to adopt this sub-measure.

In Finland, the Smart Field study (10) conducted nationally in 2016 revealed that Finnish digital infrastructures were of high quality and that the general attitude towards digitization was positive.

However, the development of digital skills and support for consumers was quite low. The priority needs that were identified to develop the digital strategies were: transportation; social and health services; distance training and teleworking. In light of these findings, the M7.3 of the PDR is aimed at projects that cover small-scale connection infrastructures (the so-called “village networks”) and the digitization of municipal services, including online video-connection systems to serve customers.

This type of support follows the line of the resolution of the Finnish government of November 2017 for rural digitalisation. The resolution emphasizes the need to develop digital services. In addition, the resolution highlights the potential to support the rural population and businesses, and creates new livelihoods and opportunities for rural economic development with the help of digital solutions that take into account local specificities.

**Sub-measure 7.4: Investments in the creation, improvement or expansion of local basic services for the rural population, including recreational and cultural activities, and the corresponding infrastructures.**

La M7.4 tiene un alcance amplio y M7.4 has a broad scope and may include health, child care, mobility, cultural services, and infrastructure for community services and leisure activities. As a result, it supports projects covering various fields of intervention - from digitization to the “silver economy” or e-health.

For example, in Finland, the Campo Inteligente study identified digital strategies that can favor the improvement of local services, including those related to leisure and

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(8) Collection of projects presented by the members of the ENRD WG (for the use of the M7 in Austria, see page 2): https://enrd.ec.europa.eu/sites/enrd/files/lg_smart-villages_project-compilation.pdf

(9) www.bmnr.gv.at/english/agriculture/Master-Plan-for-Rural-Areas0.html
Other relevant strategies: Breiband Austria 2020: www.bmnr.gv.at/telekommunikation/breiband

culture, and the consequent infrastructures. This sub-measure supports projects that seek to plan, study or improve services for the rural population, such as studying the viability of remote health services.

**Development of agricultural and business farms (M6)**

Measure 6 has a budget allocation similar to the M7, with 10.6 billion euros (11), more than half are aimed at young people. Two sub-measures can directly promote economic diversification in rural areas and their transformation into smart villages: M6.2: “Grants for the creation of companies for unrelated activities in rural areas” and M6.4: “Support for investments in the creation and development of non-agricultural activities”.

The development of new entrepreneurial activities in rural areas -beyond agriculture- is a vital component to make in the rural environment attractive and in which it is trying to reach in many regions of the Member States. When combined with other initiatives, such as LEADER, successful businesses can foster generational change, encouraging the settlement of new populations, more children in rural schools, more customers in local businesses and services, and promoting a very positive development cycle.

The start-up aid (of a maximum of € 70,000) for the development of new non-agricultural activities in rural areas has been introduced for the first time in the 2014-2020 programming period, together with the requirement that a business model was presented.

Support for investments and the development of non-agricultural activities can now also be received by small companies (previously, it was only for rural tourism and provision of services, and the rest was limited to micro-enterprises). Support for investments in non-agricultural activities can now be assigned to rural people (it is not necessary that a company has been created before requesting assistance). All these elements favor flexibility and can give rise to smart strategies.

The Finnish RDP uses the M6.2 to help rural businesses conduct business tests that promote market-adapted and consumer-oriented innovations, such as support for technology start-ups or e-learning services. Under M6.4, a company offering mobile telephony services to small businesses

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[11] Ibid note 1
and micro-enterprises in rural areas could also receive financing.

Other measures

A Finnish NGO used M16.2 (support for pilot projects and for the development of new products, practices, processes and technologies) to create the GreenCareLab (12), a network of service providers established in the natural environment, and offer activities to help their development, such as study trips and work groups.

As a result, more than 100 suppliers participated in the GreenCareLab activities during the first year. Dozens of start-ups joined the platform to test and develop their business and service ideas.

In the field of digital training and training, the interrelated issues of accessibility, skills and connectivity remain the story of the chicken and the egg, but with a clear objective: the digital inclusion of all. In Austria, new technology laboratories are being opened in schools to offer free training.

In other countries, such as Spain and France, some training centers offer training certificates using different sub-measures of the PDR, depending on the target group. The LAGs are in a key position to adapt the skills to the needs of their local communities.

**ONE + ONE = THREE**

For many people, rural areas simply are their home - a place to live, work and raise a family. Rural communities need jobs, basic services, connectivity and intelligent transportation solutions, as well as a favorable climate for entrepreneurship. This means that an intervention on all these fronts is needed in a coordinated way. The “EU Action for Smart Villages” (13) is already pointing in this direction, bringing together the Departments of Agriculture and Rural Development, Regional Policy and Mobility and Transportation.

Rural proofing (or rural guarantee mechanism) is a key first step in implementing these more integrated approaches. For example, in Finland, rural proofing is considered central to ensure that policies recognize that the rural environment is an inseparable part of social and national prosperity.

Similarly, in its opinion on the “Revitalization of rural areas through smart villages” (14), the Committee of the Regions states that “the concept of ‘rural proofing’ must be incorporated as part of the initiative ‘Smart Rural Areas’ with a view to applying this approach for the development of more general political initiatives with implications for rural areas”.

Commissioner Phil Hogan added that “[rural proofing] is more than just checking the potential impacts and implications of policies, it is also about designing schemes and strategies that reflect the needs and aspirations of rural communities, recognizing the potential to offer innovative, inclusive and sustainable solutions” (15).

At the beginning of this chapter we have seen that PDR measures are more efficient when combined strategically with each other. However, this multiplier effect can be much greater if it is combined with other sources of funding, be they European, national or private. Some recommendations can be found in “Synergies between ESI Funds, Horizon 2020 and other EU Smart Growth Programs” (16), available online for the agencies that design and implement the policies. These councils include explanations about the basic rules and principles to achieve synergies and combine the different funds and contains recommendations for the relevant actors, as well as information on the mechanisms of the European Commission to facilitate these synergies.

For example, approximately 21.4 billion euros have been allocated to ESI Funds (17) for ICT investments during the 2014-2020 programming period. To optimize the impact of investments in ICT, Member States and regions were asked to develop two strategies before making digital investments using these funds:

- A strategic policy framework for digital growth within its general research and innovation strategies.
- A New Generation Network plan that identifies where public interventions are necessary to offer access to broadband.

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(12) www.gcfinland.fi/in-english/
(17) European Regional Development Fund (ERDF), European Social Fund (ESF), Cohesion Fund (CF), European Fund for Agriculture and Rural Development (EAFRD), European Maritime and Fisheries Fund (EMFF).
The implementation of the M6 and M7 of the PDR in the Spanish context

Although measure 19 (LEADER) has traditionally been the main source of funding for actions in the field of local development, the **M7 - basic services and population renewal in rural areas** offers great flexibility to host actions in this area. However, in the case of Spain, the M7 has tended to be oriented towards the conservation and exploitation of the natural environment, giving less importance to the social development of rural communities. Of the 17 autonomous communities, only 13 include this measure in their RDPs, and in all cases, except for the Canary Islands, it represents a lower percentage than the M19 over the total budget. On average, the M7 represents 3.47% of the total budget of the autonomous PDRs and a total of 304,357,546 €. Regarding the National Program for Rural Development, the M7 has a budget of € 18,743,704 (4.52% of the total budget of the PNDR), but only goes to the creation and maintenance of natural roads (sub-measure 7.8 "Others").

Within measure 7 there are three submeasures that are particularly relevant for the socio-economic development of rural centers in general, and of Smart Villages in particular; these are:

1. **7.1 Support for the preparation and updating of plans for the development of municipalities and towns in rural areas, as well as their basic services, and protection and management plans related to spaces of the Natura 2000 network and other areas of great natural value.**
2. **7.3 Aid to broadband infrastructures, in particular their creation, improvement and expansion, passive broadband infrastructures and the offer of access to broadband and electronic public administration solutions.**
3. **7.4 Investments in the creation, improvement or expansion of local basic services for the rural population, including recreational and cultural activities, and the corresponding infrastructures.**

The case of the first sub-measure is particularly striking because, even though it is possible to devote itself to the elaboration and updating of development plans for the rural nuclei, in almost all the RDPs it is only used for the protection and management of the spaces of the Natura 2000 network. Of the 17 autonomous communities, only Andalucía and La Rioja dedicate it to the elaboration of local development plans. In the same line, although it has a more indirect impact, in sub-measure 7.6 for the "support for studies / investments associated with the maintenance, restoration and improvement of the cultural and natural heritage of the villages, the rural landscapes and the places of great natural value, including socio-economic aspects", there tends to be little or no attention paid to the analysis of the socioeconomic aspects of the rural environment, which would allow knowing the reality of the people who live there (needs, potential, etc.).

Regarding submeasure 7.3 for the...
extension of the broadband network, and to which Phil Hogan alluded in his appearance on May 22, only Galicia and Andalusia collect it in their respective programs. While in the first one, this sub-measure is destined to the deployment and expansion of the broadband network in the whole territory, in Andalusia it is also destined to the development of the electronic administration, contemplating a great abanico of areas in which these investments could be made: registration, communication with citizens, cartographic information, telematic services, etc.

Finally, sub-measure 7.4 for the improvement and expansion of basic services is included in the PDRs of the Canary Islands, Extremadura and Galicia; In addition, although in Asturias it is not included in the M7, it is considered as a priority line of action for the development of activities within the M19. In the Canary Islands, this section contemplates actions to improve the cultural and leisure offer and to hold fairs and events related to the primary sector and / or crafts. In Extremadura, the operations that may be carried out within the framework of this sub-measure are limited to the development and management of initiatives and recreational hunting and fishing activities (public offer of hunting, sport fishing ...). Of the three communities, Galicia is the one that focuses most on the social aspects of rural communities and allocates this sub-measure to the implementation and improvement of welfare services (child care, day centers, residences for the elderly, dependent or disabled, training and insertion / labor / social reintegration centers, etc.), cultural services (libraries, houses of culture, social centers, interpretation centers, museums, etc.) and service centers and small infrastructures and / or equipment that promotes cooperation, the provision of services and the implantation or improvement of companies in rural areas.

Figure 5 summarizes very briefly the sub-measures included in measure 7 of the PDR of each Autonomous Community, which have been commented on throughout this article. As mentioned above, another measure that can actively contribute to the development of rural areas is the M6 - Development of agricultural and business operations. On

| Sub-measure | Extremadura | Galicia | Asturias | Andalucia | Canarias | Castilla-La Mancha | Castilla | La Rioja | Aragón | Cataluña | Navarra | Extremadura | Castilla-La Mancha | Castilla | La Rioja | Aragón | Cataluña | Navarra | Canary Islands | Andalucia | Galicia | Asturias |
|-------------|-------------|---------|----------|-----------|----------|-------------------|---------|---------|--------|---------|---------|-------------|-------------------|---------|---------|--------|---------|---------|----------------|--------|---------|--------|---------|---------|-------------|----------|---------|--------|---------|---------|
| 7.1         |             |         |          |           |          |                   |         |         |        |         |        |             |                   |         |         |        |         |        |             |          |         |        |         |        |             |
| 7.2         |             |         |          |           |          |                   |         |         |        |         |        |             |                   |         |         |        |         |        |             |          |         |        |         |        |             |
| 7.3         |             |         |          |           |          |                   |         |         |        |         |        |             |                   |         |         |        |         |        |             |          |         |        |         |        |             |
| 7.4         |             |         |          |           |          |                   |         |         |        |         |        |             |                   |         |         |        |         |        |             |          |         |        |         |        |             |
| 7.5         |             |         |          |           |          |                   |         |         |        |         |        |             |                   |         |         |        |         |        |             |          |         |        |         |        |             |
| 7.6         |             |         |          |           |          |                   |         |         |        |         |        |             |                   |         |         |        |         |        |             |          |         |        |         |        |             |
| 7.7         |             |         |          |           |          |                   |         |         |        |         |        |             |                   |         |         |        |         |        |             |          |         |        |         |        |             |

It is considered as part of the M19
average, the M6 represents 6.87% of the autonomous PDRs (the National PDR is not included in the calculation because it does not include the M6) and it has a total expenditure of € 865,543,110.

When analyzing the regional RDPs and the distribution of the resources allocated to the M6 among the different sub-measures, we observe how the focus is on the M6.1 of help for the creation of companies for young farmers, that has been adopted by all the autonomous communities without exception.

However, there are two other measures that can especially contribute to the revitalization and revitalization of rural areas:

- **6.2 Aid for the creation of companies for non-agricultural activities in rural areas** (Business start-up aid for non-agricultural activities in rural areas).

- **6.4 Support for investments in creation and development of non-agricultural activities** (Support for investments in creation and development of non-agricultural activities).

Both sub-measures have as objective the diversification of economic activity in rural areas. This would allow rural communities not to depend solely on the income of the primary sector and employment to be as less seasonal as possible, creating resilient and competitive rural economies. The main difference between the two is that M6.2 is aimed at the creation of non-agricultural companies, mainly by owners of agricultural holdings and the people who work in them (mainly family farms), while the M6.4 It is focused on the diversification of activities within existing companies, which are aimed at hiring new employees or modernizing and adapting to the needs and opportunities of the market. However, in general these measures are designed so that beneficiaries can complement them if they consider it necessary.

Galicia, the Balearic Islands, Castilla-La Mancha and Navarra are the four autonomous communities that have included both M6.2 and M6.4 in their PDRs, while Andalucía, Canarias, Cataluña and Extremadura only collect the second. The PDR of each of these regions specifies the activities and the type of eligible operations, some of which are more specific and others more extensive and flexible.

Figure 6 summarizes graphically the sub-measures that each region has collected in its PDR.
2. Key innovations and technologies in the development of rural territories
INTERNET OF THINGS, INNOVATIVE SOLUTIONS TO REPUBLISH RURAL ZONES

The Internet of Things (IoT) is a concept that emerged for the first time in 1999, before the rise and advance of the presence of the Internet, which refers to the digital interconnection of objects of daily life with the Network. In fact, for years now, most gadgets or technological devices are interconnected, from our cars or washing machines to our toothbrushes. The IoT is a natural step towards a society that tends to be fully digitized, in which the simplest objects will be connected to the Internet and between them to bridge technological differences and optimize time and resources.

There is a clear trend towards the interdependence of all the data generated by people and the associated automated processes. Big data (analysis of large amounts of data to anticipate behavior, optimize results, create previously untapped synergies...), autonomous cars, sustainable consumption models through the monitoring of production processes and their relationship with consumers...

According to the Gartner consultancy, in 2020 the number of objects connected to the Internet will be 21,000 billion. The Internet of Things will have an extraordinary impact on our lives and economies.

By 2020 it is anticipated that it will bring a value of approximately two billion euros to the world economy by itself.

The Internet of Things connects perfectly with the Smart Rural concept, an innovative development model focused on greater sustainability and the use of resources: better planning, more participatory approaches, innovation inherent in all processes, constant search for points of interest disruptive view, optimization of basic services (transport, ICT, security...), reduce the carbon footprint, improve the circular economy of the territories... Increasingly a greater number of processes are automated or digitized, and we live surrounded by interconnected objects each.
A SMART approach to promote innovative RURAL TERRITORIES.

The European Union has made a strategic commitment to the “smart” model, with an investment of 365 million euros in infrastructure through the “European Innovation Partnership on Smart Cities and Communities”, a “Strategic Implementation Plan to accelerate the transformation of European cities in ‘smart cities’. The plan describes the proposals of the Commission to take advantage of the full potential of innovation to turn our territories into better places to live. This does not exclude the rural environment, on the contrary, since all experts agree on the great potential of rural areas to apply this innovative dynamic in the management of their territories. The updated database of the European Innovation Partnership on Smart Cities and Communities (EIP-SCC) collects initiatives and smart projects, as well as Guides, tools, agenda of events...

From the working group “Smart Agriculture and Food Security” of the European Alliance for Innovation in the Internet of Things (AioTi), they affirm that the term “Smart Rural” is beginning to be heard more and more strongly and to take into account from the community level. Although in the field there has been a constant innovation, from this institution have influenced that “now is the time of the irruption of digital technologies” that are permeating all productive sectors, which will experience “major changes in the coming years that will result in a more prosperous rural world.

At the recent OECD Annual Conference on Rural Development, one of the most relevant events regarding the future of rural policies worldwide, the importance of innovation for the survival of small municipalities threatened by the depopulation. For the OECD, the keys to the future of rural areas “will continue to be innovation, intelligent territories and digitalization, since the technological revolution will affect our rural areas and we have to be prepared for it, the innovative processes will be critical for the future of the competitiveness and sustainability of rural economies.”

ADVANCES in the legislation of a European framework for the promotion of the IoT.

In recent years, the European Commission has adopted a series of policy support measures to accelerate the adoption of the IoT and boost its full potential in Europe. Specific IoT research and innovation objectives have been established within the framework of the Horizon 2020 program, in addition to launching specific initiatives to achieve them:

- **March 2015**
  - The Alliance for Innovation in Internet of Things (AioTi) is born.
  - AioTi, the largest European Association of IoT, is created with the intention of creating a European ecosystem and a framework in which to promote an industry and a market through the collaboration of public-private entities.

- **April 2016**
  - Digitization of European industry.
  - Specifies the EU vision on IoT, based on three pillars; a thriving ecosystem of IoT, an IoT approach focused on the human being and a single market for IoT.

- **Mayo 2015**
  - Digital Single Market Strategy (DSM).
  - It represents another step in the acceleration of IoT developments; underlining the need to avoid fragmentation and encourage interoperability for the IoT to reach its potential.

- **January 2017**
  - European data economy.
  - It proposes political and legal solutions concerning the free movement of data across national borders in the EU and issues of responsibility in complex environments.

Source: Internet de las cosas: análisis de oferta educativa y la demanda empresarial en España, Fundación COTEC 2017.
INTERNET OF THINGS as a tool against UNEMPLOYMENT

The potential of the Internet of Things for the fight against depopulation is unlimited. Although it is true that in recent decades, especially in recent years, the implementation of the IoT in the rural area is being exponential, this new technology is currently being used more in the agricultural sector: smart farms; agricultural holdings that can be managed remotely and that through big data allow to optimize the productive processes; drones to control pests; tractors with GPS that can be shared among farmers... However, in terms of rural development projects, there is still a long way to go, mainly due to the degree of connectivity and coverage (Internet and mobile phone) in Spain. The lack of Internet connections in what the European Commission has called “white areas” or poor service in many others, are the factors that are hindering the progress of initiatives related to the IoT in rural areas.

As stated in the 2016 Annual Report of the Digital Agenda for Spain, on February 24, 2015, the European Commission published a new aggregate indicator to measure progress in telecommunications and the development of the Information Society in the Member States, the Index of the Digital Economy and Society (DESI). The DESI is a composite indicator that evaluates 5 areas or dimensions: Connectivity, Human Capital, Use of the Internet, Integration of Digital Technologies and Digital Public Services. In turn, each of these areas has several specific sub-indicators with which its value is calculated. This set of aggregated and disaggregated indicators is prepared for each of the countries of the European Union, which allows a very detailed comparison. This indicator places Spain in the 15th position among the 28 Member States with an overall score of 0.52, similar to the European average, having improved or maintained its performance in all the areas under study during the last year.

All the previous studies have shown (the study that has done REDR is quite clear) that a network of Internet connection is an important factor to set rural population. Many new entrepreneurs are able to accept shortcomings in certain services (commerce, transport...), when it comes to moving their business to the rural environment, but most are inflexible regarding the Internet connection. Communication and Information Technologies are already a determining factor to fight against depopulation, because of all the economic and social possibilities that they bring to the municipal fabric and the importance that the new settlers give to them. Therefore, why not take advantage of all this smart momentum and combat the depopulation of rural territories through IoT initiatives?

As the Inter-American Development Bank affirms, there are several positive factors that the IoT contributes:

- The generalization of IoT in value chains (also called “industrial internet of things”) contributes to increase productivity and efficiency in very diverse sectors.
- “Wearable technology” (wearables) will allow real-time monitoring of people’s health and could revolutionize medical services and the pharmaceutical industry through a transition from treatment medicine to preventive medicine.
- Reduce the costs associated with trade based on efficiency improvements in the storage, traceability, transport, distribution and commercialization processes derived from the evaluation of information and decision making in real time. Something fundamental for rural microenterprises in territories with deficiencies in terms of transport.
- Accentuates the dissolution of the border between goods and services: not only do the services incorporated in the goods grow, but they also become more visible.
- Extends the reach of electronic commerce beyond purchases through computers, mobile phones and other connected devices (again a big point in favor of rural commerce that tries to compete with large companies).

This transition to connected objects will generate new ways of doing business and greater interaction between producers of goods and services, giving place to greater international trade and investment flows.
IoT Sectors of the SMART CITIES transferable to the RURAL field.

There are many sectors that can benefit from the application of the INTERNET OF THINGS in rural areas:

Health: telemonitoring and telemedicine.
Examples such as the Colabor@ platform, developed by Telefónica Research and Development and implemented in several health services and hospitals both in Spain and the United Kingdom, are a clear example of how health care can be supported, facilitating sharing in real time information that is usually handled in health practice, such as the electronic medical record or the results of diagnostic tests. Additionally, it allows professionals to exchange opinions, knowledge and information in order to improve the processes of diagnosis, treatment and monitoring of patients.

e-tourism and cultural information services.
Another group of services has to do with the provision of information related to the urban area, both in terms of tourism and in relation to leisure, free time, sports activities and culture in general. This group could include guides to tourist cities and museums, available for smartphone and can incorporate technologies such as augmented reality. These services can be managed by a single entity (for example, the City Council) that establishes the business model and the way of exploitation or by several entities that are related to tourism (City Council, hotels, shops, associations, museums, etc.).

Government, citizenship and e-Participation.
This is all the services that facilitate the relationship with the Administration online, either to access basic information, such as to perform procedures, pay taxes and fees, etc. There are numerous examples and for a long time since the eGovernment is one of the Internet services that have been developed the most in recent years. One of them is the City Council of the city of Edinburgh, which has adopted a novel approach introducing citizens in the design of the services offered.

Management of public emergency services and civil protection.
Any application that allows to optimize the capacity and the response time of the emergency services will be very useful in the environment of the cities. The WikiCity project developed by the SENSEable City Lab of MIT has developed experiences in the city of Rome using the mobiles of the inhabitants to obtain information in real time and present it graphically using maps.

Collection and treatment of urban waste.
Another significant set of applications are those related to the management of urban waste. In this sense sensors are used that warn, for example, when the containers are full and therefore adjust the removal of the waste to the real needs of the city. A concrete example of this type of application is given in the Smart City of Vitoria: the containers of fraction rest, paper / cardboard and light containers have a TAG that informs by GPS of their location, as well as the last emptying and weighing. There is also a GPS installed in almost all the fleet of vehicles for cleaning and collection of waste, with a program to visualize the position of each vehicle, which optimizes routes and saves time and resources.

Open Government and Open Data.
There is an important movement in the administrations towards the provision of all types of data towards citizenship motivated by the principle of transparency. There are numerous examples of this new trend. In the case of town halls in Spain, we must mention the cases of the City of Zaragoza, which with its “Zaragoza Data” includes hundreds of data sets in open format and a dozen in semantic format, including tourist attractions, organization charts, procedures and services, addresses of Zaragoza and job offers. But there are many other examples, such as the City of Gijón.
Energy efficiency and environment.
In the field of energy efficiency and, in general, sustainability and the improvement of resource management, rural territories have a lot to implement regarding IoT processes. Energy management is becoming a priority issue in modern societies. On the one hand, the increase in the price of energy is forcing companies and households to optimize their consumption. In addition, the world is facing the challenge of climate change, so reduce CO2 emissions, making more and more efficient use of the energy while increasing the use of renewables (photovoltaic, geothermal, wind, biomass, etc.) is essential to achieve the objectives set.

Mobility and transport.
The population dispersion of rural territories follows the opposite pattern of urban areas, where the agglutination of the population in urban centers is the general trend. Although carsharing or vehicle sharing is already a common practice in cities, the possibilities offered by this service in rural areas are also striking. The services to share vehicles would be of great help for the rural population, dispersed, aging and with a lack of transport services, to optimize the transport systems of people who live nearby and have a common destination. An example in this line is the iCarYou project developed within the framework of the European initiative Living Labs. The operation of the service is that drivers can share their trip with someone and in return receive compensation from the passenger with whom they share the vehicle. The boom of electric and autonomous cars will create even more synergies in this field.

Electronic commerce.
The e-commerce systems in general and the mobile payment platforms could offer support to these needs in rural areas, also providing a platform from which to provide the payment service to multiple local services. Another set of applications has to do with the efficient management of transport fleets, one of the main handicaps of electronic commerce. Mobile technologies can be applied to track vehicles as well as using embedded systems to plan routes. All this helps to reduce the route times, optimize loads and the use of the fleet and its maintenance. In addition, this management results in a saving of fuel and therefore in the emission of gases. This same aspect can be implemented in traceability and logistics applications, which can be useful for both municipalities.

Measurement of environmental parameters.
Another field that needs to be monitored in rural areas has to do with the monitoring of environmental parameters. It is about measuring air quality, water quality, noise, humidity, temperature, pollen concentration, etc. An interesting and imaginative initiative in this area is the Live Singapore project34, through which citizens are given access to a wide range of data about the city, data that are largely provided by the citizens themselves.

Management of public infrastructures and urban equipment.
All the ideas of the Smart Cities could be applied to the management of public buildings in rural areas (inmotic) and, of course, to the maintenance of public infrastructures, such as electricity grids, water supply pipes, lighting, sewerage, traffic management elements, displays, car parks, irrigation, parks and gardens, etc.
Initiatives and projects of the INTERNET OF THINGS to fight against DEPOPULATION.

Bellry of rural churches to improve connectivity in the UK

More than half of Anglican churches and parishes in England are located in rural areas of the country, perfect locations to address one of the basic problems of these isolated areas: connectivity and coverage. Therefore, the Government has launched a project to install antennas and fiber cables in the towers of churches and other church properties, in order to improve the connectivity of broadband, mobile and Wi-Fi in local communities. The project will serve to efficiently exploit the scarce presence of telecommunications networks and bridge this gap with a network of buildings that already existed, in this case the bell towers and rural churches. “Encouraging churches to improve connectivity will help address two of the main problems facing rural areas: isolation and sustainability,” promoters say.

AGRIPIR Project: innovation in traditional mountain agriculture.

This initiative of the European Commission, located in the French and Spanish Pyrenees, has brought together agricultural industry agents, public research organizations, technology SMEs and local development agencies. Its objective has been to find ways to introduce innovative technologies in the traditional mountain agricultural sector of the region to make it more competitive. The AGRIPIR network, made up of 150 organizations and more than 300 people, imposed the task of introducing more innovation and technology in the agricultural industries of the region. Companies from the aerospace, electronics and IT sectors collaborated with researchers, clusters and development agencies to propose practical measures that could give a new image to mountain agriculture. The objective was to pool resources and conceive research and development projects with genuine economic potential.

Minibus without driver in isolated areas of Japan to provide services to the rural elderly.

Japan is another reference country in the fight against rural depopulation. As REDR analyzes in another chapter, the situation in many isolated Japanese territories is dramatic, since they are the source of low birth rates (one of the lowest in the world), a marked aging of the population and a marked rural exodus of qualified young people, towards the big urban centers. With the aim of improving the quality of life of the population, which is not active and aging, the Government has launched a pilot project in the town of Nishikata, about 100 km from Tokyo. This small town has begun to test a minibus of autonomous driving to move the elders of their municipality from a local service station to a municipal ambulatory. The Robot Shuttle, as it is called, has six seats and, although it only reaches 10 km / hour, for the moment its innovative route has not yet suffered a single problem. The intention of the municipality is to expand the routes of this autonomous bus to cover other basic places such as parks, shops, financial institutions...

The 5G Plan of Galicia wants to turn the rural territory into a testing laboratory for the new mobile networks.

Galicia has announced that its intention is to implement fifth generation mobile networks in its territory, through the development of the ‘5G Plan’ with which it wants to become a pioneer territory in the promotion of projects and solutions based on this technology. Although 5G mobile networks are expected to be fully developed at a technological and commercial level until 2020, the objective of Galicia is to define and identify strategic rural areas that serve to test and apply 5G technology to provide solutions to the problems detected in those areas.

Madrid wants its municipalities to be smart territories with the ‘Munin’ project.

The MUNIN Project seeks to achieve resources that improve the competitiveness of the municipalities by implementing innovative processes based on the use of ICTs that result in an authentic modernization and digital transformation of them. To provide order and transparency to the system of actions we have designed a “Regional Advisory Council” for each area, as a tool for the participation of the municipalities, the Community of Madrid and all the socio-economic agents of the area (associations, companies, educational community... and citizenship in general).

PILOT PROJECTS of IoT in Spain

Call for RISING STARTUP SPAIN, a program aimed at foreign entrepreneurs who establish their Startup in Spain.

Icex-Invest in Spain has launched a new call for the RISING STARTUP SPAIN program, a program aimed at entrepreneurs and foreign startups that contribute to promoting entrepreneurial activity in Spain with a scalable and innovative project. The program offers the following support services to the participating startups: free work spaces in Madrid and Barcelona; 10,000 Euros non-refundable for initial expenses; facilities for obtaining visas and residence permits; advice to connect with potential investors; visibility in media specialized in entrepreneurship; attendance at events held in Spain and meetings with Spanish multinationals... Since its launch in 2016, in the previous editions 283 entrepreneurs from 57 countries showed up, of which 15 were awarded with the help.
REPORT PREPARED WITH DATA FROM

Fundación Telefónica. 2011.


THE IMPULSE OF TELEWORKING TO FIGHT AGAINST RURAL DEPOPULATION

While rural areas throughout Europe suffer from the depopulation of their territories, information technologies are developing even faster. Supported by these advances, especially in the ICT sector, there have been many voices and experts who have recommended the use of teleworking as a way to tackle rural depopulation, especially among the youngest and most qualified population, precisely the population sector that has more impact in the socioeconomic fabric. But, why so far so few companies and self-employed have exploited communication technologies and have decided to implement teleworking? What options does teleworking allow to stop the exodus of the rural population?

In the first place, we must define the two classifications of "work at a distance": teleworking and mobile work based on ICT (T/TICM). As defined by the European Observatory of Working Life, teleworking is "a way to organize and/or perform work using information technologies, in the context of a work contract, where work, which could also be carried out at the employer’s premises, is carried out outside those facilities, on a regular basis". On the other hand, mobile work based on ICT, according to the definition published in the publication "New forms of employment", is "a work carried out at least partially and regularly outside the ‘main office’ in which the worker performs its work, - whether this is the employer’s headquarters or a personalized domestic office-, which uses ICT to access the company’s shared computer systems”.

To check the scope, the report “Work at all times, anywhere: Effects on the world of work”, prepared by the International Labor Organization (ILO) and Eurofound, analyzes in depth the state of teleworking through an analysis comparative of 15 countries. As for Spain, the document shows that 6.7% of employees work remotely, which is considerably lower than the European Union average (17%), a logical fact considering that only one 27% of Spanish companies choose this option according to INE data. That is, only
one in three companies in Spain is currently betting on teleworking, so rural areas could be a great opportunity for many companies that, through this modality, remotely employ their workers without prejudice to any for their interests, quite the contrary as has been shown. Spain is positioned in an intermediate position with respect to the rest of the EU, with the Nordic countries at the top. “The labor culture in Spain is characterized by relatively high levels of face-to-face work, and this is not mainly driven by objectives, so the result is a relatively reduced implementation of flexible labor policies”, the research states.

Although teleworking is quite implemented in most countries studied, the results show that a significant percentage of workers do not telecommute on a regular basis, but occasionally, this formula is more widespread among qualified professions, often managers, office workers, self-employed to a greater extent... In total, one-fourth (25%) of self-employed workers working with computers in Spain resort to telework, “overrepresented” according to the report. On the other hand, mobile work with information technologies is mostly present in the service sector, as opposed to the less prominent ones such as industry, construction or agriculture.

Regarding gender, in our country men telework more (54%) than women (36%), although they do it more regularly at home. In Spain, as in other countries, the trend is that women use teleworking more from their own home to reconcile work and family life, while men do more mobile work with ICT in trips or hours away from the office, “which suggests that the roles and work models attributed to men and women and family life in different countries play an important role in the configuration of T/TICM”. An aspect to keep in mind so as not to continue repeating traditional patterns of conciliation that weigh down the motivation of workers and the efficiency of companies.

Although the conclusions and effects of this exhaustive report on T/TICM are “very ambiguous”, they are mainly related to: the development of ICT and digitalization; a paradigm shift in the labor culture; appropriate legislation and a legal framework for businesses; and a social and political will. In general, the analyzed data reflect that both modalities - telework/mobile ICT work- have more advantages than disadvantages for both workers and employers, as far as they are accompanied by a coherent long-term strategy. The European Framework Agreement on Teleworking [2002] is the only document that regulates this area, since similar legal frameworks do not yet exist outside the EU and, as we will see later, Spain incorporated the concept of teleworking as of 2012 in the Labor Reform.

“... teleworking is “a way to organize and/or perform work using information technologies, in the context of a work contract, where work, which could also be carried out at the employer’s premises, is carried out outside those facilities, on a regular basis”.

POSITIVE EFFECTS OF TELEWORKING FOR THE WORKER

- Reduction of travel times from home to work.
- Increased autonomy in terms of working time, which allows greater flexibility in the organization of working time.
- Improvement of work-life balance.
- Productivity increase.
- From a gender perspective, women who resort to T/TICM tend to work fewer hours than men and seem to achieve a slightly better level of work-life balance.

POSITIVE EFFECTS OF TELEWORKING FOR COMPANIES

- Improvement of the conciliation among its workers.
- Increase in motivation.
- Reduction of staff turnover in the company.
- Improvement of productivity and efficiency.
- Reduction of the need and the associated costs.

NEGATIVE EFFECTS OF TELEWORKING

- Tendency to work more hours.
- Overlap between paid work and personal life (work-home interference) and, as a consequence, intensification of work.
- Teleworkers seem to point to a better balance between work and personal life, while “high mobility” workers are more exposed to the risk of negative effects on health and well-being.
CONCLUSIONS

Given that the use of ICTs outside the company’s facilities entails advantages for both workers and companies, the authorities should tend to accentuate the positive effects and reduce the negative ones: for example, by promoting T/TICM to part time and the simultaneous restriction of informal or supplementary teleworking or T/TICM with high mobility, which entails very long working hours.

If the implementation of T/TICM is to be developed, a regulation that reflects this circumstance is necessary, especially to guarantee that these hours are properly remunerated and minimum rest periods are respected (in the same way that when applying the principles of prevention and legislation on Occupational Health and Safety). Government initiatives and national or sectoral collective agreements are important to provide a general framework for a T/TICM strategy.

In order to take full advantage of the T/TICM potential and to improve the working conditions of the workers concerned, training and awareness-raising initiatives are needed, both for workers and managers, as well as for legislators and political lobbies, regarding the use of ICTs, the effective use of ICT in teleworking, possible risks and how to effectively manage the flexibility offered by this regime.

TELEWORKING AGAINST RURAL DEPOPULATION: LEGISLATION IN SPAIN

In the labor reform approved in 2012, teleworking was recognized for the first time in the form of a law: «The desire to promote new ways of developing the work activity, the company, the service, the guarantee, the teleworking: a particular form of work organization that fits perfectly in the model of product and economy that is pursued». By favoring the flexibility of companies in the organization of work, increase employment opportunities and optimize the relationship between time and personal and family life. Therefore, the management of traditional work in the place of reception is modified, through a balanced regulation of rights and obligations, distance work based on the intensive use of new technologies.

Article 13 of the Text: Recast of the Law of the Statute of Workers, added new sections for teleworking in most cases.


1. It will be considered teleworking that in which the provision of work activity is carried out predominantly at the home of the worker or in the place freely chosen by him, in an alternative to his face-to-face development in the workplace of the company.

2. The agreement establishing the work at a distance will be formalized in writing. Whether the agreement was established in the initial contract or if it was later, the rules contained in article 8.3 of this Law for the basic copy of the work contract will apply.

3. Remote workers will have the same rights as those who provide their services in the work center of the company, except those that are inherent in the performance of the work in it in person. In particular, the remote worker will have the right to receive, as a minimum, the total remuneration established according to his professional group and functions.

4. The employer must establish the necessary means to ensure effective access of these workers to vocational training for employment, in order to promote their professional promotion. Likewise, in order to facilitate mobility and promotion, it must inform remote workers of the existence of vacancies for their face-to-face development in their work centers.

5. Teleworkers have the right to adequate protection in matters of safety and health, resulting in the application, in all cases, of the provisions of Law 31/1995, of November 8, on the Prevention of Occupational Risks, and its regulations on developing.

6. Remote workers may exercise the rights of collective representation in accordance with the provisions of this Law. For these purposes, said workers must be assigned to a specific work center of the company.
As stated in the White Book on Teleworking, "the fact that previously teleworking did not have normative support, has not prevented it from being imposed as a reality in the field of labor relations thanks, on the one hand, to the existence of an Agreement European Framework on Teleworking dated July 16, 2002, signed between CES (European Trade Union Confederation) UNICE / UEAPME (Union of Confederations of Industry and Business Organizations of Europe) and CEEP (European Center of Public Enterprises and Companies of General Economic Interests) and, on the other hand, to the negotiation of collective agreements and the establishment of business policies in this matter! ."

If, as the International Labor Organization defends, T/TICM can play an important role in policies that aim to promote the integration of certain social groups in society and in the labor market, especially those aimed at increasing participation in the labor market of older workers, young women with children, people with disabilities... these same criteria can be applied to rural areas. Teleworking would allow many workers, who prefer to opt for the rural environment as a place of residence and way of life, not to relinquish a qualified position in a different area, which could probably be found in the urban or periurban area closest to their residence. As we have already discussed, these same initiatives against rural depopulation have been carried out successfully in the urban area of Greater Tokyo in Japan, where a large urban area concentrated a considerable percentage of qualified jobs throughout the country, and many of these posts were channeled to other surrounding periurban or rural areas.

### GOOD TELEWORK PRACTICES IN SPAIN

We have highlighted some examples of successful cases among Spanish companies that are already promoting teleworking among their workers.

<table>
<thead>
<tr>
<th>Company</th>
<th>Sector</th>
<th>Description</th>
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<tbody>
<tr>
<td>BBVA</td>
<td>Banking</td>
<td>In BBVA they define &quot;Flexible Work&quot; as the one that allows employees to develop the same functions they perform outside of work centers. The company has 3 flexible working methods, but we are going to analyze the first of them, the so-called &quot;teleworking&quot;, where the employee performs his work in a non-personal way, working from his permanent home for 90% of his working day. The reference to the unit to which it belongs is established as a reference timeframe with a general character. The remaining time of his working day is done in person within the company’s facilities in the work center to which the employee is formally assigned. The employee who joins this modality has the possibility of requesting office furniture (table and / or chair) to install it in his home. This modality is under the conditions defined in the Teletrabajo Collective Agreement. <strong>Result:</strong> A 9% of employees under a flexible work modality develop their functions in the telework mode. Almost 80% of them request furniture for installation in their home.</td>
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<tr>
<td>ENDESA</td>
<td>Energy</td>
<td>Work at home is one of the main objectives of the company’s Global Plan in terms of human resources in the dimension of Reconciliation and Flexibility. This Plan has promoted the implementation of pilot teleworking or work at home programs in the different countries where the energy company operates (Argentina, Brazil, Chile, Colombia, Spain and Peru). ENDESA’s global approach to teleworking is always partial, at the moment in no case total, and always reversible. In addition, the telework that they promote is directed to all the countries where the company is located; all jobs are susceptible to be developed from teleworking at home; it consists of two modalities: daily (1 or 2 days per week) and time (2 hours per day, at the beginning or at the end of the working day); requires the agreement of three parties: Person - Management - Human Resources and organization. <strong>Result:</strong> the goal was that by the end of 2012, 2.2% of Endesa’s global workforce would participate in work-at-home programs. Overall, the satisfaction of the participants in the pilot project was very high, around 90%; all of them would repeat and recommend the experience, and there were no differences from a gender perspective.</td>
</tr>
<tr>
<td>INDRA</td>
<td>Tecnology</td>
<td>The technological company INDRA developed a remote assistance service, the Customer Service Center (CAU), as a single access window for the end user aimed at resolving incidents and requests related to corporate ICT services. The use of this service, for the purposes of professionals in a teleworking situation, does not contemplate differences with respect to other professionals since the information and operational flows are the same. The contact with the CAU is made by telephone or through the Internet. The incidents / requests that are resolved telematically (except for exceptions such as those related to physical equipment, consumables ...). By not changing the working conditions of the professional in any case and no aspect, there is no impact on costs related to salary and payment of Social Security contributions [the impact is limited to savings in concepts of space and energy and investment in material and infrastructures]. The company establishes and covers estimated costs of the necessary elements in each job (laptop, printer, etc.). Therefore, the savings for the company is not only in direct costs to indirect proportional to each professional who works, but also in greater use of space and professional quality of life, which favors their personal and family life, translating in turn, a decrease in work absenteeism, minimization of efforts and oriented productivity oriented to the success of the project. According to company data, the growth of professionals who take advantage of this method is constant every month.</td>
</tr>
</tbody>
</table>

We believe that the impulse of teleworking would be a very valid and contrasted measure to allow the return of many skilled workers to more diversified rural areas.

**Source:** «The white paper on teleworking in Spain. From home work to e-workers. A journey through spatial flexibility, mobility and remote work », Fundación MásFamilia (2012).
TELEWORKING, A POWERFUL TOOL AGAINST THE EXODUS OF RURAL TALENT

José Emilio Guerrero Ginel,
Professor at the University of Córdoba

The human settlement and land use guidelines are very complex: interactive, complementary, multidimensional, systemic... in short, they are a social and territorial challenge. We have to consider many aspects to understand the processes of human settlement and that decisions depend on many factors, the time of life, the circumstances, the family situation, training, work, etc.

It is true that, in particular, information and communication technologies are originating a new conception of space and time, which are giving opportunities and that we have to evaluate and analyze their potential. To build territories in which someone decides to settle it is necessary to also build a complex territory, which is efficient, competitive, sustainable, with a future, in which it can live and raise a progeny that can express its maximum potential... It takes a great effort of vision, of perseverance, of compromises agreed between all the actors... In short, we are facing a complex problem but that we are obliged to resolve because the depopulation of some areas and the saturation in other settlements; it is a problem in the whole planet Earth and, at least, we must reflect and analyze saturation in other settlements; it is a problem in the

The first thing I understand is that we should work in relation to being able to combine private and public policies, which act more as detonation factors; at this moment it is difficult to make a concrete or "gridded" planning -in the best sense of the word-, with real terms, because building a complex territory has many ingredients, very evolutionary and changing every day. What are these detonation factors? Start order points that generate virtuous habits that improve the situation and are synergistic with each other.

I think that teleworking is an opportunity, an important detonation factor, because at this moment in society, and particularly in the Spanish one, employment has become a substantial element.”

From my point of view, rather the problems of settlements and migrations are linked to more complex aspects: social, cultural, paradigm changes... and this is the difficult thing to attack, the profound changes of culture. One can aspire to a change of tendencies, in fact there is a lot of experience in that sense, because it is not that this vision begins to be applied now, but that already the traditional models of work -concentrated in large cities- are unsustainable, unsatisfactory, especially for personal, family, and group well-being, at all levels. It is urgent that we look for new solutions.

What do governments, companies think... what steps should each one take? I always make a very explicit simile: this is like a common pit in which we each have to put ingredients to make a good cooked, that then we can all eat satisfactorily. It is not the exclusive responsibility of public administrations, it is necessary to move from traditional policies to compromise policies. We have to commit ourselves to the fact that depopulation is everyone’s problem, it is a very serious issue and in some situations it reaches points of no return; and on the other hand it is a waste, because the potentialities of combating depopulation and having balanced settlements are enormously important.

Speaking of teleworking, in a typology of work linked to high-tech companies and, particularly, of information and communication technologies, in the work that we are carrying out with several of them we always carry in our backpack a series of questions for see how we should approach this aspect. In a satisfactory way, the big technology companies, which need a lot of talent in their work force, are continuously looking for how they can motivate that talent. They have found that many
valuable people, in their ingredients of life and conciliation, need biophilia (love of nature), open spaces, different temporal rhythms, certain elements of stillness... And they can hardly remunerate that type of intangibles in traditional labor schemes. In my opinion, we would be able to specifically design a part of the wage bill so that it could be organized under total or almost total teleworking. For me it is not something ethereal, it is something very palpable, if we are able to consider it in a policy of shared commitments with the administrations, companies, towns, with citizens, technicians, workers... In a preliminary estimate we would be talking about a 15 % of the wage bill of these technological companies -very much-, to promote a detonation factor, within rural territories, to promote a more friendly work, advanced services, more respectful work with the environment, talent... teleworking can be a connection between the rural environment and talent.

Decent work, creative work, useful work... requires that the people who do this work have welfare conditions, salary remuneration, and fulfill personal and family expectations. In the first place, having a livelihood is of enormous importance at this time, but also doing very useful and high-level things and where one finds its settlement. Another of the essential elements is the concern for the family: I want to live in a place where my children are not denied a bit of their potential for excellence. The new ICTs and teleworking will allow people to consider themselves as an intimate appetite, both explicit and non-implicit (the aforementioned: love of nature, relationship with neighbors...) that resurface with much more force, because now the work shapes almost 100% of our behavior: we need income and we accept employment under the conditions in which it is in most cases, including young people, who accept working conditions and second place intimate desires, much more sustainable and relevant. Teleworking will allow us to incorporate into our work demands those elements of love for nature, well-being, socialization and relationships... It is a new paradigm with which we will advance in the resolution of a complex problem much more reasonable from the absolutely mono-dimensional perspective. In short, teleworking is an opportunity for a change of trend in depopulation.

Teleworking is a powerful tool for the success of rural talent. It is very satisfactory virtuous circle for the territories, the people, also the companies and the institutions. The virtualization processes are also a great importance for the improvement and the achievement of an excellent education: during the primary school, the vocational training, the permanent formation, etc. Continuous improvement in skills and abilities is another essential element in making decisions regarding settlements, it will be a factor of constant change of consciousness, which we have to modulate and believe. The message that gives life to everyone is that those who are obliged or committed to provide solutions in this regard: we do not see the future in magical solutions, there are no shortcuts... Many times we talk about fiscal measures -they are necessary- but they are not the solution, but rather a change of culture, more complex aspects, a change of paradigm that allows the peoples to have a satisfactory life, and that the decision of the settlement is not limited by inadequate restraint factors.

“Teleworking will allow us to incorporate into our work demands those elements of love for nature, well-being, socialization and relationships... It is a new paradigm with which we will advance in the resolution of a complex problem much more reasonable from the absolutely mono-dimensional perspective. In short, teleworking is an opportunity for a change of trend in depopulation.”
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CIRCULAR ECONOMY, A NEW OPPORTUNITY FOR SUSTAINABILITY

Before the traditional economic model, based on the linear scheme “extract, manufacture, use, discard”, the Circular Economy provides a series of benefits, both environmental and economic, which have already attracted the attention of governments and large companies. First, because traditional models were based on the idea that resources were inexhaustible and waste was easily disposable. In the current model, not only has it been shown that a circular approach is more sustainable over time, but it also provides enormous economic benefits in the very short term, if production plans are designed according to their principles. As defined by the Ellen MacArthur Foundation, “the circular economy is restorative and regenerative, and aims to get the products, components and resources in general maintain their usefulness and value at all times. This concept distinguishes between technical and biological cycles. As imagined by its creators, the economy consists of a continuous cycle of positive development that conserves and improves natural capital, optimizes the use of resources and minimizes system risks by managing a finite amount of inventories and renewable flows. In addition, it works efficiently on all types of scale. “This strategy means that resources are kept as long as possible in the production cycle, reduce waste to the maximum, and reintroduce the elements that can not be discarded, which decreases significantly reduce the environmental, material and human costs of the process”.

CIRCULAR ECONOMY IN THE EUROPEAN COMMISSION

The European Commission presented its Action Plan for a circular economy in Europe in 2015. This ambitious roadmap consists of 54 measures that the Commission considers key to driving a real transition in the European territories in the next five years. These measures affect the different stages of the life cycle of the products (design and production, consumption, waste management and use of the resources contained in the waste through their reintroduction into the economy); and to five areas that the Commission considers priorities (plastics, food waste, critical raw materials, construction and demolition and biomass and biologically based products). The first Report on the implementation of the action plan for the circular economy and an annex with new initiatives added throughout 2018 have already been presented.

Since then, the support of the European Union is being firm. In the report Closing the circle: an EU action plan for the circular economy, the affirmative commission that the circular economy will boost competitiveness to protect companies against resource scarcity and price volatility, already contribute to creating new business opportunities, as well as innovative and more efficient ways of producing and consuming; create jobs in a local escalation for all skill levels, as well as opportunities for integration and social cohesion. At the same time, it will save energy and help to avoid irreversible damage in the sense of climate and biodiversity, soil and water, the cause of the use of resources at a rate that exceeds the capacity of the land to renew them. In 2018 a European monitoring framework on the state of the circular economy is published in each Member State. Any citizen can access the European portal for monitoring and progress in each country through 10 indicators.

The circular economy starts from the very beginning of the life of a product. Both the design phase and the production processes have an impact on the obtaining, the use of resources and the generation of waste throughout the life of a product.

Close the circle: an EU action plan for the circular economy

SPAIN CIRCULAR 2030: SPANISH STRATEGY OF CIRCULAR ECONOMY

Following the European wake, Spain launched in February 2018 the Spanish Circular Economy Strategy, still in draft stage. This new legislative framework, aligned with the community objectives, wants to promote the transition of the territories towards more sustainable models, allowing the regions to support their own regional strategies (as has happened in the case of the Canary Islands, Catalonia or Extremadura, although many more already have specific laws in different phases such as Aragón, CLM, CyL, Galicia, Madrid, Murcia or Navarral).

Although the Plan has a multidisciplinary approach, a special planning and monitoring of five key sectors has been carried out:

1. Construction
2. Agrofood
3. Industry
4. Consumer goods
5. Tourism

Taking the Commission’s Action Plan as a reference, the lines of action on which the policies and instruments of the Spanish Circular Economy Strategy will focus are the following:

1. Production
2. Consumption
3. Waste management
4. Secondary raw materials
5. Water reuse

This last axis is incorporated as an individual axis due to the importance of water in the Mediterranean arc. Being an essential element, it has been decided to separate in order to give it a specific treatment beyond the obtaining of secondary raw materials and its special impact on the Spanish economy. In addition, with a transversal character, the following three points are included in the 2018-2020 Action Plan: Awareness and participation; research, innovation and competitiveness; and employment and training.

SPAIN CIRCULAR 2030: INSPIRED IN EUROPE

Figure 2. Comparison of the European Commission’s Plan “Close the circle: an EU action plan for the circle economy” and the “Spanish Strategy for the Circular Economy. Spain 2030”

AREAS OF ACTION

AXES OF ACTION

Source: Close the circle: The business case of the circular economy.
Horizon 2020, the Framework Program for Research and Innovation of the EU (2014-2020), contemplates the financing of research and innovation activities in the different areas of the Circular Economy. In the period 2018-2020, the new work program maintains this priority focus, allocating 940 million euros to research and innovation activities in Circular Economy. Recently, he has selected 10 European projects within the framework of H2020, centered on the circular model, with a funding of € 793M. For the 2018-2020 period, a budget of more than 1,300 million euros is available, with a focus on sustainable food availability, rural development and blue growth, of which 253 specifically fit in the field of the circular economy. The Commission also launched the Horizon 2020 SCREEN project in February 2018 to promote the transition to the circular economy in the EU regions in the context of the smart specialization strategy. The initiative aims to develop an EU reference framework to establish operational synergies between Horizon 2020 and the European Structural and Investment Funds related to the circular economy, which may represent an opportunity to finance projects in rural areas.

**SUPPORT A SUSTAINABLE ECONOMIC MODEL IN FIGURES**

The scenarios and projections made indicate that by 2030 the Circular Economy can generate a profit of 1.8 trillion euros in the European Union as a whole, which is 0.9 trillion more than the current linear economy model. The Circular Economy, in addition to greater security in the supply chain, presents numerous opportunities for companies, such as the emergence of new lines of business and services, as well as a reduction in inputs and raw materials, a reutilization of the waste produced and lower costs of managing them. In this regard, the European Commission notes that the Circular Economy will not only have environmental benefits associated with the proper management of waste, the protection of soil, water, air, or climate, but will provide economic benefits and associated social benefits. The Commission estimates a saving in raw materials by the industry of 600,000 million euros (8% of the annual turnover of the EU in 2015). Likewise, it is estimated that the creation of employment represents around 580,000 new jobs associated with the new model, of which 30% is associated with full compliance with EU regulations on waste, but also associated with eco-innovation.

**CIRCULAR ECONOMY IN FIGURES**

- Savings of 600 billion euros for EU companies, equivalent to 8% of their annual turnover.
- Creation of 580,000 jobs.
- Reduction of EU carbon emissions by 450 million tons by 2030.

**CHARACTERISTICS OF A STRICTLY CIRCULAR ECONOMY**

1. **Design without waste**
Waste does not exist when the biological and technical components (or “materials”) of a product are designed to adapt within a cycle of biological or technical materials, and are designed for disassembly and retrofitting. The biological materials are non-toxic and can be easily composted. The technical materials - polymers, alloys and other artificial materials - are designed to be reused with minimum energy and maximum quality retention (while recycling, as is commonly understood, causes a reduction in quality and returns to process as raw material).

2. **Increase resilience through diversity**
Modularity, versatility and adaptability are highly appreciated characteristics that must be given priority in an uncertain and rapidly evolving world. Diverse systems with many connections and scales are more resilient to external impacts than systems built simply to maximize efficiency and performance with extreme fragility results.

3. **Work towards the use of energy from renewable sources**
Systems should try to function fundamentally from renewable energy, which would be possible because of the reduced energy values required by a circular restorative economy. The agricultural production system works from the current energy of the sun, but significant amounts of fossil fuels are used in fertilizers, agricultural machinery, processes and through the supply chain. More integrated systems of food and agriculture would reduce the need for fossil fuel-based inputs and would take more advantage of the energy value of by-products and manures.

4. **Think of “systems”**
The ability to understand how the parts within a whole influence each other and the relationship of the whole with the parts, is fundamental. The elements are considered in relation to their environmental and social contexts. Although a machine is also a system, it is clearly strictly limited and assumed to be deterministic. Systems thinking usually refers to the vast majority of real-world systems: they are not linear, they have great feedback and they are interdependent. In these systems, imprecise starting conditions combined with feedback frequently produce surprising consequences and results that are often not proportional to the input (continuous feedback or “no buffering”). These systems can not be managed in the conventional “linear” sense, but require greater flexibility and more frequent adaptation to changing circumstances.

5. **Think of “waterfalls”**
For biological materials, the essence of value creation is the opportunity to extract additional value from products and materials by cascading them through other applications. In biological decomposition, either natural or in controlled fermentation processes, the material is broken down into phases by microorganisms, such as bacteria and fungi, which extract the energy and nutrients from the carbohydrates, fats and proteins found in the material. For example, moving from the tree to the furnace deprives the value that could be obtained through a cascading of phases, through successive uses such as wood and wood products before their deterioration and eventual incineration.

Source: MAPA

Source: Ellen MacArthur Foundation
LOCAL ACTION GROUPS AS DYNAMISERS OF THE CIRCULAR ECONOMY

Reusing the oceans

Upcycling the Oceans project (UTO) of Ecoalf collects the garbage that is destroying the oceans and converts it into high quality yarn to produce fabrics and products, thanks to the support of the fishermen. As a result of this project, Ecoalf has created a new filament 100% recycled, which is made of plastic bottles collected from the bottom of the Mediterranean. The project has achieved a 100% recycled polyester filament that provides high technical quality and textures without using additional natural resources. In this way, they manage to minimize the use of natural resources, the use of water supply, carbon emissions and energy consumption. No waste is generated during thread production and they manage to improve the preservation of marine life and the environment. The need to replicate the project around the world to obtain greater quantities of raw material. At the moment this occurs in Spain and Thailand (5 islands).

The Circular Laboratory

Ecoembes opened in 2017 a pioneering innovation center in Europe: TheCircularLab, a laboratory that, under the parameters of the circular economy and through collaborative research, focuses its activity on the study, testing and development of best practices in the field of the containers and their subsequent recycling. A project in which Ecoembes will invest 10 million euros for 2020 and which, in a first phase, will mean the creation of 40 jobs in situ and more than 200 through entrepreneurship ecosystems. The project aims to be an international benchmark in the field of circular economy, and wants to turn the region into a large center of experimentation on a real scale with the aim of developing new patterns that can be transferred to other areas of Spain or Europe.

From bottles to cars

Eko-REC is a Gipuzkoan company specialized in the recycling of PET, plastic material with which most of the water bottles and soft drinks are manufactured. They start with the post-consumer PET bottle to make products useful to the industry, ensuring environmental improvement and reducing CO2 emissions. Produce goods made of 100% recycled and 100% recyclable materials used for various purposes: the company converts 25,000 tons of PET per year into fibers to manufacture automotive components and sheets for trays in the food sector. In fact, the vast majority of car mats and trunk trays are made from recycled PET.

ONLINE RESOURCES
ON CIRCULAR ECONOMY:

Platform of European agents of the circular economy

[European Circular Economy Stakeholder Platform], of the European Commission and the European Economic and Social Committee (EESC), an open virtual environment aimed at reinforcing cooperation between networks of agents, facilitating the exchange of experiences and best practices on the economy circular of all sectors of activity.

Platform of the European circular economy industry

[European Circular Economy Industry Platform] whose objective is to make visible the work of small and medium enterprises and the industry in favor of the circular economy, as well as the challenges they face.

CIRCULAR ECONOMY STRATEGIES IN THE MEMBER STATES

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<td>Circular Flanders kick-off statement Regional plan for the circular economy, Brussels Capital Region</td>
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<td>Denmark without waste The Advisory Board for Circular Economy Recommendations for the Danish Government</td>
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<td>Roadmap towards the Circular Economy in Slovenia</td>
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<td>Leading the cycle – Finnish road map to a circular economy 2016-2025</td>
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<td>Towards a Model of Circular Economy for Italy - Overview and Strategic Framework</td>
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<td>A Circular Economy in the Netherlands by 2050</td>
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<td>Making Things Last: a circular economy strategy for Scotland</td>
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INCLUSIVE BUSINESSES, BASE OF THE PYRAMID AND SOCIAL ECONOMIES, UN SECTOR FOR EXPLOITING IN RURAL AREAS

Inclusive business can be a great economic opportunity for rural territories. They share a social approach with the so-called businesses in the Base of the Pyramid, but it differs from them because their nature is aimed at improving the living conditions of the people who participate in them, as well as in their final objective: to generate a lasting social impact. Inclusive economic activities seek to incorporate social groups at risk of social exclusion or low income in their activities, but without ceasing to seek profitability, while achieving a positive effect in all aspects of the business: from production and distribution, going through innovation in their methods. That is, generate sustainable economic and business models that multiply the social and environmental benefits in the spaces where this activity takes place. Companies and organizations that look for inclusive businesses do not have a restriction of size or capacity of income, which can be carried out by SMEs, large companies or multinationals, institutions, non-profit organizations...

As stated by the Business Observatory against Poverty, new information and communication technologies offer a field of special interest for its potential to promote inclusion and reduce gaps in access to multiple services and products for the most vulnerable groups. Technological advance opens a new era in the field of inclusive business and its development in the coming years is unimaginable. In addition, there is a growing awareness of the impact on the company to properly manage its relationships with vulnerable groups of interest. And, specifically, the benefit that arises if the company cares, manages and promotes the generation of social value, especially in dealing with the most vulnerable links in its value chain. Companies increasingly assume the idea that the generation of social value and the management of social risks associated with the value chain, will have increasing relevance for their own survival and will be more demanded by society.
TABLE / SCHEME

Characteristic factors of inclusive businesses

Commercial viability
Inclusive business models, by definition, pursue the economic benefit, always maintaining financial sustainability and with a clear objective towards self-sufficiency. Stay out of the economic dependency of the outside, although to achieve it, a longer term than traditional companies is needed.

Positive social impact on human development
An inclusive business model is aimed at generating a social impact that responds to social challenges, whether it is improving the income of low-income communities, improving access to basic goods and services (such as education, health, housing, water and sanitation, etc.) or contribute to achieving other Sustainable Development Goals. The term “inclusive” refers to the value or social impact that is generated by business activity and that benefits people, shares prosperity, especially with those who have barriers in their economic and social inclusion.

Environmental impact
An inclusive business model should not accept significant negative environmental impacts, since the link between environmental deterioration and the poverty condition of vulnerable groups is becoming more evident.

Transversal innovation
By their nature, inclusive business models must integrate innovation as a transversal axis of their management, whether in the design of products, distribution models or marketing processes. Inclusive business models must be in continuous process of revision and innovation, to overcome the challenges they will face.

Scalability
The commercial viability of an inclusive business is a condition for its scalability and expansion to other populations, and so that it can expand or replicate its activities, in benefit of the social impact sought.

Source: Observatorio Empresarial Contra la Pobreza


Article 2. Concept and denomination.
Social economy refers to the set of economic and business activities, which in the private sphere are carried out by those entities that, in accordance with the principles set forth in article 4, pursue either the collective interest of their members or the general economic interest, or social, or both.

Article 4. Guiding principles.
The entities of the social economy act on the basis of the following guiding principles:

a) Primacy of the people and of the social purpose over the capital
b) Application of the results obtained from the economic activity mainly based on the work contributed [...] and, where appropriate, the social purpose object of the entity.
c) Promotion of internal solidarity and with society.
d) Independence with respect to public powers.

BUSINESSES AT THE BASE OF THE PYRAMID, SUN STEP BEYOND THE SOCIAL ECONOMY

Businesses at the Base of the Pyramid (BoP), refer to the market oriented to segments of the population with the lowest income on the planet. The base of the pyramid is made up of two thirds of the world’s population, some four billion people, who live on less than $1,500 a year, the minimum that is considered necessary to maintain a decent life. For more than a billion people, roughly one sixth of humanity, per capita income is less than $1 a day.

The situation of extreme inequality reaffirms the fact that the less disadvantaged can not participate in the economy on an equal footing, even though they constitute the majority of the world’s population. Moreover, the projections of the World Bank affirm that the population of the BoP could reach more than six billion people in the middle of this century, because the demographic trends in the less developed regions, contrary to the rest of the world, tend to an increase in population. That is, companies and multinationals do not have this large market, despite being the largest in the world, because their potential consumers can not afford to buy their products and services. This situation is paradoxical, since the very momentum of constant growth of the companies is slowed down precisely towards the markets that have a greater number of potential clients.
THE BASE OF THE PYRAMID, AN UNEXPLORED ECONOMY

In the past, companies in the developed world have largely ignored the needs of population groups with fewer resources. Many of them have opted for the creation of low-cost services and products designed specifically for people with lower purchasing power. Low-cost cars, white brands, products with discounts... But these same services and products aimed at consumers with less possibility of spending in most cases are still outside the percentages of the population at risk of poverty.

As all reports say, the base of the pyramid is not based on an economic framework oriented towards large profit margins, but the benefits are generated through the volume and efficiency of the capital invested. It is possible that the profit margins obtained are considered low by standards, but the gains achieved through unit sales can be very high, modifying in an innovative way some aspects of the design, production, distribution process... In fact, unlike what happens with the vast majority of conventional business investment strategies, in the case of businesses at the base of the pyramid, no company can work independently, but creating synergies through different actors: local governments, NGOs, associations civilians, financial institutions, companies... This model requires a great contribution in innovation, technology, business and commercial models and management processes. The companies that want to be part of this new approach have to be willing to empower other local actors, innovate and experiment constantly, create a network of cooperation and cooperation among all those involved, and seek or create new sources of wealth and competitive advantage.

SOCIAL COMPANIES...
AN OPPORTUNITY FOR RURAL INNOVATION?

Although BoP initiatives are usually associated with developing countries, this philosophy is beginning to be introduced into economies around the world because of the enormous possibilities it offers. First, because poverty is not exclusive to the least developed countries: in the United States, more than 45 million people [15% of the population] live in poverty [the number has increased since the beginning of the 21st century]; in Japan, 16%; while in the EU, close to 120 million people (~1 out of every 4) are at risk of poverty or social exclusion. Therefore, businesses at the base of the pyramid are also finding their fundamental purpose in more developed countries, which coexist daily with poverty. On the other hand, this philosophy could serve to promote social or sustainable initiatives located in especially depressed areas, as in the case of many rural areas; These areas could take advantage of many of the lines of action of BoD initiatives carried out in less developed countries to reverse the problems derived from depopulation.

Therefore, just as the base of the pyramid represents a "gray area" for large companies, untapped from the economic point of view, rural areas could also be virgin terrains for innovation and the implementation of disruptive initiatives, which are responsible to develop the socioeconomic fabric while giving answers to local challenges.

Therefore, the base of the pyramid represents a "gray area" for large companies, untapped from the economic point of view, rural areas could also be virgin terrains for innovation and the implementation of disruptive initiatives, which take charge of developing the socioeconomic fabric while giving answers to local challenges. The rural environment has less access to services, limited public transport conditioned by long distances and natural conditions, fewer job opportunities and training... The philosophy of social entrepreneurship acquires new connotations here, since the creation of a business ecosystem within the framework of an inclusive economy becomes a very powerful tool to improve the quality of life in rural areas, with fewer opportunities for development. Therefore, the creation of social / sustainable / inclusive businesses in rural areas, typical of businesses at the base of the pyramid, could eradicate or considerably mitigate many of the local problems and combat rural depopulation. The key to finding new market opportunities, with innovative approaches, is to create a double added value in companies and the population, so that they benefit mutually and that growth and profits are correlated between them through this sustainable and participatory development of the territories. A change of business mentality and economic paradigm is necessary in order to take advantage of the full potential of this social vision.
CHARACTERISTICS OF SOCIAL / SUSTAINABLE / INCLUSIVE COMPANIES

1. They are created to look for answers to existing social problems.
2. They have a sustainable structure: they are born to generate profits but they must not lose money.
3. When there are benefits, they will be reinvented in the company (investors recover the money initially contributed).
4. Focus on the consumer: companies define in advance to whom their product will be directed, how many and who will be their customers.
5. High quality: whenever possible economically, offer quality services and products at the same price.
6. Added value: although its objective is to provide sustainable solutions to existing problems, they provide indirect benefits for companies such as innovative solutions, image improvement, employee motivation...
7. Disruptive ideas: to maintain the quality of the services and products offered, innovation must be radical; it focuses on the consumer, not the product.
8. Motivation: the feeling of belonging and commitment increases among employees and participants in social initiatives.
9. Reputation: consumers show substantial changes in the perception they have of many companies and establish new bonds of trust and loyalty, especially at the local level.

Figure 16. Sectors with the greatest potential to develop inclusive businesses within the Spanish market

| GOOD PRACTICES |

Innovative social projects in rural areas

The smart city of Almeria of 1,600 inhabitants

Health and social services
Waste management and recycling Food
Hospitality, restoration and tourism
Agricultural production and fishing
Manufactures
Education sector
Commerce
Housing and construction
Logistics
Information and communication technology Energy sector
Financial sector
Leisure and art
Transport sector

The Municipality of Lubrin (Almeria) launched a free download app with the purpose of offering all the municipal information in a simple and agile way, encouraging the participation of citizens and promoting the town. In a direct and simple way the app facilitates access to the latest news of the municipality, bulletin boards, phones or spaces of interest. In addition to gathering the fundamental services of this locality of Almeria, its neighbors will have the Comunica-T section, a tool with which to communicate with the consistency and transmit any incident, complaint or suggestion, send an image or an exact location of the where there is a problem, gaining time for its solution.

I lend you my garage

The Renault Mobiliz is a good example that a social initiative often (but not always) expresses its value proposition as a solution to a social problem that customers have. The objective of the project is to solve transport problems for people without means. In the cities, Mobiliz works with the NGO Wimoov to find the cheapest form of mobility for workers with less access to services, be it the subway, buses or bicycles. However, in rural areas, project clients need access to an affordable car and affordable maintenance, which Mobiliz provides through a network of “solidarity garages”. Network participants (garages owned or franchised by Renault) devote a portion of their time and resources to repairing damaged or broken automobiles for qualified customers at a nominal cost.

Low cost internet by local companies

New companies such as CorDECT in India and Celnicos Communications in Latin America are developing information technology and business models appropriate to the particular requirements of the base of the pyramid. Through shared access models (for example, Internet kiosks, wireless infrastructure and focused technology development, companies are drastically reducing the cost of being connected. For example, voice and data connectivity generally costs companies $850 to $2,800 per line in the developed world; CorDECT has reduced this cost to less than $400 per line, with a goal of $100 per line, which would make telecommunications available to virtually everyone in the developing world.

Water purification in a sustainable way

Aquaphytex is a pioneering company from Extremadura and leader in Europe in the biotechnological production, installation and maintenance of plant material for use in sustainable wastewater treatment systems. At the international level, it is part of the New World Culture of Water Management movement, which promotes the sustainability of the planet’s limited resources, and collaborates periodically with the Paris delegation of the United Nations Industrial Development Organization (UNIDO) in technology transfer activities. Aquaphytex’s business model is based on the production of biotechnological material, installation and maintenance of macrophyte plants, which are used for the treatment of wastewater.

The solidarity opticians

Essilor, a French optics, launched, within the framework of the Action Tank initiative, launched a social business, Optique Solidaire. Working with all partners in the company’s supply chain, including insurance companies, the company managed to reduce the cost of a pair of high-quality reading glasses to 30 euros for pensioners with less income from 230 to 300 euros. After spending 15 months working on the offer and three months doing an experiment in Marseille, Optique Solidaire has built a network of more than 500 “solidarity stores” throughout France. They are opticians who volunteered to spend part of their time selling glasses with a very small profit margin. The target customers (people over 60 with minimum resources) receive a receipt and a letter from their insurance company informing them about the offer and providing the address of the closest participating opticians.


Figure 16. Sectors with the greatest potential to develop inclusive businesses within the Spanish market

Health and social services
Waste management and recycling Food
Hospitality, restoration and tourism
Agricultural production and fishing
Manufactures
Education sector
Commerce
Housing and construction
Logistics
Information and communication technology Energy sector
Financial sector
Leisure and art
Transport sector

65 70 75 80 85 90

Fuente: Observatorio Empresarial Contra la Pobreza
RURAL, DIGITAL... INNOVATIVE TERRITORIES

Rural areas across Europe face very particular challenges. With regard to urban territories, small rural municipalities have worse access to basic public services such as health systems, commerce, communications, transport... besides having to face depopulation and all its consequences, such as the exodus of young people to the cities, the masculinization or the aging of its population, just to mention some of the obstacles to its development. As the European Commission affirms, the most relevant change between the factors that traditionally characterized rural areas is that agriculture has ceased to be the main productive sector in a large part of Europe's rural areas. In almost all European rural areas, the primary sector now represents less than 10% of total employment, and in a third of them its relative importance is less than 5%. It is also an old-age employed population, since a quarter of holders of agricultural holdings are over 65 years old. In many of these areas, the only way to maintain the economic and social vitality of this agricultural medium is, therefore, the diversification of the economic fabric, mainly by the services sector, which is not only the main source of employment in the region in most of the rural areas, as in urban areas, but is also the sector that expand most rapidly.

As stated in the Declaration of Cork 2.0 (‘A better life in rural areas’), it is necessary for legislators, administrations and governments to recognize more the potential of rural areas to offer innovative, inclusive and sustainable solutions for current and future social challenges, such as economic prosperity, food security, climate change, resource management, social inclusion and the integration of migrants.

The same document states that rural communities must participate in the knowledge economy in order to make the most of advances in research and development. For this, rural companies must have access to appropriate technology, the latest in connectivity, as well as new management tools to
Traditionally, one of the aspects that characterize rural areas is their capacity to transform problems into solutions, and to respond to the challenges presented to them in a creative way. Innovation has become one of the great tools to improve the socioeconomic possibilities of rural territories. Rural areas can be perfect places for experimentation and the implementation of disruptive and innovative processes. The rural environment is a perfect laboratory of ideas and a test bed for the implementation of management methods that go beyond the norm. In fact, the community policy for this new period is marked by the importance of innovation. In June 2018, the European Commission presented its proposal for the next Framework Program for Research and Innovation for the period 2021-2027, which will be renamed Horizon Europe, replacing the previous Horizon2020. The EC states that approximately two thirds of economic growth registered in Europe in the last decades have been a consequence of innovation, and it foresees that the investments of the Union in R & I will lead to the direct creation of up to 100,000 new jobs in activities related to R&I during the «investment phase» [2021-2027].

Horizonte Europa, with a budget of 97,600 million euros, is the largest funding program for research and innovation launched in the European Union. The new Research and Innovation Framework Program will have 10,000 million euros to finance research and innovation in agriculture, rural development and bioeconomy. Another of its objectives will be to promote the acceleration of the process of digitalizing rural life, for example by expanding access to broadband in rural regions, to improve the quality of life in these regions and to contribute more to achieving greater competitiveness of European agricultural production.

Source: European Commission/ES2020
RURAL RENAISSANCE: RESEARCH AND INNOVATIVE PROJECTS

In the framework of Horizon 2020, still in force until the new Horizon Europe program is implemented, the entities and actors working in rural areas, such as the Local Action Groups, have access to the "Rural Renaissance" call (H2020-RUR-2018-2020), aimed at improving the natural, social, cultural and economic potential of rural areas (the term "rural" is understood in a broad sense and also includes peri-urban, remote, mountain and coastal areas). The first call was closed in September 2018, while the new one ends on January 23, 2019. According to the Commission, these funds will serve to boost economic development, ecosystem services and business innovation, through strategies of diversification and modernization, improving governance models, supporting innovative food value chains and non-food value chains, and capitalizing on local assets, including natural and cultural human capital. It also wants to serve to develop synergies among the main economic sectors of rural areas, strengthen sustainable development using territorial assets, support the development of the circular economy in rural areas or develop a comprehensive approach to digitalization as a facilitator of the rural economies. The activities under the so-called RUR will be fundamental to implement the Focus Areas “Digitizing and transforming the European industry and services” and “Connecting the economic and environmental gains: the Circular Economy”. In addition, to a lesser extent, they will contribute to the Focus Area “Building a low carbon and climate resilient future”.

"CONNECT EUROPE" MECHANISM

The Connect Europe Mechanism (MEC) is a key EU funding instrument to promote growth, employment and competitiveness through specific investments in infrastructure at European level. It supports the development of interconnected, efficient, sustainable and high-performance trans-European networks in the fields of transport, energy and digital services. CEF investments complete the missing links in Europe’s energy, transport and digital backbone network. In addition to the grants, the CEF offers financial support to projects through innovative financial instruments, such as guarantees and project bonds. These instruments create a significant influence on the use of the EU budget and act as a catalyst to attract more funds from the private sector and other public sector actors. One of the key priorities of CEF is to allow and strengthen synergies among the three sectors. Actions in all sectors can allow costs or results to be optimized by combining financial, technical or human resources, which is an opportunity for rural areas.

RURAL... AND DIGITAL TERRITORIES

The Digital Agenda for Europe maintains that the digital economy grows seven times faster than the rest of the economy and much of this growth is given by broadband Internet. The development of high-speed networks today has the same impact as the development of electricity and transport networks a century ago. The data published by the European Commission indicate that, although more and more people are connected, almost 50% of the population suffers from insufficient digital knowledge for the work environment of today. This deficiency is maintained at a time when specialists in information and communication technologies (ICT) are needed more than ever and jobs are created in this sector much more quickly than in others. Despite European efforts and programs, connectivity data in Europe is hampered by rural areas, where full coverage of broadband technology and digitalization are still a challenge to be achieved. This may be the biggest obstacle to the conversion of small municipalities into innovation centers, but it is a technical difficulty that can be overcome with political and business will, as other examples have shown in the rest of Europe.

THE DIGITAL ECONOMY IN FIGURES

- For every two jobs lost “in the real world”, the internet economy creates five.
- The EU digital economy grows 12% per year. It is already greater than the Belgian national economy.
- In the EU there are more mobile telephony subscriptions than people.
- The European sector of information and communication technologies employs 7 million people.
- It is estimated that half of the increase in productivity is due to investment in information and communication technologies.

Source: Europe Digital Agenda
https://europa.eu/european-union/file/1501/download_es?token=3l7D0Fil89
INTELLIGENT RURAL TERRITORIES, 
AN EFFORT TO BREAK THE URBAN / RURAL DICOTOMY

The National Plan for Intelligent Territories (PNTI 2017-20) promoted by the Ministry of Industry and Commerce for the first time includes a reference to the Smart Rural Territories. But, what characteristics do they have? An “Intelligent Rural Territory” is the socioeconomic area formed by a network of local entities characterized by the predominance of the primary sector and its derived activities, which under the principles of efficiency and effectiveness, cooperate among themselves to improve sustainability in its three aspects; they are, in turn, innovative territories, capable of building their own competitive advantages in relation to their environment, within the framework of a complex, global and interrelated world. Likewise, intelligent territories pursue a balance between the aspects of economic competitiveness, social cohesion and sustainability.

WHAT ADVANTAGES DOES THE IMPULSE OF THE INTELLIGENT RURAL TERRITORIES CONTRIBUTE?

- Attract population / telecommuting, hubs....
- Improvement of living conditions, more complete and attractive
- Access to basic services via telenatics: shorten “distances”
- New business opportunities, both for the population and for urban areas
- Productive models [in all sectors] that are more sustainable and efficient
- Application of new techniques of intelligent agriculture and precision
- Improves health alert networks, early detection.
- Intelligent supply / demand adaptation.

Source: Plan de Territorios Inteligentes MINETAD / Comité Técnico de Normalización de Ciudades Inteligentes de AENOR (AENOR/TCN18) / Fuente: D.O. Desarrollo rural y Política Forestal (MAPA)

DECLARATION OF YEAR “DIGITALIZATION AND INTELLIGENT RURAL TERRITORIES: FOR AN INTELLIGENT, DYNAMIC AND CONNECTED RURAL WORLD”

Digitization and the promotion of smart rural territories are key to the future of the economy, society and the environment. It is the main conclusion drawn from the Declaration of Añora, a document prepared by experts in the fields of development and rural areas, digital divide, connectivity, training, smart peoples, entrepreneurship, business and employment in the smart rural environment, and policy makers public, protected by the Ministry of Agriculture and Fisheries, Food and Environment. The Declaration makes clear that the revitalization of rural areas through social and digital innovation can not only contribute to the leadership of a competitive and sustainable agri-food sector economically, socially and environmentally, but also allows to fix and attract people to an environment attractive rural area, generator of wealth and quality employment, and therefore impacts all sectors of action in rural areas, producing an integrated and transversal development. It must be borne in mind that the digital transformation of rural environment, and of the primary sector as the main -by no means exclusive- economic, social and environmental motor of the rural environment, is necessary, but not sufficient to face the demographic challenge to which the rural areas are facing. It is a key tool to consolidate population, contribute to economic development and bring the Administration closer to citizens. There is enough developed technology, whose value can contribute to mitigate depopulation. The new digitization paradigm is key to promote teleworking and the improvement of services provided to companies and citizens in areas such as education, health, care for the elderly, mobility, energy, etc. Also as a reducer or eliminator of the digital divide between rural and urban and between large and small companies. For this, it is also necessary to make public policies of equal opportunities between urban and rural citizens and eliminate or reduce existing technical, legislative, economic and training barriers.

The digitization agenda of the agro-food and forestry sector and the rural environment, therefore acquires a strategic importance as part of the solution to the depopulation and the promotion of intelligent communities and territories, which ensure that our rural territories remain populated, alive and generating wealth and quality employment permanently. These are your highlights:

1. Multidisciplinarity
Building complex, systemic, adaptive, efficient, competitive and sustainable territories is a multidisciplinary and transversal task, as well as addressing the challenge of the territorial challenge.

2. Innovative talent
It is necessary, not only to value innovative talent in rural areas, but to attract and retain it, to offer job opportunities or entrepreneurship, and thus set the population in rural areas, especially among young people.

3. Cooperation
Collaboration and cooperation between Public Administrations at different levels, in particular from town halls, county councils and CCAA, as well as with Universities, organizations and companies of the agri-food and technology sector, and Local Action Groups and civil society are key to develop and execute a development strategy for the territory.

4. Governance
Governance, resulting from co-participation and co-leadership, is at the center of the solution.

5. Digital training
It is fundamental to promote the literacy and digital training of all society, especially adults, and in particular the recycling of teachers in new technologies.
6. Interoperable data
It is necessary to have accessible, reliable and interoperable data. The culture of cooperation and collaboration in the shared use of data generates value in decision making and contributes to the increase of competitiveness, profitability, sustainability and improvement of the environment.

7. Telecommunication networks
It is necessary to implement coordinated public-private policies to achieve the adoption and use of broadband in rural areas. Local authorities should assist in the deployment of telecommunication networks.

8. Public Services 4.0
The public services to which the Information and Communication Technologies can be applied must be defined and converted into Public Services 4.0: proactive and personalized, with the aim of facilitating the life of the citizens both in the procedures and in the benefits.

9. Smart villages
Smart villages, where the rural community takes the initiative to reach practical solutions and new opportunities in the face of challenges, must promote digital innovation together with social innovation, which allow the development of a process that is based, among other aspects, in the development of digital infrastructure, digital public services and the training of the population in digital skills.

10. European financing
Rural territories must be able to identify, study, coordinate and take advantage of holistic and comprehensive multiple and varied European funding tools.

11. Facilitating agents
The rural environment must have facilitating agents capable of supporting, leading, managing and multiplying the projects and empathizing with the needs of new settlers.

FINANCING INNOVATIVE IDEAS

Innovation based on technology, digitalization and megatrends (such as artificial intelligence and the circular economy) offer huge opportunities, but they also create new challenges. It is at the same time a unique opportunity for rural territories, which can put these new trends into practice and take advantage of the technological and disruptive conjuncture that we live in today. In its effort to place innovation in a predominant place in the near future, the European Commission has renewed the initiative “STAIRS OF EXCELLENCE” in order to provide help and individualized technical knowledge to regions that have lagged behind in terms of innovation.

According to the Commission, this initiative will help regions to develop, update and refine their smart specialization strategies -that is, their regional innovation strategies based on specialized areas of competitive strength- even before the start of budget period 2021-2027. This initiative will also help them to identify which resources of the Union are suitable to finance innovative projects and to team up with other regions with similar strengths to create innovation clusters.

Following the Commission’s proposals on the future cohesion policy and the new “Horizon Europe” program (which we have discussed above), and in line with the renewed agenda of the Commission for research and innovation, the European authorities want This “STAIRS OF EXCELLENCE” is another way of giving new tools to European regions to prepare for the future with innovation strategies that have the support of Union funds in the next 2021-2027 period.
The initiative, coordinated by the Joint Research Center, will offer the regions four main types of aid:

1. Experts from the Commission and external experts will help regions to detect what aspects they can improve in their smart specialization strategies, in their regional innovation systems, quality of public service, efficient relations between the world of companies and the scientific world, and favorable environments for companies, and in the way they cooperate with other regions in research and innovation issues.

2. The experts will also make it easier to take advantage of companies and in the way they cooperate with them thanks to the synergies between the world of companies and the world of research and innovation. For example, Horizon Europe, with its funds of the Union in the period 2021-2027.

3. The Joint Research Center will help detect and eliminate regional bottlenecks in relation to innovation, for example, the lack of interaction between the world of local and academic businesses or a low level of participation in the short time of capacity as generators of dynamization of rural territories.

4. The Joint Research Center will also organize networking opportunities and workshops for the regions to meet and exchange good practices in the creation of regional innovation strategies. This will also facilitate the development of partnerships for interregional investments in innovation.

REPORT PREPARED WITH DATA FROM

European Commission


EU funding opportunities related to innovation, food and forestry

Innovative Rural Regions: The role of human capital and technology, OECD

Map for a European Innovation Council

The European Innovation Association (EIP) aims to accelerate innovation in the agricultural sector and the rural environment, to achieve a competitive agriculture that produces more with fewer resources and less environmental impact. Therefore, this initiative aims to improve the exchange and transfer of knowledge from the field of research to practical application, the areas of agricultural productivity and efficiency in the use of resources, bioeconomy, biodiversity... The main actors of the implementation of the EIP are the operational groups. These groups will be formed by the interested parties in solving or addressing a specific problem or taking advantage of an opportunity through knowledge and innovation, and will be created on their own initiative. The group's mission is to define a concrete project that must act to try to solve a problem or take advantage of a given opportunity in the agrarian, forestry, and food sectors. Many Local Action Groups are already participating and leading these Groups, which have demonstrated in a short time their capacity as generators of dynamisation of rural territories.

THE EUROPEAN INNOVATION ASSOCIATION AND THE INNOVATION OPERATIONAL GROUPS

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3. Case studies of good practices in the field of adaptation to demographic changes
ANALYSIS OF MEASURES AND STRATEGIES AGAINST DEPOPULATION, AGEING POPULATION AND THE DEMOGRAPHIC BALANCE IN JAPAN

Depopulation and demographic aging in Japan are not a new problem for the country, which has been suffering its consequences for more than half a century. However, the worst predictions were fulfilled in 2008, when for the first time it registered a negative demographic balance. Since then, the Asian country begins to develop urgent measures at the national level in order to tackle the decline of its population, which is also among the oldest in the world.

In 2015, the population of Japan was below 127 million. By 2040, it is expected to fall to around 110 million and, by 2050, it will be around 88 million. In the year 2000, the demographic percentage that lived in urban centers was 78%, while in 2015 it had already reached 93%. Only in the "Greater Tokyo" is it estimated that there are up to 36.13 million inhabitants.

Source: National Institute of Population and Social Security Research in Japan (IPSS)

In 2014, the book "The Disappearance of the Regions of Japan", a detailed demographic report of former Minister Hiroya Masuda prepared with a prestigious cabinet of experts, showed that half of cities, towns and villages throughout Japan were in danger of disappearing in 2040 according to the official data of the National Institution of Population and Social Security Research of the Government (a situation very similar to Spain). They called them shometsu kanosei toshi, "municipalities at risk of extinction". The book had a huge impact and opened the eyes to the authorities and public administrations before the seriousness of the situation that was posed. The report made several recommendations in order to try to correct the demographic balance, but it focused especially on two: a drastic increase in the birth rate and a strong economic boost from the peripheral and rural regions of Japan. The population pyramids that it uses reflect that there is a massive exodus of young people to cities.
Rural exodus is having irreversible consequences in the Asian country. A research project of the Tokyo Foundation estimated that in the next 30 years the total area of unclaimed land could amount to 310,000 hectares, 8.2% of the total area, while approximately 10% of Japanese farmland is currently abandoned, and that figure will surely increase even more. It also includes a survey by the Home and Communications Minister in which it counted 8.2 million vacant homes throughout the country at the end of October 2013, 13.5% of all housing units.

In municipalities with less population, the rate of population decline will be higher. By 2050, around 20% of current residential areas are expected to become nonresidential. The rate of increase of the elderly population will accelerate even further, starting in local areas, while the rate of older people will increase drastically in large cities during this period.


Depopulation and aging had already lead to a strategy of decentralization and rationalization of its administrative and governmental structures, which led to a trend towards mergers of municipal entities until the number of municipalities was reduced by 45%, from 3,229 to 1,788 between 1999 and 2008 (Rausch 2012: 187; Yokomichi 2007: 4-7). This same line led to a reorganization and centralization of several essential services, as well as the abandonment and closure of different buildings for public use (schools, hospitals ...). However, it would not be until well into the 21st century, between 2014 and 2015, when日本 developed for the first time a great road map in which the demographic challenge was included as one of its pillars. This long-term roadmap against depopulation was reflected in the so-called "Comprehensive strategy for overcoming the decline of the population and the revitalization of local economies in Japan" and the creation later of the Ministry of Regional Revitalization. In this way, the country linked its future economic development to a successful management of the demographic challenge and the promotion of its regions. According to recent words of Prime Minister Abe, the population decline is one of the great challenges facing the country and the revitalization of local economies will be one of the pillars of the Japanese economic strategy until 2020.

INTEGRAL STRATEGY TO OVERCOME THE DECLINE OF POPULATION AND REVITALIZE THE LOCAL ECONOMIES IN JAPAN

The Japanese government has tried to implement since 2015 a great national strategy to combat the decline of its population and rural depopulation. In the first year, the measure for "regional revitalization" was funded with 1.4 trillion yen (10,600 million euros). Since then, some of the proposed measures have been implemented, with some obstacles at the local level. The regional revitalization strategy of the Abe administration includes in its regulations a mechanism to offer autonomy to local initiatives. The national government offers grants to local governments that develop feasible revitalization plans to address issues such as supporting the upbringing of children and helping people who wish to resettle in rural areas. It has already allocated 560 trillion yen (4.2 trillion euros) in these grants. However, many media claim that the strategy is not being widely accepted by local administrations because their plans must conform to the rules established by the State and must undergo a strict examination. In any case, it was the first time that a referent such as Japan, the third largest economy in the world, has established an ambitious national economic plan to face the demographic challenge, which is a first step in accepting that the population balance adds to others challenges that societies face in this century.

5 PRINCIPLES OF THE INTEGRAL STRATEGY

Instead of using previous measures previously used for the evaluation of policy measures (vertical division, nationally uniform, pork barrel *, superficial, short-term), this time the measures will be evaluated on the basis of five principles:

Autonomy.
Future perspectives.
Regional characteristics
Frankness.
Orientation to results.
STRUCTURE OF THE NATIONAL AND LOCAL MEASURES, AND ESTABLISHMENT OF A STRATEGY TO PLAN-MAKE-VERIFY-ACT

National and local governments will put in place a structure to formulate and implement five-year strategies, and establish a framework to verify and improve strategies according to key performance indicators. All prefectures and municipalities will make an effort to formulate and implement a “Regional Population Vision” and a “Regional Integral Strategy” from 2015. Governments will establish clear objectives and key performance indicators and will improve them through the methodology Make-Verify-Act. This performance-based approach has been supported by the “Regional Economic Data Analysis System”, which local governments should use to dump all the data of their projects and initiatives, as well as the results obtained from each one, with the objective of to analyze the effectiveness of the investments and the ideas put in place at regional level and to take advantage of the full potential of the big data and implement these measures in the future.

The Strategy includes four major objectives associated with measures to address the demographic challenge, associated with the strong process of depopulation of many of its regional areas in addition to the aging of the population.

MEASURE 1. Generate employment in regional areas

MEASURE 2. Create a new population flow towards regional areas

MEASURE 3. Fulfill the hopes of the new generations regarding marriage, children and parenthood

MEASURE 4. Create regional areas adapted to the times, safe environments to live and cooperation between areas

MEASURE 1
GENERATE EMPLOYMENT IN REGIONAL AREAS

Goals
- Create employment for young people in regional areas: a total of 300,000 in five years until 2020.
- Increase the proportion of young people with stable employment.
- Increase the proportion of jobs among women.

Package of measures
Improve the competitiveness of regional industries (cross innovation measures between companies)
- Exhaustive support for start-up businesses.
- Support key companies that play a very important role in the region.
- Encourage foreign companies to make direct investments in the interior of regional areas.
- Establish a general structure of support combining industry and financial sector.

Strengthen the competitiveness of regional industries (specific measures for each sector)
- Revitalize the service industry and boost added value.
- Convert agriculture, forestry industry and fisheries into a growth sector.
- Develop local tourism and use local resources.

Establish a structural framework to encourage the return of population to regional areas
- Create and manage “regional work support centers”.
- Promote the return of professional workers to regional areas.
MEASURE 2
CREATE A NEW POPULATION FLOW TOWARDS REGIONAL AREAS

Goals
- Stop the current influx into the Greater Tokyo Area of more than 100,000 people a year and achieve a balance in the movement of population between that large urban area and the regional areas.
- By 2020, increase the leak from the Greater Tokyo Area to regional areas by 40,000 people.
- By 2020, decrease the influx of 60,000 people from the regional areas to the Greater Tokyo Area.
- One of the key indicators to achieve 80% of new graduates began working within their own prefecture.

Package of measures
Promote migration to regional areas
- Establish a “community center on migration information” and organize a structure that provides information on how to settle in regional areas.
- Establish a “National Council for Migration to Regional Areas” to promote migration to these areas and second homes.
- Consider a Japanese version of nursing homes in community.

Encourage relocation to regional areas
- Promote regional brands.
- Relocation of government institutions to regional areas.

A 5-year revitalization strategy is planned for regional universities.

MEASURE 3
FULFILL THE HOPES OF THE NEW GENERATIONS REGARDING MARRIAGE, CHILDREN AND PARENTHOOD

Goals
- Make it possible for new generations to search for marriage and fatherhood without anxiety.
- Improve the proportion of stable work for women after the birth of their first child.
- Increase the rate of people who want to get married and couples who want to have a certain number of children.
- One of the main indicators would be to ensure that the percentage of women who continue working when they have their first child will increase to 55%.

Package of measures
Implement measures for the employment of young people, setting in motion the “Acceleration Project to Achieve Employment”.

Support marriage, pregnancies, births and parenting.
- Establish a “Comprehensive Support Center for Families with Children,” and guarantee perinatal care.
- Implement new systems for children and their upbringing, and promote support to families with several children and homes with several families that live in a single house or in a close manner.
- Develop licensing systems for child care, reform excessive hours of work and support companies that innovate in personal and work balance.

Harmonize family and work life [equilibrium work-personal life] (“reform of labor trends”).
MEASURE 4
CREATE REGIONAL AREAS ADAPTED TO THE TIMES, GENERATE SAFE ENVIRONMENTS TO LIVE AND PROMOTE COOPERATION BETWEEN AREAS

Goals
• In rural, mountainous or isolated areas, create measures to ensure and revitalize communities, through providing services that meet the daily needs of the population, such as cleaning or food delivery services, associated with population decline.
• Establish regional "small centers" and promote regional cooperation.
• One of the main indicators would be to ensure that 150 municipalities have created optimized plans for their territories.

Package of measures
Form and support “small hubs” (multigenerational and multifunctional exchange)
Create economic and lifestyle areas in regional cities through regional cooperation.
• Create “compact cities” and transport networks with the surrounding areas.
• Establish “connected central urban areas”.
• Promote the formation of "areas of independence and settlement".
Ensure a safe way of life to live around major cities.

Strengthen the management of existing housing resources based on population decline.

Source: Overcoming Population Decline and Revitalizing Local Economies: Japan’s Long-term Vision and Comprehensive Strategy

MORE CONCRETE MEASURES THAT HAVE BEEN IMPLEMENTED (THIS IS INTERESTING BECAUSE IT IS NOT OFFICIAL, IT IS WHAT THE MEDIA SAYS WITH CURRENT INFORMATION OF WHAT HAS BEEN DONE AND WHAT IS NOT)
• One of the measures that the Administration has introduced to reverse the trend and create jobs outside the capital area is to offer tax incentives for companies that move their headquarters out of the large urban region of Tokyo. At the end of August 2017, only 17 companies have requested it; in fact, the number of companies moving to Tokyo outnumber those that moved in recent years.
• Many local areas have focused on attracting new residents through improvements in services, such as the creation of schools, new community centers and medical facilities, but at the same time they are competing among them. In the Minamisoma region, for example, the government has set up a new technology park that wants to have a global reach, where new companies and start-ups can establish their business thanks to low rental offices and the establishment of an academy of business for people interested in entrepreneurship and the creation of new companies.
• The Administration’s efforts to decentralize and relocate different functions and official buildings of the Tokyo national government -to be an example to private sectors- have made little progress. The only exceptions have been the decision to move the Agency for Cultural Affairs -with more than 250 staff, or about 70 percent of its staff- to Kyoto for the fiscal year 2021, and the transfer of a section of the Agency of Affairs of the Consumer, with about 50 workers, to Tokushima in July 2017. The decision to move the last agency to Tokushima will be made in about three years.
• One of the measures included in the National Strategy to combat depopulation was to restrict the creation of new universities and associated university centers in large cities, especially in the urban area of Tokyo. However, this measure, considered on paper as a strategy to regulate the influx of more young people to the capital to attend school, has met with strong political opposition, as many warn that this law could restrict opportunities for young people in rural areas to study in Tokyo, also affirming that limiting enrollment capacity hinders the development of higher education institutions by not having all that potential talent.
• The local initiatives included in the strategy focused on rural return plans and the promotion of family and work-life balance and the raising of children, which can be promoted by local councils and regional administrations, have been endowed with a financing of about 4.2 billion of euros since they started up until 2017.

Sources: Can Anything Stop Rural Decline? - The Atlantic Slow regional revitalization – The Japan Times
CONSIDERATIONS ON DEPOPULATION IN JAPAN

- In municipalities with less population, the rate of population decline will be higher. By 2050, around 20% of current residential areas are expected to become nonresidential. The rate of increase of the elderly population will accelerate even further, starting in local areas, while the rate of older people will increase drastically in large cities during this period.

- An aging society with fewer children will negatively affect 1) the economy, 2) local communities and 3) social security and finances.

- It takes decades to get the birth rate to recover, as well as stop the decline, therefore, the prevention of population decline is a pressing problem.

HISTORY OF DEPOPULATION IN JAPAN

- In 1949, the “resolution on the subject of the population” was adopted by the plenary session of the Lower House. This resolution recognized that the population at that time was significantly surplus, and to decrease the surplus population, decided the dissemination of family planning (concept of birth control), research and preparation with respect to future immigration.

  According to the world population trend, more efforts must be made to stop the population increase.

- Report of the 1984 Population Council
  This report referred to the importance of promoting the participation of the elderly in various social activities, while a greater decrease in the birth rate is expected.

- Intermediate forecast in 1976: the population increase would continue and reach its peak in 2010.

- Intermediate forecast in 1981 and 1986:
  Population growth would peak around 2010, then the population is expected to decrease gradually, while the estimated long-term fertility rate would be 2.00 (estimated in the middle of 1986).

CONSEQUENCES OF THE DECLINE OF POPULATION

- Impact on the economy: the decrease in labor and consumption caused by the decline of the hand working.

- Impact on local communities: the rapid contraction of local economic societies in the areas rural areas and functional reduction in urban cities.

- Impact on social security and finances: the decrease in the number of workers who pay for social security will lead to difficulties in maintaining social security and impact towards fiscal consolidation. Impacto en la economía: la disminución de la mano de obra y el consumo provocados por la disminución de la mano de obra.

MAIN HISTORICAL CONCRETE MEASURES

1992: Application of the Child Care Licensing Law
1994: Establishment of the “Angel Plan”
1995: Creation of child care license benefits
1999: Establishment of the “New Angel Plan”
2003: Application of the Basic Law of measures to deal with a society whose birth rate has decreased
2004: The measure of the Cabinet “Scheme of measures against the declining birth rate” and Establishment of a “Plan to support the care of children and childhood”.
2008: The measure “New strategy for children who are not on the waiting list in the care centers diurnal”.
2010: The measure of the Cabinet “Vision for children and care of childhood”.
2012: Establishment of 3 events related to childhood and childcare
2013: “Emergency measures are adopted to overcome the decline and birth crisis”
2015: The decision of the Cabinet “Scheme of measures against the decrease of the birth rate” is approved

DEPOPULATION IN SWITZERLAND: A REGIONAL THREAT

Few European countries have experienced population growth as important as that of Switzerland in the last century. From the 60’s until today, the Swiss population has increased from 5 to 8 million, almost half. But, like other countries that have experienced a similar demographic dynamic, such as Spain or Ireland, they are also facing a problem of depopulation of their rural areas in the last decades. Depopulation is not considered a real problem at the national level, but it is beginning to show worrying signs in many rural regions. In addition to having increased the population due to immigration and the good level of births during the last decades, rural municipalities with a population density of less than 150 persons/km2 in three quarters of the cases have experienced an increase in the population between 1990 and 2000. However, at the local level there are cases of severe depopulation that are endangering the sustainability of many villages.

Although Switzerland is densely populated compared to most other OECD member countries, rural areas cover a large part of the country. The Swiss government has not yet taken specific measures at national level to combat depopulation, being at the moment a problem facing the most depopulated cantons of the country, especially those in the south. Therefore, the strategies to reverse the rural exodus and the depopulation of sparsely populated areas are currently an effort that is being promoted from the local levels. However, the government has been promoting a regional policy for more than half a century that clearly takes into account the particularities of the country and the importance of its rural areas (more than 80% of the territory is rural in nature and houses approximately 40% of the population).
The first measures were taken at the end of the 1940s to prevent the emigration of mountainous regions and to protect mountain agriculture. The measures were mainly of a financial nature, such as price guarantees and subsidies for complicated production conditions. Since 1970, a federal law supports the improvement of housing in the middle mountain areas of subsidies. Ten years earlier, in the mid-sixties, the Swiss parliament called for more support for mountain areas in order to address the depopulation that was then already becoming a problem. In response, on the proposal by a group of experts, the federal government established a general framework to sustain the economic development of mountain areas. This concept has been implemented since 1974 through various measures, which maintained the general objective of improving living conditions in mountain areas.

The following table summarizes the situation that defines rural municipalities in Switzerland, and that could be extended to many parts of the world. The data shows that the smaller towns are less populated, their population is older and less wealthy than the cities and larger rural municipalities.

<table>
<thead>
<tr>
<th>Population Range</th>
<th>Number of Municipalities</th>
<th>Population Density (municipalities per km²)</th>
<th>Share of persons older than 64 years (%)</th>
<th>Wealth (Federal taxes per person)</th>
<th>Share of persons employed in 1st sector (%)</th>
<th>Share of persons employed in 2nd sector (%)</th>
<th>Share of persons employed in 3rd sector (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-100</td>
<td>145</td>
<td>24</td>
<td>20%</td>
<td>338</td>
<td>44%</td>
<td>8%</td>
<td>15%</td>
</tr>
<tr>
<td>100-500</td>
<td>779</td>
<td>59</td>
<td>16%</td>
<td>388</td>
<td>26%</td>
<td>12%</td>
<td>21%</td>
</tr>
<tr>
<td>500-1000</td>
<td>381</td>
<td>77</td>
<td>14%</td>
<td>443</td>
<td>20%</td>
<td>16%</td>
<td>26%</td>
</tr>
<tr>
<td>1000-5000</td>
<td>352</td>
<td>84</td>
<td>14%</td>
<td>436</td>
<td>17%</td>
<td>23%</td>
<td>33%</td>
</tr>
<tr>
<td>5000</td>
<td>21</td>
<td>80</td>
<td>14%</td>
<td>543</td>
<td>11%</td>
<td>23%</td>
<td>50%</td>
</tr>
</tbody>
</table>

A report by the Union of Swiss Farmers (2002) shows that among the main causes that threaten the viability of many rural Swiss municipalities are migration - especially of qualified young people - and declining birth rates. In the case of Switzerland, the conclusions of this study prepared with data from the Federal Department of Environment, Transport, Energy and Communications highlight the importance of different economic sectors and their influence on demography. That is to say, that a coherent demographic policy in rural areas would have to take into account that there are sectors that favor population growth more than others. The study collected data from 1,606 Swiss rural municipalities, and several general conclusions were reached regarding the depopulation of rural areas in Switzerland:

- Companies are more important than jobs when it comes to boosting demographics. The number of companies in a municipality explains the increase in population to a greater extent than the number of jobs, which means that a large number of stable small businesses that maintain a certain economic diversity do more to ensure the future of a region rural sector than a small number of large companies (in fact, the agricultural sector once again has more than half the impact on the demographic momentum of a Swiss region than industrial activities, a fact that could be explained by the strong national link with the agriculture and the local economy).

- The impact of an agricultural worker on the development of the population is almost four times greater than the impact of an industrial worker (an explanation that this figure is so high could be the deep-rooted rural and local culture of the country). It is essential to detect and promote the sectors that have the greatest demographic impact depending on the geographical peculiarities of each region.

- Tourism is a fundamental boost for rural areas of Switzerland, given its special characteristics and, as is the case in the rest of the world, this situation is conducive to the existence in these regions of second homes or seasonal accommodation, which tends to increase the population of these areas. In Switzerland, the particularly picturesque or tourist municipalities are not the ones suffering especially from depopulation; in addition, the data indicate that many people who retire eventually settle in the municipality where they used to vacation and where they have an emotional bond; and indirectly and residually, but also taken into account at the fiscal level, the impact it has on the construction industry and the creation of additional jobs is important. In any case, all the experts agree that welcoming an external population, even temporarily, is always an advisable idea to combat rural depopulation.

- The great impact of commuting. It has been shown that daily commuting to work has an enormous influence when it comes to combating depopulation: in terms of demographic data, it is just as important for locals to have work in a neighboring municipality as to have employment in the municipality itself, which gives more value to the development of the economic fabric of the people’s environment. On the contrary, the commuters that work in the own town, do not influence significantly in the growth of the population with respect to the local development.

The aforementioned study by Stefan Mann, based on sector data from the DETEC, makes clear that agricultural development is an economic variable that influences the development of the population. An active agricultural sector apparently has the potential to prevent or at least slow down depopulation processes in rural areas. This would justify an agricultural policy not only focused sectorally, but also the rural environment as a whole. According to these same conclusions, an agricultural policy that supports a living rural sector can, therefore, be more effective than a general industrial policy that pursues the same objective. The importance of the possibilities offered by commuting for demographic development shows that rural municipalities can not be considered in isolation. It is crucial for rural development that jobs be within an accessible and reasonable distance, although it seems that the distance over which people are willing to travel has increased in recent years. Therefore, an urban development policy can also help significantly in rural areas, particularly those near or under the influence of urban regions.
60,000 EUROS FOR LIVING IN ALBINEN, A PARADISE IN THE MOUNTAINS

Albinen, a small town of only 248 inhabitants in the Swiss canton of Valais, launched on January 1, 2018 an initiative to combat depopulation: pay up to 60,000 euros to families who move there. Specifically, each person pays 25,000 francs (21,381 euros), each pair 50,000 (42,763 euros) and 10,000 additional francs (8,553 euros) for each child.

Like many small mountain municipalities in Switzerland, the town has suffered a massive exodus of young people and the aging of its population, which has been significantly reduced in recent years, endangering the municipality’s own sustainability. The elderly who still remain are left alone, the town has recently lost three families and there are only two children who go to school and five who go to the institute, according to the City Council. The population was of 376 inhabitants in 1941, a figure that has been continuously reduced until 2015 with 253 citizens.

The requirement that the town asks the new inhabitants is that they are 45 years old or less, buy or build a house and do for it a minimum investment of 200,000 francs (171,051 euros). They have to commit to staying at least ten years in the town because, if they left before, they would have to return the money received. The funding comes from a fund created by the City Council, which will enter 100,000 francs (85,525 euros) annually, up to a total of 500,000 francs (427,627 euros) to attract young and new families. Future new residents must demonstrate that they have a credit or a financing plan, a budget to build a house or a house contract. In addition, to boost the local economy, new residents must contract 70% of construction contracts or recognition of companies in the same canton.

The town of Bourg-Saint Pierre, in Valais, would give a 10% credit to new residents who build or renovate a property, up to a maximum of 30,000 francs (25,658 euros).

The inhabitants of Inden have a discount in the village shop, while in Trient (also in Valais), they enjoy energy and free bus tickets, direct aids in health insurance and construction and renovation.

In Mont-Noble they decided to lower the price of buildable land, and the population has grown from 847 inhabitants in 2011 to 1.64 in 2018. This strategy was used for the first time in 1993 by the municipality of Vernamiège, now part of the same locality, and was later imitated by other places, such as Salvan and Leuk.

As for the municipality of Gondo, it managed to attract a data center of IT companies by offering electricity at low cost and the use of refrigerated rooms in old civil protection shelters.

And in the Italian-speaking canton of Ticino, a member of the cantonal parliament proposed tax exemptions for anyone who decides to live in a remote area. However, the measure was rejected by the cantonal government this year, arguing that it would go against the principle of equality and universality of taxes.
DEPOPULATION IN SWEDEN: ISOLATED AND REMOTE BUT COORDINATED AREAS

As in the rest of European rural areas, demographic pressure in Sweden is manifested in at least three ways. First, with the pronunciation of the population, a situation that exerts a strong influence on economic structures and rethink the ability of provision of services and on the social welfare system (including health care and pensions, as well as the way in which services will be provided in this new demographic scenario). An aging population is also a smaller number than the people that derive the services that are maintained, finally, that the requirements are fulfilled, that they are used and that they are in charge of carrying out a before. The second factor is internal migration, with people moving in a region for different but often persistent reasons (for example, opportunities, quality of life, etc.). Finally, the increasing level of external migration since 2012 affects the capacity of the national and regional government to provide services and ensure sufficient infrastructure (such as housing, schools, health clinics, etc.).

In general terms, all the government studies in this regard have expressed the need to articulate a common approach by the Administration, integrating the peculiarities of the different territories, especially the rural communities that are experiencing faster rates of depopulation and aging. There is additional work to be done in terms of institutional coordination with respect to migrants. This includes the need for greater vertical cooperation, particularly between central-level agencies and municipalities; horizontal coordination at the municipal level and care to avoid duplication or overlap of the service, for example with respect to parallel employment services.

HISTORICAL CONTEXT

From 1950 to 1980, the population of rural Sweden decreased by approximately 50%. The decline of rural areas began in the 1960s. Smaller food stores closed because they were not considered profitable enough. In 1971 there was a great structural change that brought together 2,500 small municipalities in less than 300. This structural change reduced the number of local political actors, and it became more difficult to politically influence the development of the people. The 60s were a dark decade for rural regions of Sweden, with depopulation, the failed economy and social inactivity. During the 1970s, public opinion changed a bit and migration out of rural areas decreased for a while, although the beginning of the 1980s was again a setback for rural areas.

The campaign “All Sweden will live” (Hela Sverige ska lev), promoted by the Council of Europe, began in June 1987 and continued until September 1989. The government asked the Delegation of Sparsely Populated Areas created by the EU to coordinate the Swedish campaign. His work was carried out in close collaboration with the newly created National Committee of Civic Movements, which had 98 participating NGOs. At the regional level, there were county committees with representatives of civic authorities and movements. Almost all the municipalities participated in the campaign.

The campaign achieved significant success. The local mobilization went beyond the already high expectations. The authorities and the national administrative boards supported the work and a series of concrete pilot projects were initiated. Also in the media, the message of the campaign came clearly. However, the only negative aspect was that there was not enough support from the business sector and the coverage of the national media was too weak for the message to reach the big cities. While the mobilization of people in rural areas was successful in general, on the contrary, it often did not include and involve young people in local actions.

In the spring of 1988, the National Committee of Villages’ Movements initiated an important project aimed at gathering the views of the rural population. 110 collaborative documents [collected contributions from the territories through which they passed] traveled through all of rural Sweden. In these documents, people were urged to write their suggestions, ideas and demands to combat depopulation and propose solutions to repopulate the isolated areas of the rural environment. Civic and public organizations cooperated to complete these documents. In the summer, they had reached about 1,200 different locations in 23 counties and 197 municipalities.

Local development groups, organizations and individuals contributed. The documents were finally presented to representatives of political parties at a major event in the capital, Stockholm, and the minister of industrial affairs promised that the government would test the ideas listed. The 6,000 suggestions gathered filled 30 folders at the campaign headquarters. The end of the campaign culminated with the first Rural Parliament, held in the town of Umeå, from April 1 to 2, 1989. Around 650 delegates met to discuss the content of the documents. The result of the meeting was synthesized in approximately 300 demands addressed to around 60 different institutions, and it was decided that the movement for rural areas should continue. The following autumn (1989) the popular movement “All Sweden will live” was formed.
Most important objectives of the initiative:

- Track the work initiated by the campaign.
- Encourage and support local participatory development.
- Facilitate cooperation / coordination between the different local development groups to coordinate the political stance of the various civic popular movements.
- Collect, analyze and present the problems of rural areas and act as a pressure lobby towards the government.
- Promote projects and concrete actions for the return of young people and fight against depopulation.
- Create a central government agency for the development of rural areas.
- Implement a unified rural strategy where the regional balance is regained and a new integral vision of rural areas is developed.
- Better cooperation and coordination between civil service departments, authorities and organizations.

Research shows that the reduction of the Swedish welfare state since the late 1980s has been a specific disadvantage for rural areas with the closure of the physical presence of several vital public services such as police offices, employment offices, postal services or public insurance. Many of these services became more accessible electronically, which allowed people to use the services with the help of the Internet. One problem that arose is that such infrastructure is less developed in rural areas: while cities have a well-developed broadband infrastructure, many rural areas have to deal with a large amount of infrastructure to achieve worse-or nonexistent-connectivity, which meant a decline in access to public services and other areas by rural populations. The report “Rural depopulation policies in Sweden: What can rural municipalities do to reverse the decline of the population?” of the University of Lund affirms that, although that digital breach meant at the time a loss of jobs that perhaps did not directly affect many people, on the other hand the indirect consequences were significant for many of the related functions, both public and private, smaller rural municipalities have had a harder time compensating for large urban areas. It concludes that even if “small policies” such as national or regional programs (in addition to community programs) directed directly at rural areas are to some extent important, studies show that “broader policies” such as The reduction of the welfare state, deregulating the financial market and other structural changes at the national or supranational level affect the rural areas in a much deeper way. However, despite the diverse support of national programs, in the end it is up to each municipality to create a favorable and generally pleasant environment for its citizens and existing businesses and to attract new residents.

CASE STUDY

“For the rural areas of Sweden: a coherent policy for work, sustainable growth and well-being”, Sweden

Swedish rural policy came under scrutiny in the 2017 OECD Swedish Territorial Review, which argues that the current government policy does not understand the particular challenges facing peripheral areas and requires a more coherent approach focused on developing rural and potential strengths. As a result, sectoral policies such as education and health services, spatial planning and transport do not have a clear and coherent “rural articulation”. The Parliamentary Report of 2017 produced from the research, entitled “For rural areas of Sweden: a coherent policy for work, sustainable growth and well-being”, exposed the need to develop a more integrated and holistic approach to politics national rural. The report highlights the importance of Swedish rural areas for the development of the green economy and tourism, but points out a failure to exploit commercial potential and discrepancies in access to public services compared to urban areas. The report describes three broad general objectives for developing a coherent rural strategy, which includes:

1. Equality of conditions for citizens to live and work in rural areas;
2. Increase of the opportunities of rural areas to exploit entrepreneurship and employment opportunities in a way that is sustainable in the long term;
3. Increase of the opportunities of rural areas to contribute to the positive development of the economy.

More specifically, the report makes a series of more focused recommendations, such as emphasizing the need for companies in sparsely populated areas to interact with local, national and global actors. This should be achieved by increasing the financial capital available to companies, developing good digital communication opportunities and creating stronger networks with research organizations and innovation centers. Improving access to the labor market and skilled labor is considered essential. This will be achieved through increased investment in education and training centers, relocating public sector jobs in rural municipalities and offering incentives for skilled workers to move to rural areas, including reduced student loans and easy access to services of general interest to improve the quality of life. Finally, the report raises issues related to the governance of rural areas, particularly in relation to the important role of the State in the promotion of employment, the establishment of intersectoral coordination and synergies between public and private actors and the improvement of the roles of social groups in regional activities.
In 2004, the northernmost regions of Sweden (Norrbotten, Västerbotten, Jämtland Härjedalen and Västernorrland), together with several regions of Finland and Norway with similar characteristics, formed the network of Sparsely Populated Areas of Northern Europe (NSPA), in order to unite efforts to fight against the extinction of its most isolated and isolated municipalities. In total, the 14 regions of the 3 countries occupy an area with a population density of 4.71 inhabitants per km². To put the figures of the NSPA in a European context, it could be mentioned that the population density in the EU-27 has been estimated at 116.4 inhabitants per km². Therefore, they are areas affected by depopulation in an extreme way, which share a hostile climate, a scarce population and long distances between settlements (comparable to Canada, Australia, Chile...). This public-private network involving rural actors of very different nature, has been defending common objectives for more than a decade and is working together to raise awareness about rural depopulation in EU institutions, influence regional and national community policies and serve as a place to share information and good territorial experiences that can be extended to the rest of the regions.

In his report “Strong, specific and promising. Towards a vision for the sparsely populated areas of the north in 2020”, the NSPA makes a first analysis on the reality of isolated rural territories and the necessary paradigm shift -beyond legislation or financing- to address the root causes of the problem. The demographic problem remains the central challenge in all the depopulated regions of Sweden and the rest of the NSPA area. A main component of the vision for 2020 is to change the perception of the regions, and especially of their rural areas, making them more attractive for women, young people and foreigners (several of the indicators that the report uses as keys in the demographic strategies). This implies efforts in terms of communication and image, which are based on the values provided by rural territories in terms of natural environments and social contexts. It also implies the need to implement concrete measures to identify the gender bias in local hierarchies and development plans, to improve the sense of belonging among young people, encourage the immigration of young graduates and facilitate the successful integration of foreigners. In general, the rural areas of Sweden need to survive strategy for their sustainable social development; what seems an objective condition for the continuous economic growth of its isolated regions and, therefore, its mode of subsistence.

There are several reasons why it can not be said that rural population of these isolated areas will remain stable only taking into account the economic development opportunities they offer. Perhaps the most important is that the small size of many NSPA labor markets implies that they need to specialize; therefore, they are vulnerable to economic cycles and fluctuations in world market prices. The sometimes dramatic social effects of such economic recessions and corresponding media coverage lead to an impression of regions and municipalities -examples of habitat-oriented work [50]- an underestimate of the economic benefits derived from activities in these areas and an impression of regions with lower overall economic performance. It is even more important to improve communication about the benefits obtained from industrial activities in the NSPA from a long-term perspective, both within and outside the regions. This would help justify the higher costs of providing infrastructure and the provision of public services in these areas. The economic and social strength of local communities is, in other words, a key word in the vision of the NSPA in 2020. Strategies should be designed to increase their resilience in the face of external market swings, through diversification, a strategic choice of economic niches and measures to increase the circularity of local and regional economies.
RURAL PROOFING: THE GUARANTEE THAT THE RURAL ENVIRONMENT IS TAKEN INTO ACCOUNT IN POLITICAL DECISIONS

Rural proofing or rural guarantee mechanism is a commitment that governments acquire to review and examine all public policies to try to ensure that they do not harm rural areas. In addition, it is an effective communication tool between the Government and the rural population. During the European Conference on Rural Development that took place in Cork in 2016, the European Commissioner for Agriculture and Rural Development, Phil Hogan, stressed the importance and convenience of adopting mechanisms of rural proofing as a means to ensure that all policies that are carried out contribute synergistically to ensure equality between the urban and rural population.

Following is a brief review of the main countries that have implemented rural proofing mechanisms.
ENGLAND

Rural proofing was established in England in 2000, and in 2006 the first annual report was published. When rural proofing began to be applied, it was done by the Commission for Rural Communities (CRC), an independent government agency. However, in 2013 this commission was eliminated and its functions were transferred to the Department of the Environment, Food and Rural Affairs (DEFRA), creating the Rural Communities Policy Unit, in which an independent evaluation team is formed annually to prepare an annual report (the last one is from 2015). Currently, DEFRA is responsible for making visible and encouraging the use of rural proofing in government, but each ministry is responsible for putting it into practice with its own policies. In recent years, although the regularity of reports has been lost, DEFRA has continued to value this methodology and to apply it to all parties directly or indirectly involved in rural development (Government, LAGs, etc.).

The methodology used has two aspects: on one hand, the documentary review, that is, studying the legal texts or government reports (for example the Impact Assessment of the ministries) to see if rural areas are taken into account and how. On the other hand, there would be the analysis of the reality of rural areas, for which the teams in charge of making the reports use mainly statistical sources and cartographic materials, since one of the pillars of rural proofing is the analysis of objective and empirical evidence as a way to demonstrate the impact of policies.

As a strong point, highlight that probably the United Kingdom is the state that has most come to institutionalize this mechanism, besides being one of the pioneers in its implementation, which gives it a long experience that can inspire and help other countries to design your own rural proofing strategies.

The main criticisms it has received are that the differences between rural areas are not nuanced and a general procedure is applied, common to all regions, ministries and administrative levels, and that currently it is not being applied as regularly as before (annually), plus there is no longer a specific and independent body in charge of carrying it out.

Wales and Northern Ireland have adopted similar mechanisms; however, Scotland has opted for rural mainstreaming. This consists of including the needs of the rural population in the design of all policies in a transversal way, and for this they have created the Scottish Rural Parliament [https://www.scottishruralparliament.org.uk/] in which politicians meet with local leaders and associations every two years to discuss the future of the public policies from a rural perspective. In short, it is decided to include rural voices in the decision-making process from the beginning and not once the measures have been designed.

More information:

- Rural proofing: Practical guidance to assess impacts of policies on rural areas
- LGiU - Rural proofing Policy briefing
**CANADA – Rural Lens**


This evaluation method is used to advise the Minister of Agriculture and Agri-Food on the impact that policies could have on rural communities. The main objective is that policymakers have as much information as possible about the impact that certain laws and bills have or will have. It involves different stakeholders and seeks to generate a bidirectional dialogue between the federal government and the rural population. In fact, from the beginning, the priorities of the approach were drafted after a process of dialogue between the federal government and rural and/or remote communities.

Questions that are proposed for the managers and technicians of the programs or policies:

- How is this policy relevant to rural and remote areas of Canada?
- Does this policy/program have a specific impact on a specific rural or remote area?
- Have the possible positive and negative effects on the rural population of Canada been identified and taken into account?
- Is the initiative designed to respond to the priorities of the rural population?
- Has the rural population been consulted during the development or modification of the initiative?
- How is the benefit maximized for the rural population? (for instance, Cooperation with other partners, Development of local solutions for local challenges, flexibility for decision making)


For its part, the Municipal Association of Rural Ontario, developed its own version of this evaluation tool to adapt it to the specific reality of their region. More information: [The Rural and Northern Lens](http://publications.gc.ca/collections/collection_2015/aac-aafc/A114-43-2001-eng.pdf).

**FINLAND – Rural Policy Committee**

The Rural Policy Committee is an agency created by the government in charge of designing and implementing rural policies. The government also establishes tasks and committee members. The objective is to improve governance, involving citizens, businesses and the third sector in the decision-making process. It consists of representatives of nine ministries and other public bodies, as well as research institutes and private agents. In total it is made up of 21 members. In addition, there is a working group within the committee that is expressly responsible for applying rural proofing.
It is positive that a specific body has been created to elaborate and implement rural policies and to evaluate the rest of the policies in the key of rural development. However, some ministries have been reluctant to prioritize rural development over other priorities. The OECD, for its part, highlights two shortcomings: that the committee does not take into account regional governments and lacks a person in charge of representing the committee vis-a-vis the government and promoting the rural approach in policies and plans.1

At present, a major reform of the administrative division of the regions and their powers is taking place in Parliament, which will affect regional governments and health and social services, among other areas. It is expected that this process will last until January 2021, so until then it has not will produce changes in rural proofing mechanisms at the state level. However, in June 2018, the project “Rural Development in Landscape Reform and Care” was launched by researchers from the Åbo Academy in Vaasa and financed by the LEADER program and the Finnish Cultural Fund, which aims to explore the potential of rural proofing at the local and regional level. The study focuses on three types of regions (archipelagos, rural centers and peripheral areas) and its objective is to detect the local specificities that must be taken into account when evaluating the impact of public policies in rural communities, such as the language differences within the country. Therefore, it is a pilot project with the intention of making its results scalable and apply rural proofing in the rest of the rural regions and municipalities of Finland, respecting its particularities.

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AUSTRALIA – Regional Impact Statement

All states except one have agreed to prepare a Regional Impact Statement (RIS) for the Council of Ministers. However, these reports (with the exception of South Australia) are not available to the public. In addition, each state decides who will carry out the evaluation and what elements will be taken into account, there is no standardized procedure.

More information:

- Resumen Regional Impact Assessment Statement de South Australia
- Guía para el Regional Impact Assessment Statement de South Australia

NEW ZEALAND

In this country, rural proofing is specifically focused on guaranteeing access to health services in rural areas. In October 2011, the New Zealand Rural General Practice Network proposed this mechanism and published a guide so that the different rural localities could evaluate the quality of their health services.

More information:

- [Rural proofing: Ensuring that the impact on rural communities of new services or service reconfigurations is considered](https://www.ruralhealth.org.nz/resources/rural-proofing)
- [Rural proofing your primary health services](https://www.ruralhealth.org.nz/resources/rural-proofing-your-primary-health-services)

SWEDEN

Currently, no rural proofing protocol is established in Sweden. In 2017, the Rural Areas Committee launched a policy proposal for Sustainable Rural Development, which highlighted the need to implement cross-sectoral and guarantee mechanisms. After carrying out a consultative process, in the spring of 2018 the Swedish Government approved a decree establishing the objective of developing a coherent and sustainable long-term rural development policy. With regard to rural proofing, this document recognizes the need to integrate the rural perspective into other fields of public policy and for this, the Economic and Regional Growth Agency has been assigned the task of developing a methodological proposal in collaboration with other departments. It is expected that there will be a first report in March 2019 and a final proposal in March 2021.

During this process, the strategies of other countries were analyzed and three main barriers were identified for the implementation of rural proofing: on the one hand, the short-term cost-benefit ratio; on the other hand, the difficulty of maintaining an evaluating body without effective power of veto or decision; and finally, the fear that its implementation will slow the government’s
decision-making process too much.

More information:

- [OECD Territorial Reviews: Sweden 2017 Monitoring Progress in Multi-level Governance and Rural Policy](#)
- [Northern Lights: reflections before and after rural proofing (Rural Connections, pp. 36-37)](#)

**SOME CONCLUSIONS...**

- There is a need for an independent body responsible for applying rural proofing. If left to the ministries alone, there is a risk that they are not adequately trained to implement it or that they do not give it the importance and priority it requires.

- To be effective, rural proofing must be mandatory (at least in certain ministries) and use standardized processes (although they are then adapted to the different cases).

- It has to be guaranteed that the results obtained in the analysis will be taken into account and included in the policies that are being evaluated. If not, it becomes a waste of time and resources. Therefore, the different institutions must be made aware of the importance of this approach.

- It is also necessary to implement rural proofing at the sub-state levels of government.

- It is necessary to assess the long-term benefits (learning from experience and good practices, balanced development between the countryside and the city, optimization of resources) and not only the short-term economic cost.

- If rural proofing is only proposed as a consultative mechanism to assess the potentialities and limitations of policies, the option of rural mainstreaming (as in Scotland) could also be contemplated and create spaces for dialogue between the rural population and institutions so that the first ones to send their ideas, demands and opinions to the second ones.
4. Diagnosis of needs of the rural population
REPORT ON THE SITUATION OF RURAL YOUTH

The present report has been made with the data extracted from the survey *Rural Youth? We want to listen to you!*, which is part of the REDpoblaR study, carried out by the Red Española de Desarrollo Rural (Spanish Rural Development Network) and financed by the Ministry of Health, Consumption and Social Welfare. The main objective of this research is to identify the needs of rural youth and make realistic and adapted proposals to socially and economically revitalize rural areas. The survey, in web format, has been completed by 2,151 people residing in rural municipalities of all the Spanish regions.

This report does not intend to capture the particularities of each territory -for which it would be more convenient to do detailed studies in the field-, but to identify the major trends and challenges that are taking place in rural areas and to give young people a voice on the direction rural development policies should take. Therefore, this document aims to serve as a guide so that the different administrations and social agents can evaluate the situation of their peoples and regions and design adapted and realistic measures.
The main challenges faced by rural youth and some keys to change

When asking rural youth what they consider to be the greatest challenges facing their villages, the three most frequently repeated themes are: the lack of opportunities to build a career, the deficiencies in services and the problems related to communications.

Regarding the first topic, it is worth highlighting the lack of training opportunities and a shortage of stable and qualified employment opportunities (and self-employment); This leads to greater difficulty in becoming independent and initiating a life plan in the area. Regarding services, the lack of health and educational services, as well as the scarce cultural offer, in some rural areas (other people have emphasized that having all basic services available to them, do not consider it a challenge to live in their villages). Finally, there is also recurrent discontent with communications, both in the sense of transport (quality of roads and public transport, dependence on private vehicles, etc.), and in a more human sense, repeating the idea of spatial isolation, social, technological and cultural of the peoples.

In relation to the aforementioned issues, some respondents have indicated that the challenge of the rural environment is to achieve self-sufficiency and we wanted to highlight it because to achieve it, it is first necessary to recognize the co-dependence of rural nuclei and create networks to reach a rural environment interconnected and cooperative.

Local labor markets

When asked about their degree of agreement with the statement “it is difficult to find work near where I live”, 78.3% of young people surveyed agree or strongly agree. However, when asked if they consider leaving their town to go to another municipality or city where there are more opportunities, the answers have been more disparate. However, by deepening the analysis, significant differences are observed depending on the employment situation, age and whether the respondents have children or not. Also, although to a lesser extent, the size of the town of residence, helps explain the disparities when interpreting this question.

In the first place, when comparing the answer according to whether the employment situation is employed, unemployed or student, it is observed that the latter consider the option of moving in search of job opportunities to a greater extent. It is striking that they show more predisposition to leave the village than those people who, being active in the labor market, are unemployed. However, this group is the one that has most indicated the option “neither agree nor disagree” which can be translated as a greater uncertainty about the future.
Secondly, age also influences when contemplating the idea of leaving the town in search of employment. As can be seen in the graph, as young people get older, there is a process of progressive rootedness; first they stop having so clear the option of leaving in search of opportunities and little by little they position themselves clearly against the option of leaving the town.

Finally, the fact of having children also determines the way in which the respondents value the idea of moving for work reasons. While just over 40% of young people who do not have children consider this option, less than 20% of those who do have children consider it. In addition, 43.4% of the latter, strongly disagree with the statement “I plan to move to a municipality or city where job opportunities are better.”

These three variables, moreover, are not independent, they are interrelated among them. Therefore, all the above could be interpreted as there is a transition process between the beginning of youth when it is being studied or has just ended, and you do not have children, which determines the way one values the idea of moving; way in which the respondents value the idea of moving for work reasons. While just over 40% of young people who do not have children consider this option, less than 20% of those who do have children consider it. In addition, 43.4% of the latter, strongly disagree with the statement “I plan to move to a municipality or city where job opportunities are better.”

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The lack of stable jobs in rural areas (as well as in urban areas) makes it difficult for young people to have their own house, either for rent or property. Of the young people surveyed, 55% are not independent.

Proportion of independent young people according to age

When asking about the main problems related to housing, the main one, by far, is the price: more than half of the young people surveyed consider this a problem. The following brakes in the access to a home are also related to the purchasing power of young people: the difficulty to get mortgage loans (26.4% consider it a problem) and to pay the entrance and/or bail (25.4%). The other problems identified by young people are more related to the characteristics of the houses [quality, available housing, having land, which are furnished, etc.] and their situation with respect to public services (lack of public transport facilities in urban areas). The latter, although they are not strictly housing problems, do pose a problem for young people when it comes to independence.

This question was answered both by the young people who are independent and those who are not and, in general, the answers between the two groups do not differ much. The only exception is the difficulties to pay the entrance or deposit; this response was marked by a greater proportion of young people who were not independent than independent, so it can be inferred that this is a determining factor when it comes to becoming independent.

What are the main housing problems for you?

Access to housing

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Communications and dependence on private vehicles

When asked about the means of transport they use most frequently, the strong dependence on the private vehicle compared to the use of public transport has become clear. At this point it is necessary to point out that the sample that has been used is composed of young people from 18 to 35 years old, so that of the youngest there will be many who have not yet obtained their driver’s license. In addition, a paradox of the rural environment is how the places where the daily life of people develops (home, work, school, etc.), are usually at a lower distance from each other than in the cities, and yet, due to the deficiencies in public transport, in many cases it is necessary to use the car to make relatively short distances.

What means of transport do you usually use?

As expected, young people who live in smaller municipalities tend to have to travel more kilometers per day to their jobs, and are those who work in a smaller proportion in the same municipality they reside. At the same time, they are the ones that worst value the public transport network.

Finally, there is a statistically significant relationship between age and the type of transportation used on a day-to-day basis. As young people grow up, they gradually abandon the use of public transport and bicycle, and begin to move around in a car. This indicates that public transport is not a real alternative to the private vehicle, but a resource for those people who have no other transportation option.

How could public transportation improve in your area?

When asked about how this situation could be reversed and improve public transport services, the most repeated response has been the increase in frequency in the service, followed by the expansion of the bus network and the offer of different modes of public transport.
Deficiencies in the offer and access to services

When asking the respondents to assess their access to different public services (ambulatory, pharmacy, shops and supermarkets, sports facilities, nursery, shows, library / study and leisure room) there is a significant correlation between the size of the municipality of residence and all services, that is, larger, better access. The biggest differences are in the case of access to stores and supermarkets, followed by access to pharmacies; both basic services of a private nature.

Valuation of access to stores and supermarkets depending on the size of the municipality of residence

In addition, in this section, the existence of a slight significant correlation between gender and the demand for training centers in the municipality of residence draws attention, that is, a higher proportion of women than men who lack training services (language centers, vocational training, training for employment, etc.). We should also remember that at the beginning of the report it was seen that, in general, rural girls are more educated than boys, which leads us to confirm the hypothesis that one of the great causes of the masculinization of rural areas is the growing women’s interest in developing an academic career and then opt for skilled jobs, or what has been called the “illustrated flight”.

What public services do you miss in your area?

With regard to the training offered in rural areas, there is also a slight indirect correlation between the educational level and the evaluation of the training offer. In other words, less educated young people consider that they have a wider range of opportunities to train, while those who have attained some level of tertiary education (higher education, undergraduate, bachelor’s, master’s or doctorate) value the scarce offer to a greater extent. This, added to the difficulties to study a university career while residing in the rural environment (mainly by distance), highlights the need to offer higher education in rural areas to try to stop the abandonment of the same by the younger generations. young boys. For example, in the Scottish Highlands and Islands region, a university has been created with 13 campuses and 70 local learning centers, in addition to offering online study modalities to facilitate access to rural youth and to attract urban population to the region.

On the other hand, when designing training services adapted to rural youth, we recommend assessing the following data revealed by the survey: older youth are more in favor of online training, while younger people prefer training face-to-face. This makes sense if one takes into account that the older ones have higher employment rates, in some cases they have children and they have usually reached higher educational levels, so the training is seen as a complement to the previous training background, which allows specialize or acquire new skills. The preference for one modality or another is also correlated, although to a lesser extent, with the size of the municipality, so that young people living in small towns show more interest in face-to-face training than those who live in more populated municipalities and, for therefore, with more services.

Notes: Respondents could mark several valid answers, by which percentages indicate the proportion of people who have marked that option versus those who do not.

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Socializing in times of depopulation

As mentioned before, access to basic health services (doctor’s office or health center) is practically guaranteed in all villages, however, there are disparities in terms of more specific services. When asked about what should be improved in this area (respondents could answer several of the possible options), 34.6% of respondents demand greater availability of appointment (in the chart on the left is another question that delves into this aspect), especially in the consultation of specialists and in those places in which the doctor covers the service of several peoples and therefore is not full time. The other most repeated responses were that there was a closer emergency unit (22.2%), more information about the services in the area (18.2%) and the creation of a medical telecare service (18.2%). In addition, in the section on other options, mention has been made of the need to guarantee transport to access health services and to strengthen the service in hospitals in the county seats, not only in provincial capitals.

In terms of health services, how do you rate the availability of appointments in your area?

As for other aspects that could improve the social life of young people, there is a slight inverse correlation between age and the demand for more bars or pubs in their villages, that is, older people among the young peoples and therefore is not full time. The other most repeated responses were that there was a closer emergency unit (22.2%), more information about the services in the area (18.2%) and the creation of a medical telecare service (18.2%). In addition, in the section on other options, mention has been made of the need to guarantee transport to access health services and to strengthen the service in hospitals in the county seats, not only in provincial capitals.

What would help improve your social life?

Notes: Respondents could mark several valid answers, by which the percentages indicate the proportion of people who have marked that option versus those who did not.
CONCLUSIONS: Where should rural areas advance to support their youth?

Political disaffection

The detachment of youth towards institutions is clear when asked what they consider to be the administration that is most concerned with improving the quality of life in rural areas. 35.8% consider that no level of public administration cares about their welfare. The best valued institution in this sense are the town halls; however, their competences in leading significant social and economic change in rural areas are limited. In addition, in many cases, the respondents have denounced the lack of dialogue between the youth and the rulers and, therefore, a mismatch between the measures that are being taken to keep young people in rural areas and the real needs and expectations of these.

In your opinion, which institution is more concerned with improving the quality of life in your area? (%)

- The Central Government
- The Autonomous Government The Province
- The County Government
- The City Hall
- None of the above

The open questions have revealed that, in spite of the deficiencies in the services and the lack of job opportunities, the rural environment is characterized by the quality of life, the tranquility, the natural environment and the people (family, friends, etc.). These have been the most repeated answers both in question 5 (What do you like most about living where you live?) And in question 6 (If you had to summarize where you live in three words, what would they be?). While in the first question only positive aspects were alluded to, in the second question, the respondents had the option of highlighting negative characteristics of their peoples, however, the only one that has been repeated in a significant way has been “boredom”. Another aspect that can be extracted from the answers obtained is the vision of the rural environment as a place to develop a life plan, comparing it with cities, which are seen as spaces where the cost of living is higher and life is governed by the uncertainty and the pace of life accelerated. Mainly, it stands out the suitability of the villages to raise children in a safe space and with strong and supportive communities, as exemplified by the following responses:

- “It is well connected with roads and trains, with nearby hospital and cinema. It has enough resources to live comfortably without the need of agglomeration of a city”
- “The tranquility and, at the same time, the closeness you have with the city”
- “I live in a small place with a field but with a big city within walking distance of the services I do not have in my village”

In addition, the interest in staying in the villages is extracted from the different questions of the consultation. In general, young people do not see emigration as something positive, but as a necessary condition to be able to develop a career (both academic and work). In the words of a 15-year-old girl from Teruel, when asked what the main challenge of living in rural areas is for her: “In the future I will have to go to the city”. The following is a series of key points that can help regional, county and local leaders make realistic proposals adapted to the reality of rural youth.

However, despite the desire to remain in their hometowns, the prevailing feeling among young people is pessimism. Unemployment and job insecurity faced by young Spaniards in general, we must add the lack of services (public transport, health, education / training, Internet access, etc.) specific to the sparsely populated rural areas. On numerous occasions throughout the questionnaire, they referred to the treatment they receive from the institutions and the rest of society as “second-class citizens”, giving priority to the development of urban centers in relation to the rural environment.

Despite the widespread discontent with the situation of rural youth, they are proactive in making proposals for improvement. Here are some of them:

- Employment opportunities: Almost all respondents agree on the need to create quality jobs in rural areas as a fundamental condition for young people to return or not leave their villages. This problem is especially serious in the case of the most qualified young people, who do not find opportunities in their towns according to their studies. To change the situation they propose to promote the transfer and creation of companies in rural areas, to offer help and advice to entrepreneurs or the promotion of teleworking. On this last point, one of the people surveyed proposes the use of public spaces with internet access from which they can telecommute, as coworking offices. In addition, tax incentives or hiring aids for companies that favor this type of work could serve as measures to promote it.

- Guarantee of minimum public services: Although the survey has shown that the vast majority of municipalities have basic facilities (health center and primary school, mainly), in cases where this is not the case, it has a strong negative impact on the population, making it difficult or even impossible for families to remain in their villages. In addition, in many cases the need to facilitate access to medical specialties such as pediatrics or diagnostic tests has been mentioned (for example, through mobile centers).

- Access to the Internet: At present, having access to high-speed Internet is necessary to be able to participate in equal conditions in society and the economy. In addition, digitization (teleworking, health services, etc.) is a key to reducing the distances and geographical obstacles that have traditionally kept distanced rural areas and cities.

- Housing supply: There are numerous cases of rural youth who complain about the lack of affordable housing in their villages, due to the disuse and abandonment of them by former residents. Municipalities (and competent institutions) are required to take part and try to facilitate contact between owners and potential buyers or lessors of the houses.

- Mobilization of rural youth: together with widespread pessimism, the respondents themselves identify a lack of cohesion and participation of young people. Therefore, they consider that a greater involvement of young people in the social life of the people, through associations, activities or events, would help them to become aware, empower themselves and create spaces for dialogue to participate in making decisions that may affect his stay in the town. In addition, one of the people who participated in the consultation proposes that the creation of information networks among the villages,
hrough which can be promoted information on job offers, available housing, leisure activities, etc. as a resource to help young people create a life plan in rural areas. An example of an initiative of this type would be the Young Rural Dynamizers program launched by fourteen local action groups and the Government of Aragon.

Improve the leisure offer: although it is not a basic necessity, in the consultation it has become clear the need for leisure alternatives for young people. This does not imply that leisure has to be like that of cities (bars, restaurants, cinemas, etc.) but can be oriented to the potential of the rural environment, especially encouraging outdoor activities that, as one respondent points out, young people can benefit from them, at the same time that it serves as a claim for outsiders.

Rethinking the role of public administrations: there are two main problems that are identified in the operation of government bodies that have the capacity to affect the rural environment: on the one hand, the inefficiencies derived from the excess of administrative levels (especially in the Pluriprovincial Autonomous Communities), which multiplies the bureaucracy and, therefore, the obstacles when undertaking a business or requesting aid, for example. On the other hand, it is demanded that governments (especially local governments) promote citizen participation and listen to what the population has to contribute when making decisions about the future of the people.

Picking up some aspects of those mentioned here, one respondent makes the following diagnosis of the challenges faced by rural youth:

**Rural youth lacks better access to quality leisure, places to meet, activities, promote association with them and teach them to create for themselves a leisure that covers their hobbies and perspectives.**

They need help so that they can live in the villages, not only tax incentives, but also to provide them access to homes or land and less bureaucracy in the town halls. Many go to nearby cities for that reason. "It is much easier to buy an apartment or a flat in a city than to access a house in a town".

Finally, in addition to young people who have grown up in rural areas, there are those who live in the city, want to move to non-urban areas, attracted by the quality of life, the possibility of creating a family, start a business, etc. In parallel to the work that is being done to offer opportunities to native youth so that they do not have to emigrate, neo-rurals have the potential to have a specific interest in establishing themselves in rural areas, so it is necessary to offer them the fundamental resources (mainly housing, employment and basic public services) to take the step. In fact, one of the people who answered the survey, when asked what was the biggest challenge of living in rural areas, answered: "Take the step of leaving the city".

In this regard, in June 2018 an event was held jointly between REDR, AlmaNatura and Impact Hub Madrid to discuss and make proposals to revitalize the rural environment. There, a questionnaire was passed to the attendees, among whom the vast majority wanted to move to a town, and they were asked about what kind of work they would like to have if they lived in a town (they could indicate several valid answers so the sum of percentages is greater than 100%), 42% answered that they started a business, 28% wanted to telecommute (that is, keep an "urban" job but settle in a rural area), while 28% would like to look for a job in the town or nearby. Finally, only 8% wanted to dedicate themselves to agriculture, livestock or other traditional trades.

As for the brakes that stop them when it comes to moving to rural areas, these were their answers:

**Youth and Local Action Groups (*)**

Of the young people surveyed, 41.6% indicated that they know the activities developed by the Local Action Group of their region, but only 12.6% are part of it. Of those who are part of the group in their region, 70.9% know the Local Development Strategy and of these, 75.6% are represented in it. On the other hand, 65.6% of young people who are part of a Local Action Group, consider that this has helped improve services and quality of life in the area.

(*) When interpreting these data, it is necessary to take into account that the groups that are part of the Spanish Rural Development Network have collaborated in the dissemination of the survey, so there may be a certain overrepresentation in the percentage of young people who are part of the group of their region.
The present report has been made with the data extracted from the survey Rural woman? We want to listen to you!, which is part of the REDpoblaR study, carried out by the Spanish Rural Development Network (REDR) and financed by the Ministerio de Sanidad, Consumo y Bienestar Social (Ministry of Health, Consumption and Social Welfare). The main objective of this research is to know in depth the situation and the existing diversity within the group that make up rural women, as well as to identify their main needs and concerns and make realistic and adapted proposals to socially and economically revitalize rural areas. The survey, in web format, has been completed by women between 17 and 84 years old living in rural municipalities of all the Spanish regions.

This report does not intend to capture the particularities of each territory -for this reason it would be more convenient to carry out detailed studies in the field- but to identify the major trends and challenges that are taking place in rural areas and to give women a voice on the direction rural development policies should take. Therefore, this document aims to serve as a guide so that the different administrations and social agents can evaluate the situation of their peoples and regions and design adapted and realistic measures.
The main challenges faced by rural women

Access to housing

When asked about the residential situation, 11.3% of the interviewees are not independent, 15.4% live on rent, 63.3% have their home and the remaining 10% are in other situations. This variable is strongly related to age, that is, in general, a progressive process is followed in which one moves from the parents’ house to one of rent, to later buy a house of their own. It is interesting to observe how the rent is usually a transitory measure, which after 40 years becomes practically residual. However, in the older generations, it has a slight upturn, predictably due to public policies that have encouraged the purchase in recent decades.
As for the problems related to housing, 64.3% have indicated the price, 26.9% the difficulty to obtain a loan or mortgage and 26.4% the lack of available housing. In addition, when analyzing who has indicated the problem of loans / mortgages, there is a significant difference by age, being the youngest those who are most affected by this “obstacle”. On the other hand, it is observed that in the larger towns the respondents complain to a greater extent that there are not enough available housing and the prices are higher.

What are the main housing problems for you?

- Prices: 64.3%
- Difficulty in obtaining mortgage loans: 26.9%
- Lack of public housing: 14.4%
- Lack of property with land: 10.4%
- The houses are too big: 3.9%
- Lack of furnished homes: 3.4%
- The houses are too small: 3.3%
- Few homes allow pets: 2.8%
- Lack of unfurnished homes: 1.9%
- It is not a safe place: 0.6%
- None of the above: 10.5%

Note: The respondents could mark several valid answers, so the percentages indicate the proportion of people who have marked that option as opposed to those who do not.

Employment

As previously mentioned, 63.3% of those surveyed are employed by others (20% of those surveyed are public employees), 18% are self-employed, 9.3% are unemployed, 3.9% are housewives, 2.4% students, 2.5% pensioners and 0.4% volunteers. When analyzing the women who are in the labor market, we see how unemployment affects more strongly after the age of 50 (coinciding also with the fact that this is the least educated age group). On the other hand, the proportion of self-employed women remains constant from 25 to 50 years and after this age grows slightly, predictably, in response to unemployment.

Regarding income, approximately 50% is between € 900 and € 1,800 per month, with differences mainly due to age.
When asking the respondents to assess the situation of the labor market in their towns and surroundings, around 75% of them consider that it is difficult to find a job. However, when asked if they consider leaving the town in search of opportunities, the answer is the opposite, with more than 60% of women who do not consider the difficulties to find work as a reason to leave their villages. This means that despite the labor difficulties, we are facing a rural population rooted (at least residentially) to their territories.

Finally, when asking about which areas of daily life there is more discrimination against women, 50.3% said that in the workplace. This warns about the need to develop equality plans that guarantee non-discrimination in access to work and in the workplace.

61% of the respondents have children (in 39.2% of the cases they are minors) and more than half of them have two. In addition, 9.2% live with dependent elderly people (to a greater or lesser degree) and 2.8% with people with disabilities. In terms of marital status, 30.3% are single, 35.5% are married, 6% are separated or divorced and 8.2% are in another situation.

Below are shown two graphs with the aspects that rural women have indicated as facilitators and obstacles when forming a family in rural areas. As advantages, more than half have indicated living close to nature and the family, while the biggest drawbacks are the lack or scarcity of public transport, the lack of opportunities and job stability and the scarce offer of leisure.

It is curious that the cost of living has been one of the most repeated options, both as an advantage and as an inconvenience, this is due to the fact that there are many different factors that influence this variable: the size of the town, whether the women have children or not, the age of these (especially if they are studying outside the town), the employment situation, etc.

Regarding participation in household chores, it is observed that although in the older age groups there is still a traditional distribution of domestic work, the younger generations increasingly divide it more equally between men and women.
The most frequently missed services in rural areas are health specialties (pediatrics, gynecology, diagnostic tests, etc.) and training centers (languages, vocational training, training for employment, etc.). At the other extreme, access to primary education centers and health centers is guaranteed in more than 90% of cases. In terms of family-oriented services, one respondent wrote: “I consider pediatric services imperative. Other specialties may be further away but pediatrics is essential. Without day care or pediatrics, if you do not have close relatives it is very complicated to consider motherhood.”

In deepening the needs related to health services, the three key improvements demanded by the respondents are: more availability of appointment, more staff and better public transport to access the health center or hospital. In addition, as we saw before, there are great deficiencies in access to medical specialties, especially diagnostic tests (22.6% have indicated that this service is not available in their area), rehabilitation and physiotherapy (18.2%), gynecology (15.4%) and pediatrics (15.2%). In this regard, it is worth mentioning the following specifications that have been included in the comments section:

“I understand that for the small population that there is, you cannot ask to have everything, but once a week or a month if it would be interesting, gynecological tests, pediatrician, rehabilitation, etc.”

“We only have a family doctor a few hours a day. The rest once every fifteen days in a health center 15km from where I live or in the hospital in Avila. This makes the waiting list for a specialist to see you seem eternal.”

Regarding the possibility of digitizing some services, 60.5% of the rural women consulted are familiar with the format and consider it a good alternative to supply the face-to-face services. In addition, 23.6% have indicated that, although they would need training, they also consider it an alternative. In another part of the survey, it has been shown that more than 90% of rural women connect to the internet every day, either through mobile phones or broadband (only 57.9% of those interviewed have access) or other means. Although these figures have to be taken with care, since it is assumed that the women interviewed have sufficient digital skills to complete the online survey, it presents a hopeful picture for the development of smart villages.

With regard to training, an open question was included in the questionnaire about which areas they would like to be trained in. The area in which the greatest demand for training is in the field of languages. Other recurring responses have been social networks, tourism, health, catering, cooking and administration and business management (essential to be able to start a business). Regarding training adapted to the rural and / or natural environment, it is worth mentioning those who want to be trained in rural development, recovery of traditional knowledge and trades, adaptation of new technologies to the rural / natural environment (geography, biotechnology, agroecology, etc.) and organic farming. More than 65% of the women consulted consider that with better training they would increase their labor expectations; that is, even recognizing the difficulties of the local labor markets, they are optimistic.

What do you think that with a better training offer you would improve your work expectations in your area?

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<tr>
<th>Option</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Yes</td>
<td>66.7%</td>
</tr>
<tr>
<td>No</td>
<td>33.3%</td>
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</tbody>
</table>

Note: Respondents could mark several valid answers, so the percentages indicate the proportion of people who have marked that option versus those who do not.

What is your opinion about digitized services (for example, medical telecare through the internet so as not to have to go to the health center, distance training courses or to make the purchase online)?

<table>
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<th>Option</th>
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<tbody>
<tr>
<td>Familiar and good alternative</td>
<td>60.5%</td>
</tr>
<tr>
<td>Interestingody but would need training to use them on my own</td>
<td>23.6%</td>
</tr>
<tr>
<td>Do not seem a good alternative to face-to-face</td>
<td>15.9%</td>
</tr>
</tbody>
</table>

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Regarding the training modality, the preferences vary according to age: up to 24 years, those who prefer blended learning predominate; between 25 and 55, the number of women who prefer online training grows and the proportion of those who have indicated blended learning remains the same. Finally, starting at age 55, those who prefer face-to-face training predominate. This is explained by two factors: on the one hand, the greater familiarity of younger women with new technologies, and on the other, by the need of women between 25 and 55 years of reconciliation between family, work and training.

As for public transport, almost 80% of the participants value it as bad or very bad in their area, again, especially in the smaller towns. And when asked about different ways to improve it, the most repeated is to increase the frequency (72.3% consider that this measure would improve the situation), followed by expanding the bus network (47.9%) and offering more public transport options (45.6%). In this regard, one respondent points out: “Public transport is essential for them to develop, since among the female population there are fewer that have their own car or even carnet.”
Socialization and leisure possibilities

A key element, although it is not usually considered fundamental at the time of analyzing the situation of the environment, rural is the social life. 70.9% of women normally participate in the traditions and festivals of their town, 68.4% dedicate their leisure time to stay with friends and 68.4% usually do nature activities (these are the three most repeated activities by the respondents). When asked about how the social life of their people could be improved, the most supported responses have been that there were more young people (41.3% think it would help), that there would be better communications with the surrounding cities or larger towns (30.4%) and that there were more local events and associations (35.7%).

The role of public administrations

When asking rural women about what measures they consider necessary to revitalize rural economies and societies, the most important has been the promotion of the social and collaborative economy, followed by the adaptation of vocational training to territories and incentives for companies encourage teleworking. In addition, in the section “Other, Which?” The main proposals are to encourage companies that settle in the rural environment (remove or reduce the quota of self-employed, tax advantages, etc.), facilitate access to rent and housing in general, facilitate the settlement of new settlers (improving the previous two), compensate the rural population for the extra costs in the displacements and / or improvement of public transport, that careers and training cycles include a specialization in rural areas (such as the “agrarian Erasmus” proposed by the Ministry of Agriculture, Fisheries and Food) and promote collaborative actions such as co-housing, co-working or shared vehicles.

With regard to specific fiscal measures, the respondents consider that deductions for self-employed workers and SMEs, deductions for rent, purchase or rehabilitation of housing, deductions for families who move their residence to a rural area would have the greatest positive impact. deductions for young farmers.

When asking about how they would like to learn about the calls for grants and subsidies offered in their town or region, more than 60% have indicated that through a mobile application or a web page that collected them all. In addition to the options that were proposed, it has also been proposed that the Local Action Groups are the ones in charge of reporting open calls in each area or sending notices by SMS, Whatsapp or Telegram when there is a new call. Currently there is the National Database of Grants that brings together all public subsidies convened by the different levels of the administration, however, as one of the participants pointed out, so that it can be used by everyone, it is necessary to take care of the design and usability of the website. A problem that has been detected is the disaffection of the population towards the institutions, especially towards the autonomous and central govern-
ment. Almost 30% consider that institutions do not care about improving the quality of life in their territories. On the other hand, 53.3% have indicated that the municipality is the body that is most involved in the welfare of the rural population. Although it is logical that the institutions closest to the population are those that have a more relevant role in the development of the territories, these figures highlight the need to propose strategies for rural revitalization on a large scale, not only local ones. As one of the respondents says: “the depopulation and the situation of women must be transversal issues, require change of mentality and cooperation of all public administrations.”

Some proposals of rural women

Promote qualified employment in the public sector from the public administration: even if it is to support those who are engaged in agriculture or rural tourism, the institutions could specifically encourage the transfer of skilled workers to the towns, which would have a positive effect on the long term, since these people would revert their knowledge and abilities over the territory.

Citizen participation and associationism: in addition to the population decline, many women identify a lack of social cohesion and awareness of the needs of the community. Therefore, it is proposed that local administrations consult citizens when making decisions that affect the people and encourage the creation and revitalization of neighborhood associations. There is also a need for the different local entities (local councils, local action groups, commonwealths...) to participate among themselves and with the citizens.

Opening of the towns: one of the participants in the study remarked the idea that the development of the towns must not go directed to be equal to the cities, and nevertheless, it is necessary to open the towns to the global society. In this sense, facilitating mobility and guaranteeing access to high-speed Internet (which in turn allows tele-training, online procedures, teleworking, etc.), are two fundamental requirements.

In your opinion, which institution is more concerned with improving the quality of life in your area?

- None of them
- City Hall
- The County Government
- The provincial deputation
- The autonomous Government
- The central Government

68.6% of the women consulted know the activities of the Local Action Group of their territory and 33.6% have participated in a work table representing women. In addition, 24.9% are part of a group. Of these, 83.3% know the Local Development Strategy and 79.2% are reflected in it.

(*) When interpreting these data, it is necessary to take into account that the groups that are part of the Spanish Rural Development Network have collaborated in the dissemination of the survey, so there may be a certain overrepresentation in the percentage of women who are part of the group of their region.
CONCLUSIONS: THE DEBATE ON DEPOPULATION, FINALLY ON THE POLITICAL AGENDA BUT NOT IN SOCIETY

There is no magic wand that can solve what is probably the biggest problem facing the entire Spanish state. This serious situation is not solved with temporary solutions or palliative measures; nor through more debates. The diagnosis is already made, and the quantitative data, more than internalized.

The solution is always at the side of the problem, or at least close... In this case, it is in our hands, because we ALL have been guilty of this situation: the legislators who once favored the cities in front of the rural municipalities; those who left because the city seduced them; those who consider second or third class citizens the people who live in rural areas; the media that have shown a negative image of the rural environment... All, except those brave people who have stayed in their municipalities of origin, fighting against many and great difficulties; they are the heroes of this film and, therefore, we have to reward them. But they do not want a prize, they want solutions. Even so we must compensate them, because thanks to their insistence on remaining in the rural environment, they save our forests, prevent climate change, drive the wolves away from flocks of sheep, keep us safe from more fires... Not only that; thanks to them we have pure AIR, WATER, ENERGY, HEALTHY FOOD, LEISURE AND TOURISM ZONES, HERITAGE... and what do we give them in return? Poor infrastructure, remoteness from public services and proximity, worse education, poorer health, little space for leisure, few or no employment opportunities... Hasn’t the time come for us to compensate this population and begin to redress the balance? Are we not observing that other countries have championed the depopulation and revitalization of the rural environment as a priority objective for the next decade? What are we waiting for in Spain?
Rural development policies and demographic policies must go hand in hand, but the responsibility to stop depopulation cannot be placed solely on the rural environment; while rural development policies should aim to guarantee access to services and improve the quality of life in rural areas, demographic policies should try to balance the settlement of the different territories, encouraging or restraining the settlement of people. A claim that rural territories have been making for some time is the need for transversal rural development policies that respond to the real needs of the local population, an area in which LAGs have much to contribute. Because there is no better demographic policy than to offer opportunities to those who want to live in both rural and urban areas.

In this report we don’t analyze the causes of depopulation, which have already been studied in depth and from different perspectives by other experts and organizations; we rather encourage actions to combat depopulation in rural territories.

From REDR we want to make a tribute and congratulate the thousands of entrepreneurs who decide to implement new businesses in rural areas, just as we congratulate the Local Action Groups for their tireless efforts to revitalize their territories. We also want to recognize the enormous importance of those rural inhabitants who, in spite of the adverse circumstances, stand firm when it comes to staying in their territories, because for them the most important thing is the quality of life (and there is much of it in rural areas!).

The main objective of this study has been the analysis of depopulation from a positive point of view: to turn the traditional approach around and concentrate on examining the available tools and resources that can be applied in a practical way to try to counteract the trend towards rural depopulation.

On the other hand, the sooner we understand that rural areas do not need to compete with urban areas, but learn how to relate in a fairer way and live in a sustainable way, better rural policies and investments will be planned. Being aware of this situation and accepting it can help to re-orient rural policies and investments and allow rural territories to be open to innovation and modernization of governance and public services, employing holistic, proactive and local strategies coherent with the current social reality.

Depopulation is a phenomenon that is characterized, in addition to the progressive emptying of the villages, by the growing aging and masculinization of the population living in them. That is why in the study we wanted to know first-hand the needs and proposals of women and young people living in rural areas. Through online surveys, we have come to the conclusion that the rural population wants to stay in their villages, close to their families and friends and the natural environment, and there is a turning point once young people have a home and children: in general, they dismiss then the idea of leaving the territory. Therefore, rural policies should not be so focused on rewarding the birth rate as on creating the best living conditions (housing prices, job opportunities, etc.), because, when people are young and have less links with the territory, the lack of job and training opportunities does make them consider leaving their places of origin to a greater extent.

Following our tendency to be proactive, we have analyzed opportunities that may arise in rural areas such as the internet of things, inclusive business, teleworking, case studies from other countries, etc. Because the rural environment is a living and constantly evolving (not regressing) and we invite everyone to approach our territories to explore a world of opportunities, and for that all it takes is to have the willingness.

The rural environment can not look the other way when it comes to replicating, adapting, assuming... the weight of trends; it has to understand, integrate and make the disruptive and renovating ideas their own. The LEADER method used by the Local Action Groups is a good collaborative tool to improve rural governance and has been the only instrument that has moved decision-making on European funding to the local level. The Local Action Groups have a long history in the field of local and collaborative development and already have an established network of citizens, local companies and public institutions, as well as a labor structure made up of experienced managers and technical and administrative staff. Thanks to the work that the LAGs have done for decades, nowadays, when they establish a new project, they start with an advantage because they
do not need to invest too many resources to inspect the area and reach the population and local organizations. The rural territories have been innovating since 1991 through this approach, so they are perfect candidates to become what has been called Smart Villages or Smart Territories.

For all the above, from REDR we defend that without people, there is no future. It is essential that Spanish society recognizes the urgency of combating depopulation and giving another opportunity to rural areas. The debate has finally reached the political agenda, but unfortunately it has not reached society. And the question is, are we still on time?

For our part, we will make an effort to transfer the image of the rural environment as living spaces of innovation, and inviting society to launch initiatives and disruptive processes in our rural areas.

“Rural development policies and demographic policies must go hand in hand, but the responsibility to stop depopulation can not be placed solely on the rural environment; while rural development policies should aim to guarantee access to services and improve the quality of life in rural areas, demographic policies should try to balance the settlement of the different territories, encouraging or restraining the settlement of people

Our messages are concise and simple:

1. Take advantage of the rise of new technologies and digitization in rural areas.

2. To converge resources in a coordinated manner among public administrations.

3. Establish an urban-rural contract that regulates their relations, based on cooperation and not on competition.
In the pages of this study, from REDR we wanted to change the point of view and focus on those innovative and innovative aspects that can help not only to combat the situation of rural depopulation but also to reverse it, based on constructive initiatives and not only on analysis and pessimistic assessments. These innovations make it possible to overcome the barriers that have traditionally limited the development of rural areas, prioritizing the advancement of large cities, and ensuring that talent remains in the villages, that young people do not have to migrate to cities to be able to realize their business ideas or to find jobs according to their high qualification and expectations. These trends are also presented as new paths in the face of the challenge of de-agrarization and the diversification of rural economies, turning towns into think tanks. On the other hand, we have observed and compared similar experiences in which other countries and regions are facing the challenge of depopulation. The successes and mistakes of other nations and territories should serve as a starting point in the debate on how to articulate a plan of shock against comprehensive, cross-sectional and evidence-based depopulation.

These are the main topics analyzed:

1. Documentary / legislative and resource management analysis in the field of public services to rural areas at national and European level

RDPs as catalysts of innovation in rural services: FEADER pone a disposición de los estados miembros y sus regiones una serie de medidas para dinamizar y mejorar la calidad de vida en las zonas rurales; depende de las autoridades de gestión incluir en sus programas de desarrollo rural las medidas que más se adapten a las necesidades de su territorio. En este capítulo, se pone de manifiesto que, además de la M19, las M6 y M7 son clave a la hora de desarrollar la iniciativa de Smart Villages.

The European programs, accesible for everyone: más allá del programa FEADER, la Comisión Europea ofrece un amplio abanico de programas que pueden solicitar tanto las administraciones regionales, como los GAL o los ayuntamientos, para mejorar la calidad de vida en el medio rural (Erasmus+, Interreg, Horizon 2020, etc.). Además, se prevé que para el periodo 2021-2027 se simplifiquen los procedimientos de solicitud.

2. Key innovations and technologies in the development of rural territories

Internet of Things (IoT): este concepto se refiere a la interconexión digital de objetos de la vida cotidiana con la Red, y ayuda a facilitar las tareas diarias. En el medio rural, puede suponer un gran cambio en la mejora de la calidad de vida de toda la población y, especialmente, de las personas mayores.

Teleworking: esta modalidad de trabajo remoto puede implementarse tanto en el sector privado como en el público y está suponiendo una revolución, ya que da libertad a los trabajadores para poder fijar su residencia independientemente de su lugar de trabajo. En el medio rural, esto requiere una buena conexión a la banda ancha y la creación de centros de teletrabajo o “co-workings” y, al mismo tiempo, ofrece la oportunidad de fijar población y atraer talento y empleo.

Circular economy: consiste en la creación de «sistemas» socioeconómicos que contribuyan a crear comunidades resilientes y autosuficientes en la medida de lo posible. La disponibilidad de recursos naturales y humanos en el medio rural son una gran oportunidad para desarrollar este concepto.

Economy at the base of the pyramid: se trata de una forma de economía social y hace referencia al mercado orientado a segmentos de la población con los ingresos más bajos del planeta; por lo tanto, el negocio está en el volumen de la demanda. Este sector emergente de la economía global puede ser un mercado atractivo para los emprendedores rurales, que quieran ampliar sus horizontes en buscas de nueva demanda.
3. Case studies of good practices in the field of adaptation to demographic changes

**Japan**: in 2015, a national strategy was launched for the recovery of the aging population and for the revitalization of local economies in Japan, which is still in place today. It aims to address the severe imbalance that threatens to drain rural areas of the country. As one of the world’s most elderly countries, many of the measures and initiatives that have been put into action in Japan can be extrapolated to Spain.

**Switzerland and Sweden**: although the Swiss government has not yet taken specific national measures to combat depopulation, the more rural cantons and regions are developing solutions. In Sweden, the government has developed a transversal strategy over several years that has involved all sectors of society, and thanks to these characteristics, it has managed to maintain an active and competitive rural area.

**Rural Proofing**: this is the concept used to designate the different mechanisms through which a rural perspective is introduced in all fields of public policy, valuing the potential impact that laws can have on rural communities.

4. Diagnosis of needs of the rural population

The Spanish countryside is becoming increasingly elderly and masculinized. Why are young people and women leaving? What do they need to stay or move to rural areas? To know their needs, concerns and proposals, we have conducted online surveys with over 4,000 participants, research that has given us a first-hand vision of the advantages and difficulties of living in the countryside.

**Situation of rural youth**: like urban youth, rural youth face labor precariousness and difficulty in independence. However, in villages, the difficulties in accessing higher education, the lack of qualified employment opportunities and the deficiencies in public transport exacerbate the situation.

**Situation of rural women**: the surveyed women have highlighted as the main problems of rural areas the lack of stable and quality employment, the lack of specialized health services (pediatrics, diagnostic tests, etc.) and of training centers and the deficiencies in the public transport network.