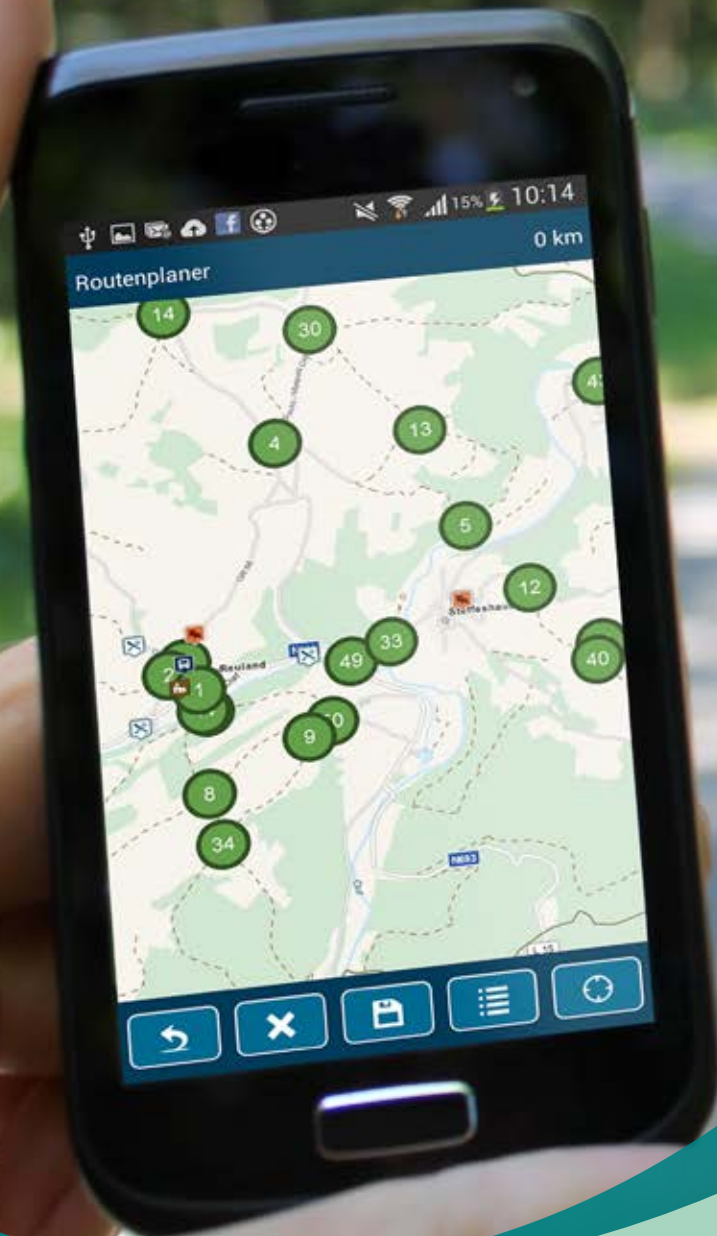European Network for
Rural Development

PROJECTS BROCHURE

The European Agricultural
Fund for Rural Development

SMART AND COMPETITIVE RURAL AREAS

https://enrd.ec.europa.eu

European Network for Rural Development

The European Network for Rural Development (ENRD) is the hub that connects rural development stakeholders throughout the European Union (EU). The ENRD contributes to the effective implementation of Member States' Rural Development Programmes (RDPs) by generating and sharing knowledge, as well as through facilitating information exchange and cooperation across rural Europe.

Each Member State has established a National Rural Network (NRN) that brings together the organisations and administrations involved in rural development. At EU level, the ENRD supports the networking of these NRNs, national administrations and European organisations.

Find out more on the *ENRD website* (https://enrd.ec.europa.eu)

The European Agricultural Fund for Rural Development (EAFRD)

The EAFRD Project Examples brochure forms part of a series of ENRD publications that help encourage information exchange. Each edition of the brochure features different types of projects that have received RDP co-finance from the EAFRD.

Past editions of the EAFRD Projects Brochure can be downloaded from the publications section of the ENRD website.[1] The ENRD collection of good projects and practices[2] contains many additional examples of EAFRD assistance to rural development initiatives.

(1) https://enrd.ec.europa.eu/en/publications-and-media
(2) https://enrd.ec.europa.eu/policy-in-action/projects-practice

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Contents

Introduction

This edition of the EAFRD Projects Brochure focuses on the topic of 'Smart and Competitive Rural Areas'. It hopes to provide inspiration on how to address a number of topics vital for today's rural areas, including rural connectivity, adding value, developing markets, modernisation and diversification.

Being 'smart and competitive' is about developing the strategies and tools for different types of rural areas to be economically competitive, while at the same time preserving their natural resources and social cohesion. This is not only important for rural areas themselves, but also for maximising the contribution that rural areas make to the rest of the economy and wider society.

The projects presented in this publication aim to cover some of the breadth of possible approaches for promoting smart and competitive rural areas, whether in improving connectivity, refining existing business models or diversifying into new products or sectors of activity.

They highlight the extensive potential for using new technologies to provide faster and more convenient services. In particular, information and communication technologies can bring rural businesses closer to consumers and communities closer to the services they need – even in some of the remotest rural areas.

The examples also demonstrate the potential of non-technological 'smart' approaches, often based on collaboration and new ways of working, and the close links between farming and other rural economic activity.

Six themes of smart and competitive rural areas:

This brochure is structured into six sections reflecting some of the main areas of opportunity presented by the Rural Development Programmes for supporting 'Smart and Competitive Rural Areas':

1. Rural broadband

Fast broadband connections are increasingly important for rural areas to compete and thrive in the modern economy. Smart approaches to rural development need to support the provision of such services in often isolated rural areas.

2. Digital access to market

Digital technologies can enable rural businesses to reach new and broader markets. EAFRD projects can support rural retailers and producers to build websites, social media and smartphone apps giving them direct access to consumers, offering the potential to increase both their sales and profit margins.

3. Farm modernisation

The modernisation of farming practices and equipment can be a vital element in ensuring that agricultural holdings in Europe remain competitive. This can involve high-tech as well as small-scale innovations, which can be applicable to smaller as well as larger rural producers.

4. Market development

To support the competitiveness of Europe's producers, it is essential to look also at ways of developing access to markets. EAFRD support can be used to help producers to overcome barriers to accessing existing markets or to develop new or higher value products to expand or create markets.

5. Rural diversification

Smart approaches to rural development need to think about the broad range of (potential) rural economic activities beyond the key strands of agricultural and forestry production. Diversification can mean rural producers expanding their activities into new areas or other forms of rural entrepreneurship, many of which are still closely linked with forestry and farming.

6. Sustainable communities

Smart approaches to rural development need to ensure that rural communities are vibrant and attractive places to live and work. Ensuring the provision of sustainable rural services – including schools and shops - alongside job creation, can create positive cycles of local rural development.

Each section of this publication starts with a one-page overview of the sub-topic and possible approaches to achieving 'Smart and Competitive Rural Areas'. This is followed by two short case studies of EAFRD-supported projects, providing both an illustration of the topic, as well as specific good practice in that area.

We hope this brochure contributes to a better awareness of some of the issues facing today's rural areas as well as the many possible solutions that can be supported under the Rural Development Programmes.

We trust that the examples will inspire similar initiatives, building on some of the practices and approaches presented. The ENRD Contact Point will continue to be interested to hear about emerging and innovative approaches to be shared and discussed within the network

The ENRD Contact Point Team

1. Rural broadband

Fast broadband connections are increasingly important for rural areas to compete and thrive in the modern economy. Smart approaches to rural development need to support the provision of such services in often isolated rural areas.

Fast broadband connection can provide rural people and businesses with meaningful access to information, services, suppliers, markets and other opportunities that cannot be accessed offline (see Section 2). Such aspects can increasingly make the difference between having a viable business and closing down.

Fixed broadband is currently available to 97% of EU homes, but only around 25% of rural households are connected to high speed broadband.

However, many smaller and more isolated rural communities face market barriers to accessing broadband where private companies are not willing to make the investment required to link areas to the existing infrastructure.

The need for rural areas to have the fastest achievable connection is at the heart of current EU Policy. It is prioritised within the roll-out of the EU Digital Single Market package[1] – one of the priorities of the European Commission for 2014-2020.

Cabled broadband

One approach is to link rural areas to the main cabled network. Connecting via existing telephone lines is not enough to provide superfast access. So superfast cabled solutions require the laying of new cables between the existing broadband infrastructure and the outlying rural area.

EAFRD funding can add particular value here because it can both target rural locations where private companies are not likely to make the required investment, whilst also building on existing national or regional infrastructure.

The case study on the following page presents a project in Lithuania which used EAFRD support to extend an already ambitious national broadband cable programme to targeted rural communities.

Whilst some approaches will be based on extending broadband infrastructure out to rural areas, others are more community-driven. These start at the local level and focus on how rural communities can be supported to reach out to the existing network and private internet providers.

See the following pages for details of a project from Sweden which promoted community engagement to create 'village networks' and attract private companies to hook into them.

Wireless broadband

In many rural areas understanding local characteristics and needs will mean opting for wireless technologies rather than cable. These solutions are based on the installation of antennae to enable transmission of wireless broadband to a receiver in the rural area.

The signal can be superfast provided there is a clear line of sight between the antennae. The receiver is often placed on a prominent building in the rural community, such as a school.

Although not receiving EAFRD support, this was the approach used by a project on the Mull of Kintyre (Scotland)[2] to transmit fast broadband across water to a small island community. Similar technology was used in the ambitious Spanish project 'Guifi'[3], which, with 27 000 users, is now estimated as the largest wireless network in the world.

(2) www.tegola.org.uk
(3) https://guifi.net/en

© Plačiajuostis internetas

(1) http://ec.europa.eu/priorities/digital-single-market

Community-led creation of village networks in Sweden

The 'Fibre to the Village' project in Sweden stimulated communities to set up their own village internet networks. This made it financially viable for internet service providers to hook into and service these local networks, thus overcoming one of the main barriers to rural broadband provision.

One of the project's main achievements was to demonstrate the potential of community engagement for overcoming market barriers to rural broadband. Local communities, local authorities and private internet service providers all became more aware of feasible local approaches for delivering fast and reliable rural broadband.

"Participants all wanted to make this work, whether they were ordinary residents, public administrators, interest groups or the private sector – it was noticeable that most were still unaware of the breadth of possibilities and solutions offered by this kind of community-driven collaboration in rural areas."

Camilla Jönsson
Swedish Urban Network Association

Establishing community need

Local village associations in Sweden started the drive to get rural broadband internet access for themselves. They applied to the county board to get EAFRD support for a community-driven approach to connecting into the existing broadband network in the country. They engaged the private consultancy Ekot Konsult to deliver the project.

The project started by working with local communities to identify challenges and needs with regards to internet access. It organised four pilot study seminars to bring rural stakeholders together to explore these issues.

One of the key outputs was the identification of rural internet 'white spots' – rural communities where the private market was not providing broadband internet access and where it was unlikely to do so in the next five years. The project could then target intervention at supporting rural areas where the private market does not offer a solution for broadband infrastructure investment.

Stimulating community engagement

After this initial scoping exercise, project partners – including the national farmers' organisation and the Swedish Urban Network – produced information materials and practical guidance on how local communities can build up their own village networks.

Effective community engagement overcame the market barriers to rural broadband access in the small village of Hedemora.

© Fibre to the Village

Many communities avoided some of the financial costs by volunteering to do manual work themselves.

These materials were then used in a series of local seminars to catalyse community engagement to deliver village broadband networks. Held in community centres and other local buildings across the country, the events explained how to set up village networks – including how to fund them. Seminars differed significantly in size depending on the community – from 25 up to 150 participants.

"We held more than 50 local seminars from north to south in Sweden. The first 13 were funded under EAFRD and the rest by the Post and Telecom Agency in Sweden.

Lars Hedberg
Project Leader, Ekot Consult

Outcomes and results

The results of these 'inspirational seminars' was very positive. By using collaboration and discussion, this project succeeded in mobilising both village residents and local authorities to tap into the potential for delivering their own practical solutions to rural broadband access. They also created an opportunity for dialogue with internet service providers.

Several villages and network companies immediately planned an expansion of the broadband network in their areas. One of the important benefits of the 'community engagement' approach is that local people know the local conditions better than anyone and it makes it much easier to agree interventions to install infrastructure across private land.

"The project enabled participants in rural areas to access fibre connections instead of WIFI. The work started in 2009. Today about 1 500 villages have built or are constructing their own broadband networks."

Lars Hedberg
Project Leader, Ekot Consult

Project Name	Fibre to the Village
Type of beneficiary	Village associations
Period	2009 – 2010
Project funding	**Total cost: € 53 810** EAFRD contribution: € 42 250 Local contribution: € 11 560
Further info	https://enrd.ec.europa.eu/en/policy-in-action/rdp_view/fibre-village-bringing-broadband-remote-areas
Contact	lars.hedberg@ekotkonsult.se

Extending fibre-optic networks into rural Lithuania

The 'PRIP' project extended an already ambitious national broadband infrastructure programme to more isolated rural communities in Lithuania. The initiative showed how targeted EAFRD funding can build on broader programmes to make the difference for rural areas.

PRIP successfully built on previous work supported by the European Regional Development Fund (ERDF) which installed a comprehensive broadband cable network across Lithuania. The EAFRD-supported activities installed additional fibre-optic cable to connect rural activity centres with the main cable network.

An ambitious long-term strategy in Lithuania

Back in 2005, there were profound differences in access to broadband internet across Lithuania. Only 2% of villages of fewer than 3 000 inhabitants

The PRIP project extended the national broadband cable network to targeted rural communities in Lithuania.

had access to broadband and only 4.9% of rural households were connected.

Today, Lithuania is considered a highly successful example of the provision of high-speed broadband internet over fibre-optic cables. The country is a leader in the EU and ranked in the world's top ten for fibre-optic broadband penetration.

This is largely thanks to the ambitious Rural Area Information Technology Broadband Network (RAIN) initiative launched in 2005 and supported by ERDF. This ran in two phases to install a broadband 'fibre backbone' across the country.

"The peninsula on the other side of the Kronian lagoon provided us with our most interesting engineering challenge – we initially planned to pull an aerial cable across and anchor it on the island in the lagoon – which in fact posed a security issue due to gas reserves. Providing network to the peninsula ended up becoming the longest underwater drill ever made in the Baltic Countries."

Gediminas Šečkus
Project coordinator, RAIN

The network infrastructure is owned by the State and managed by the public company "Plačiajuostis internetas". All internet service providers are able to use this national infrastructure on equal conditions to provide their own services on the private market. End users can freely choose retail operator, services and last mile technology according to their needs.

	RAIN	RAIN-2	PRIP
Implementation period	2005-2008	2009-2015	2014-2015
Fibre-optic cables laid	3 357 km	5 775 km	485 km
Number of access points	935	2789	426
Number of residents reached	~300 000	~700 000	~100 000

Using EAFRD to reach out to more isolated areas

The hope and expectation was that small operators would use the RAIN network to provide 'last mile' services to rural communities and businesses, and connect one village to another. However, the need was identified to target more public investment at reaching hard-to-reach rural communities where private providers were unlikely to offer the solution.

Since 2014, the PRIP project, financed with EAFRD support, has been building on the results of RAIN-2, specifically to extend the fibre-optic network to targeted rural communities. It laid 485 km of additional fibre-optic cable to connect isolated rural areas with the country's broadband network 'backbone'.

"We are inviting broadband operators to invest in rural communities. The creation of this additional optical network by PRIP has lowered investment costs for commercial operators and encourages them to access and provide quality broadband services in rural areas."

Gytis Liaugminas
Director, Placiajuostis internetas

The project established 426 additional access points in prominent rural buildings within these communities, such as farms and rural tourism centres. Communities can then develop the most appropriate local solutions for tapping into these access points – whether through wired or wireless technologies.

Whilst the scope of PRIP is smaller than RAIN, its specific targeting of hard-to-reach rural areas has had an important impact on extending rural broadband access. By 2015, the percentage of households in rural areas with broadband internet access had increased to 58.4% (a twelvefold increase since 2005).

"Our example has inspired others – we have been in touch with many EU and non-EU countries. The Georgian broadband infrastructure is currently being set up based on the Lithuanian model."

Gediminas Šečkus
Project coordinator, RAIN

Project Name	PRIP – Development of broadband connection infrastructure in rural areas
Type of beneficiary	Public company - Plačiajuostis internetas
Period	2011 – 2012
Project funding	**€ 5 million** EAFRD funding (85% of total – 15% national public finance)
Further info	www.placiajuostis.lt
Contact	v.tvaronavicius@placiajuostis.lt

2. Digital access to market

Digital technologies can enable rural businesses to reach new and broader markets. EAFRD projects can support rural retailers and producers to use such approaches to gain direct access to consumers to increase both sales and profit margins.

Specific digital tools useful for rural businesses include **websites, social media and smartphone apps**. The software and applications continue to develop so that previously complex challenges such as web design or online payment management can now be delivered through user-friendly software, available to the smallest business.

Websites

One of the most common approaches to improving digital access to markets is through **web-based marketing and promotion activities**. Almost all forms of rural business can benefit from advertising and promoting their products or services online.

A particularly interesting possibility for rural producers is to use digital tools to enable **direct selling** to (potential) consumers, without the need to rely on traditional supply chains. This offers the potential to increase profit margins and to access a much broader market, including internationally.

Rural producers will typically need to develop their own website to highlight and sell their products. However, an attractive approach is to work with others to develop **common platforms** for promoting local businesses. This was the approach, for example, of the 'PROVE' project in Portugal, which included an online system for ordering from local producers.[1]

These approaches can form part of strategies to promote a region or sector as a whole and have greater potential to be more broadly promoted, for example via local tourist offices.

See the following pages for details of a LEADER-supported initiative for promoting restaurants in the south of France via a shared web platform that also promotes local retailers and producers.

In addition to the above business-to-consumer (B2C) approaches, websites and web platforms are used in **business-to-business** (B2B) contexts. Relevant examples include wholesalers and public sector purchasers, such as schools and hospitals. These can expand markets, make transactions more efficient, and facilitate the optimisation of delivery systems tailored to the specific demand.

Social media and apps

One of the most rapidly emerging areas in recent years has been the rise of **social media**, which allows even the smallest businesses to connect with (potential) customers using a range of easily accessible tools such as Facebook, Twitter and Instagram.

Similarly, **smartphone apps** using GPS technology can be used to enable locals and visitors alike to find rural producers selling their products nearby. This was the approach used, for example, by the Austrian project 'Goodies from the Farm'.[2] Some of the smartest approaches involve a mixture of all these digital tools.

The case study on the following page shows how organic farms in Slovenia came together to develop a web portal and smartphone app to enable consumers to find nearby farms and products.

(2) www.gutesvombauernhof.at/index.php?id=3

(1) www.prove.com.pt

Working together to develop organic markets in Slovenia

A project in north-east Slovenia brought together a group of certified organic farmers to support and encourage direct relationships with consumers and promote the presence of organic produce in local markets. Among the promotional tools developed were an interactive web portal and mobile app via which organic farms can promote their goods.

Established in 2011, the cooperative EKO-podeželje brought together 16 producers of a wide range of organic produce from north-east Slovenia. They aimed to work together in order to overcome market barriers, such as the higher cost of organic food.

"Synergies can emerge when there is common trust and all members communicate the same message."

Silvo Pozderec
Director, EKO-podeželje Cooperative

The cooperative accessed EAFRD support to help them raise awareness about organic produce and to improve their ability to sell directly to consumers through the use of new technologies.

Enabling direct access to consumers

The project developed the interactive web portal www.ekoportal.si to enable organic farmers to reach potential consumers directly. The portal provides consumers with the opportunity to search for organic produce in Slovenia by both product type and location.

Consumers can search amongst 14 categories of product, including honey and bee products, herbs, fruits, vegetables, crops, milk, cheese, eggs and meat. Agri-tourism businesses located on organic farms – such as organic farmstays – are also highlighted.

The online system provides results marked on an interactive map of Slovenia. Consumers can click on individual farms to read a short presentation and access a range of detailed information including location, products offered, organic certification date, contact details and photos. Other organic farms in the area are also highlighted.

"The project definitely helped me to promote my farm, particularly through my new online store."

Boris Uranjek
Farmer, member of the EKO-podeželje cooperative

Consumers can also find explanations of the value of organic farming and relevant information on organic legislation and labelling on the website. The portal is accompanied by the mobile application, 'EKO podeželje', which allows users to locate nearby organic farms and their products using GPS.

Organic producers can benefit from their high-quality produce through direct access to markets.

© Eko Portal

Awareness-raising

The project foresaw the need to build consumer trust in certified organic products. To this end, a common marketing plan was drawn up.

The plan included visits and tastings at local markets, members' farms and other places where products are available for purchase. A total of 55 events were organised along with 79 tastings, and 27 workshops for children and teenagers.

Organic products were further promoted at trade fairs and other agricultural, nutritional and environmental events. A range of promotional materials, from posters and leaflets to videos were produced to support this activity.

"The key lesson was that by working together in a group, each organic producer could strengthen his presence in the market."

Silvo Pozderec
Director, EKO podeželje Cooperative

Results

The number of visits to the group's web portal increased by more than five times from August 2014 to May 2015 and the number of users by nearly seven times. Ultimately, this led to an overall increase in sales and an expansion of the organic sector in the regional market.

Members of the cooperative have been encouraged by the results and are committed to continuing the work to enhance digital access to consumers.

"The project reaffirmed the need to devote more time to selling. We are preparing to carry out more activities to increase sales on our farm."

Zvonko Pukšič
Farmer, member of the EKO podeželje cooperative

Furthermore, the project has already generated private investment in follow-up promotional initiatives and raised the interest of other farmers in carrying out similar cooperative activities.

Project Name	Awareness raising and sales promotion for organic crops and products
Type of beneficiary	Cooperatives and farmers
Period	2012 – 2015
Project funding	Total cost: € 343 036 EAFRD contibution: € 199 990 National public contribution: € 143 046
Further info	• www.ekoportal.si • www.eko-podezelje.si
Contact	silvo.pozderec@eko-podezelje.si

© Eko Portal

The web platform enables users to locate organic products and the farms that produce them in rural Slovenia.

'Pays Gourmand' – promoting French restaurants

Three inter-related French LEADER projects have developed, extended and promoted a local food quality label through a dedicated website. Potential customers – whether locals or tourists – can now search for accredited restaurants and local producers in nearly 70 municipalities in the south of France.

The 'Pays Gourmand' initiative started in 2010 when the Local Action Group for the French *'Pays'* comprising Asses, Verdon, Vaïre and Var (known as 'Pays A3V') conducted research on the recipes used in local restaurants. This found that very few restaurants in the area were using local produce, despite the quality and diversity of products on offer.

A new Quality Label

To improve the quality and reputation of local restaurants and stimulate the use of local produce, the project developed a new 'Pays Gourmand label'. It drafted a Quality Charter, which defined the conditions for accreditation.

Establishments have to offer at least one 'Pays Gourmand' dish – made up of mostly local products – every day on their menu. Cafés can also receive the label by offering at least three local 'Pays Gourmand'

drinks every day. The Pays Gourmand options can change and restaurants are encouraged to use seasonal produce.

© Pays Gourmand

"People who come here on holiday do not want the same as they could eat anywhere else. So we try to offer them local products... adapted to the season."

Bruno Roussey
Pays Gourmand restaurant 'Le Mot de la Faim',
Embrun, France

Two subsequent cooperation projects with additional LEADER funding extended the use of the label into the nearby Pays Serre-Ponçon Ubaye Durance (known as *'Pays SUD'*) and the *'Pays Dignois'*. Both areas were already exploring options to support their local cuisine for similar reasons to the Pays A3V.

Extending use of the Pays Gourmand label meant that the new territories could build on the work already achieved by Pays A3V without having to develop their own competing brand from zero. It was also beneficial for Pays A3V in increasing the overall exposure and awareness of the Pays Gourmand brand.

Digital tools

Central to the project has been the development of a dedicated website: www.paysgourmand.fr. All accredited restaurants and retailers are added to the searchable Pays Gourmand map. Website users can find a short description of each establishment, including location, contact details and any relevant information on the Pays Gourmand options available.

"People make a tour of the Pays Gourmand restaurants because they want to try different local dishes and they know they are quality local products and not necessarily more expensive... The label brings us a lot of customers."

Louisette Ricaud
Pays Gourmand restaurant 'L'Oustalet',
La Colle Saint-Michel, France

In early 2016, nearly 50 restaurants and a further dozen retail outlets could be found on the clickable map covering the three 'Pays' in the Provence-Alpes-Côte d'Azur region in the south of France. The map also includes the locations and details of nearly 40 local producers who supply the accredited restaurants.

In addition to the interactive map, users can find detailed information on the territories covered by the Pays Gourmand initiative, typical local products, traditional recipes from the area and a selection of more modern alternatives, including selected recipes from participating restaurants. The home page highlights a different restaurant, producer, territory and recipe each day.

"We do not accredit farms, but we try to catalogue all those local producers supplying the accredited restaurants and promote them on the website so that locals and tourists can find them."

Olivia D'Haene,
Pays Gourmand project manager for 'Pays A3V'

Another digital tool developed by the Pays Gourmand team has been a members-only online platform to support new commercial relationships between outlets and suppliers. Participating farms can post their available produce, which Pays Gourmand restaurants may be interested to buy.

Project Name	Pays Gourmand
Type of beneficiary	LAG
Period	2010 – 2011
Project funding	**Total cost of all three Pays Gourmand projects: € 194 500** Combined EAFRD contribution: € 107 400 Combined national/regional co-financing: € 87 100
Further info	www.paysgourmand.fr
Contact	paysgourmand@pays-a3v.net

© Pays Gourmand

The Pays Gourmand map highlights all the accredited restaurants in the project area.

3.Farm modernisation

The modernisation of farming practices and equipment can be a vital element in ensuring that agricultural holdings in Europe remain competitive. Rural Development Programmes offer significant opportunities to facilitate this modernisation process.

Modernising farms can involve a broad range of activities, including purchasing newer farm machinery, updating management systems and the use of data. This can often seem complex and expensive, but new systems continue to emerge which are applicable to smaller, as well as larger rural producers.

Precision farming

Precision farming harnesses technological and engineering know-how to provide farmers with the information they need to make better decisions, reducing resource consumption and improving their output.

The practical applications of Precision Farming often use **remote sensors** which send back detailed and accurate information to inform management decisions, whether for the maintenance of hedgerows, irrigation planning or animal husbandry. These can be particularly valuable for hard-to-access rural locations.

The case study on the following page presents a project in Spain which used EAFRD support to install a network of sensors in beehives, providing an early warning system on bee health.

Approaches can include **monitoring soil management needs** and the performance of fields. This was the approach of an ambitious Precision Farming project in Belgium using satellite images.[1] Current trends are towards the use of drones or other low-flying crafts to gather the required information.

Another approach is to use software to monitor **electronically tagged animals** to enable improved management of herds or flocks over extensive terrains. A project in Wales (UK) developed a Sheep Tag App[2] to enable farmers to track their flocks from a smartphone.

Other potentially useful forms of new and emerging **software** include carbon calculators and tools to monitor the onset of calving in cattle. These can often be used productively to help to improve performance, even on small farms.

See the following pages for details of a Scottish project which used investment in modern robotic milking to increase yields and enable a move into added-value production.

Smart farming

Farm modernisation does not have to be about the latest technological innovation or large-scale investments. Farms can modernise their **production processes** through smaller pieces of machinery as well as smart and **innovative ways of working**, for example sharing resources across farms.

There are a number of long-standing examples where **cooperative use of machinery** has minimised the cost of purchase of higher-value specialist machinery for individual farmers. This need not necessarily be the latest technological advance, merely the appropriate means to deliver the service appropriate to the farmers' needs.

The uptake of modern farming systems can be supported by independent and specialist advisory services, and analytical support tools. They can also be enabled by effective peer-to-peer exchange and cooperation amongst rural producers.

(1) http://enrd.ec.europa.eu/enrd-static/policy-in-action/rdp_view/en/view_project_681_en.html

(2) www.bbc.com/news/uk-wales-34211541

© European Union

Sensor technologies enable remote monitoring of bee populations in Spain

The 'Apilink' project in Spain used an observation system that enabled early detection of problems in around 500 beehives. A cross-sectoral project bringing together scientists with practitioners, it increased the ability of beekeepers to implement cost effective solutions to save their hives and, by association, their honey-related products.

The project emerged as a response to declining bee populations in Spain – as elsewhere in Europe. Problems being encountered included increased hive mortality due to the increasingly prevalent phenomenon of colony collapse disorder – where worker bees abandon their queen and their hive.

The Apilink project had the full name: "Remote monitoring of beehives to reduce costs and increase productivity in beehives as a means of supporting rural populations". It was led by the European University of Madrid, in partnership with the University of Cordoba and beekeeping associations in Asturias, Aragón and Málaga.

"Beekeeping does not require large initial investment and so represents an increasingly interesting option for rural entrepreneurship. However, problems such as environmental degradation [and] new diseases... make the early detection of problems... increasingly necessary."

David Atauri
Project Manager, Apilink

Information flows from 500 hives

Around 500 beehives were fitted with sensors in five apiaries: three managed by private beekeepers showing differences in practice and local climate; and a further two operated by university researchers with guidance from the beekeeping associations.

The sensors detect the sound made by the bees in the colony, sending the information to a single terminal that processes and stores the data in a central database. The system identifies patterns and changes in sound within the beehives which can signal problems. This is possible because bees produce constant sound that reflects their communication and activities.

With this technology, the system automatically generates regular reports and sends them directly to beekeepers electronically. Furthermore, when swarm activity decreases, an alarm is automatically sent to their computer or smartphone so that they can take immediate action.

© Apilink

Sensors are used to provide an early warning system on bee colony health and hope to increase scientific understanding of the threats they face.

"Remote monitoring lets beekeepers know if a hive has been orphaned (no queen), if It has health problems or if it is producing honey."

David Atauri
Project Manager, Apilink

The pilot project provided information over three years, during which time the researchers made ongoing modifications and improvements to the monitoring system.

Economic and scientific impact

By enabling early intervention, the system gives beekeepers a much better chance of avoiding the negative impact of phenomena such as colony collapse disorder or the spread of disease. This reduced mortality translates into increased productivity with economic benefits for the beekeepers.

Furthermore, the approach achieves better results with less financial cost. Previous systems for checking the health of bee colonies were very labour intensive requiring regular visits to hives often located far apart. Such visits are not only expensive, but also cause stress amongst the bee colonies.

"[Early warning systems] help beekeepers to make more rational decisions about the most appropriate time to visit the hives or when to conduct health checks of the bees."

David Atauri
Project Manager, Apilink

The project also had an important scientific dimension in providing a database of big data which researchers can study to improve understanding of beehive health and early detection of environmental impact on bees and particularly colony collapse disorder. Importantly, the database is open for other beekeepers, researchers or interested parties to examine.

The project demonstrated that modern technologies can be applied effectively to a traditional industry to deliver significant practical benefits for rural entrepreneurs. It also provides a good example of how researchers can work with rural producers for mutual interest and benefit. The involvement of the beekeepers and beekeepers' association has been essential for adapting the system to local needs and generating wider interest in the initiative within the sector.

Project Name	Apilink
Type of beneficiary	Universities and beekeeping associations
Period	2012 – 2014
Project funding	**€ 183 900** of funding from the Spanish National Network for both preparatory Technical Assistance and Project Implementation
Further info	www.apilink.net
Contact	info@apilink.net

Kedar cheese – added value production through farm modernisation

A Scottish family farm used EAFRD support to modernise their milk production processes through robotic milking. They were able to increase milk production and free up hours of labour. This supported the long-term goal of producing their own cheeses on site, increasing the farm's competitiveness.

A new business model

TE Lochhead and sons were a traditional dairy producer who saw their herd of cattle wiped out with the outbreak of foot and mouth disease in southern Scotland in 2001. Rather than simply replace the herd, Gavin Lochhead and his family looked into opportunities to differentiate from other farmers. They decided to move into cheese production, adding value to their primary milk product.

The farmer was able to participate in the Scottish Enterprise 'Added Value and Quality Development Programme' which took the business through a series of workshops to develop a full business case. From this, a full business plan was developed, and a proposal for investment created both for grant funding and for bank loans.

"Our farming business has a very long and established heritage, but it's important we try and explore new opportunities. Once we are fully operational, our milk sold as cheese should be worth double what we currently receive."

Gavin Lochhead
Dairy Farmer and Cheese Producer

© Gavin Lochhead

Robotic milking increased the efficiency and volume of milk production on the family farm.

Investment in a new cheese-making facility was not the only requirement. To devote enough time and energy to cheese production, the family needed to increase the efficiency and capacity of their milking processes. They needed a larger volume of milk and to be able to spend less time milking. The answer was to install modern robotic milking equipment on the farm.

Modern milking equipment

Along with their own money, the Lochhead family was able to access bank loans and a supporting grant from RDP measures for Rural Diversification. The total investment was over EUR 1.5 million for the construction of a new complex for 150 cows. It included a cubicle house format of dairy parlour incorporating three robotic milking machines, together with a calf-rearing shed and slurry store.

Dairy production using the robotic milking machines commenced in 2013. The automated process increased the number of milkings per cow and the overall volume of milk produced from the herd. It has also enabled much greater and more efficient monitoring of animal health and milk quality across the whole herd.

"The robotic milking saves us 5 hours a day in time spent milking. It creates better animal welfare, and allows us to concentrate on animal breeding and on the production and marketing of the cheese."

Gavin Lochhead
Dairy Farmer and Cheese Producer

The family carried out a second investment in a small cheese-production facility in the dairy unit. The full investment was met with the help of loan capital from the bank, based on a full feasibility study carried out with support from the Scottish Farm Advisory Service.

A niche final product

As part of their overall business model, the Lochheads bought 150 Brown Swiss cows to become the only producers of cheese from this breed of cows in the UK. They also fulfilled a plan to ensure their production had organic certification, providing additional differentiation in a highly competitive market.

The business started producing and selling their first cheese in 2016, a mozzarella cheese which will be followed by other 'mountain brand' (Swiss style) cheeses.

"Market research has helped the business to identify an unfulfilled niche within the cheese market. Not only will the project exploit this niche, it will also create a number of rural jobs to the area, with the potential for more in the future."

Paul Mayfield
Food & Drink Advisor

The new business model required substantial investment in modernising the family farm's production facilities. However, with effective support from farm advisors in Scotland, the Lochheads have found good ways of adding value to their production and taking effective advantage of this through short-chain sales via farmers' markets and local retail outlets including farm shops.

Project Name	Farm Modernisation for Added Value
Type of beneficiary	Farmer
Period	2011 – 2013
Project funding	**Total cost: € 1 620 000** EAFRD contribution: € 412 000 Private contribution: € 1 208 000
Further info	• www.kedarcheese.co.uk • www.youtube.com/watch?v=FSjHLIDiMAE
Contact	glochhead@btconnect.com

4. Market development

To support the competitiveness of Europe's producers, it is essential to look also at ways of developing access to markets. EAFRD support can be used to help producers to overcome barriers to accessing existing markets, or to develop new or higher value products to expand or create markets.

There have been a number of areas in recent years where rural producers have been able to diversify their businesses to develop the markets that they are operating in or looking to access. Some of these markets have existed for a number of years, but have become more accessible over time. Others can be considered as 'new' markets based on the creation of 'new' products.

Public food

A key potential growth area for Europe's producers is to access the significant **public market for food**. This can include the food purchased in some schools, kindergartens, hospitals and prisons. Accessing this market has traditionally been challenging because individual farmers struggle to meet the requirements for consistency of volume, diversity of supply and consistency of quality.

Smart approaches for gaining access to this significant public market include creating or enabling **producer cooperatives or networks** so that they can meet the purchasers' requirements as a group. These networks can be virtual or real.

Other or related approaches can usefully involve changes within the **systems of public procurement**. In Scotland, for example, this has meant dividing the public food contracts into smaller lots, so that a range of suppliers can enter into smaller contracts.

See the following page for a case study from Slovenia that developed a cooperative of rural producers to supply food to a new consortium of state-owned schools and kindergartens.

Niche markets

Where businesses can redesign and adjust their output to the specific needs of the market, they can create a Unique Selling Point (USP), where they are differentiated from other businesses. That can be one of the keys to continued viability in a competitive area.

Approaches can develop ways for producers to **add value to products**, for example by processing primary products themselves into products with higher profit margins. Projects can also explore the development of

new products, including those made from materials previously considered waste. This was the approach of a project in Malta that turned tomato residues into a new 'gourmet tomato vinegar'.[1]

An alternative approach can be to take advantage of the reputation or specific **characteristics of local production** – such as those recognised by EU-protected food names, to develop a niche market. This was the approach of 'Finest Greek Tastes',[2] a LEADER cooperation project between regions in the country.

See the following project case study from Finland which saw the development of a new brand of nutritional supplements for the international market using traditional herbs from Lapland.

Other approaches have developed **new ways of selling**, which can be online (see Section 2) or involve physical infrastructure, often at a relatively small, local scale. Examples include the creation of artisan producer or farm shops, farmers' markets or mobile food trucks. It can also involve the creation of new relationships between hotels, restaurants and local suppliers.

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(1) http://enrd.ec.europa.eu/sites/enrd/files/gp_webtemplate_tomatomt.pdf
(2) http://www.finestgreektastes.com

© Arctic Warriors

Accessing the market for public food in Slovenia

A Slovenian project has demonstrated a successful approach for enabling small and local producers to access the significant public food market. It developed a network of producers and a consortium of schools and kindergartens to enable the purchasing relationship to develop between them.

The 'Heart of Slovenia' Local Action Group (LAG) has made one of its top priorities "increasing added value and quality of growing and processing, as well as marketing of local agricultural products". To achieve this objective, it aims to support networking and collaboration between local actors in the development of innovative approaches.

The strategy has recognised that many local producers lack the diversity or volume of production to consistently and reliably meet the demands of major purchasers, such as schools, restaurants and hotels.

A cooperative of producers

In this context, Jarina Rural Development Cooperative, has received LEADER funding for a series of inter-related activities to promote local food self-sufficiency in the LAG area.

"With good services and a socially responsible business attitude from everyone involved, short-supply chains have a big potential, not only economically, but also in terms of food quality and quality of life."

Vesna Erhart
Jarina Cooperative

A particular opportunity was identified in the market for public food. Jarina sought to overcome the barriers local producers faced in accessing this market by facilitating cooperation between them in order to generate collectively the consistency and quality of supply needed to satisfy the market.

Jarina worked to explain to producers that by working together they could increase the profile of their businesses. The result was the creation of a network of local farms of different sizes and scales. Through working with Jarina, each local producer is able to concentrate on their core activity of food production, leaving the cooperative to help identify and develop the market.

Jarina organises the whole distribution chain from end to end, picking up goods on the farm and delivering them to the buyers. They implement a market-led approach, combining the goods of multiple producers to meet buyers' specific needs, keeping in mind the quality required.

"Our network of approximately 100 producers enables us to fulfil buyer's needs. And as our producers are located in different regions with its special climate conditions, the period that we are able to deliver product fresh from the field is much longer."

Vesna Erhart
Jarina Cooperative

© Jarina

Jarina cooperative organises the whole supply chain to improve small producers' access to markets.

A consortium of schools and kindergartens

To develop the particular potential of supplying the public food market, Jarina worked directly with schools and kindergartens. It met with headmasters, cooks and school catering organisers to raise their awareness of the availability and potential uses of local ingredients. They also worked to improve purchaser understanding of the seasonality of certain products.

It linked these discussions with the development of educational programmes aiming to promote the benefits of consuming local produce to children and their families. These included demonstrations, workshops and field trips to farms.

Jarina led the educational establishments in discussions around the value of joining together to collaboratively order appropriate volumes to the benefit of both purchasers and suppliers. The result was a formally established consortium of 15 schools and kindergartens.

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The creation of the network of suppliers and the consortium of purchasers has ensured the appropriate capacity at both ends of the supply chain. This made it feasible for the procurement relationship to exist between the schools and local producers.

Furthermore, the work done has helped local suppliers to develop other local markets, including in hotels and restaurants. Promotion of the project's successes even managed to attract the attention of these private purchasers, leading to the signing of new supply contracts.

"We are very proud of the Jarina cooperative, as it was subsequently invited to supply local products to hotels and restaurants in Ljubljana - which is European Green Capital in 2016."

Aleksandra Gradišek
Manager, 'Heart of Slovenia' LAG

Project Name	Expanding the Network of Local Products in the Area of LAG 'The Heart of Slovenia'
Type of beneficiary	Rural Development Cooperative
Period	2012 – 2014
Project funding	**Total budget: € 61 000** LEADER funding: € 49 000 Private co-finance: € 12 000
Further info	www.jarina.si
Contact	info@jarina.si

Award-winning superfoods from the Finnish Arctic

A small Finnish start-up company developed nutritional supplements based on traditional herbs and plants from Lapland. It has shown how the development of niche products supported by effective branding and marketing have the potential to reach significant new markets.

'Arctic Warriors' started from an appreciation by three friends that Lapland had indigenous plants and herbs with strong natural characteristics. The nutritional value of Lappish plants is strengthened by the cold winters and long summer nights in this Arctic territory.

"We were troubled by the fact that superfoods were being imported to Finland while traditional Lapland plants were proven to be clean, strong and high in nutrients. So we three friends decided to do something about it."

Katja Misikangas, Ilkka Kauppinen, Tuija Kauppinen
Arctic Warriors Management Team

New products, new brand

The friends were able to access start-up funding from their Local Action Group 'Peräpohjolan Leader ry' to develop their company and brand new nutritional supplements. The aim was to turn indigenous herbs and plants from Lapland into superfood products to meet the growing market for natural, energy-giving foods.

The partners recognised that branding and packaging were essential to reach out to a relatively young market. They wanted to develop a fun product that was easy to use and consume, and which transmitted the feeling and ethos of these natural Lappish products.

The branding idea that emerged was based around the concept of 'Arctic Warriors', which aimed to reflect both the strengths of the product and the philosophy of the company. Three products were branded according to three types of Arctic Warrior: defender, fighter and energy:

1. **Defender Gel Shot**: with angelica, nettle and northern sweet grass for immunity and resistance;

2. **Fighter Gel Shot**: with roseroot and nettle to avoid stress or tiredness;

3. **Energy Honey Shot**: with honey, roseroot and nettle for sports or other physical activity.

The packaging shows colourful cartoon drawings of the three warriors according to the product type and clear labelling of their 100% natural ingredients. The products are available in bottles or plastic packets

that are designed to be easy to open on the move by folding and squeezing out the liquids. They can be consumed directly or added to drinks.

"This kind of brand was long awaited. The taste makes you smile. Packaging is nice, Finnish and natural."

Taika Nummi
Student

Supporting local farmers

Arctic Warriors is committed to being an active partner in developing the local economy. They have developed a network of local farmers from whom they not only buy raw ingredients, but exchange information and good practices in the farming of herbs.

The relationship is important to the company in terms of guaranteeing quality local products, supporting local farmers and the company's place within the local economy and community. It has already incentivised other local farmers to start growing traditional herbs alongside their main farming activities.

"We have noticed that our customers are very impressed when they hear that we know our farmers personally and know the journey of the herbs from seed to the end product."

Tuija Kauppinen
Partner and Sales & Marketing Manager, Arctic Warriors

Accessing international markets

Working with an internet marketing consultant, the Arctic Warriors brand has continued to develop a strong online presence, including through Facebook, Twitter and Instagram. The website contains a wealth of information on the company, products, plants, farmers and testimonials from satisfied customers.

The website also has an online shop and links to more than 25 online stores and numerous shops and retail chains across Finland from where Arctic Warriors products can also be purchased. In a relatively short time Arctic Warriors have expanded swiftly across Finland and into the Norwegian and Swedish markets.

Crucially, the team have continued to build international marketing activities for their niche products. Berrytime, a Hong Kong-based online shop, is now selling Arctic Warriors products worldwide. The company is also negotiating with potential resellers in South Korea, China and Canada.

Project Name	Arctic Warriors
Type of beneficiary	Private company (start-up)
Period	2014
Project funding	**Total Cost: € 30 890** EAFRD contribution: € 15 129 Private contribution: € 15 761
Further info	www.arcticwarriors.fi
Contact	info@arcticwarriors.fi

Arctic Warriors nutritional supplements use well-thought-out marketing to access international markets.

© Arctic Warriors

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5.Rural diversification

Smart approaches to rural development need to take into account the broad range of (potential) rural economic activities beyond the key strands of agricultural and forestry production.

Rural diversification is about exploiting important growth areas for rural development, such as the 'experience economy' where consumers spend money on activities rather than products. Diversification can deliver an economic stimulus, as well as reduce the dependency of some rural areas on production.

Diversification can mean rural producers expanding their activities into other areas, as well as other rural actors developing many other different types of activity. These activities often build on the natural and cultural assets of the area, including farms and forests.

At the heart of many rural diversification approaches is the need to attract people to visit the area so that they spend money in local shops, using local services and supporting local businesses. Smart approaches can be based on the use of new technologies, as well as integrated approaches that think strategically about the development of a local area.

A competitive local offer

Rural communities and businesses seeking to attract visitors can usefully think about the combined local offer to tourists – **destination creation**. One business or activity alone will have a certain power of attraction. However, if that is combined with complementary businesses and services, including places to stay, places to eat, alternative activities and places to shop, then the attraction is larger. A 'destination' is created.

EAFRD support has been used by rural actors to develop the offer being made to potential tourists in specific rural locations. These tend to work best when they engage the different stakeholder groups within the local community in delivering a coherent overall strategic approach.

The case study on the following page presents a local project from Bulgaria that has developed a number of complementary attractions as part of an overall offer to rural tourists.

Other approaches can focus on specialising in a specific sector of activity – for example local food and drink or adventure sports such as climbing and paragliding.
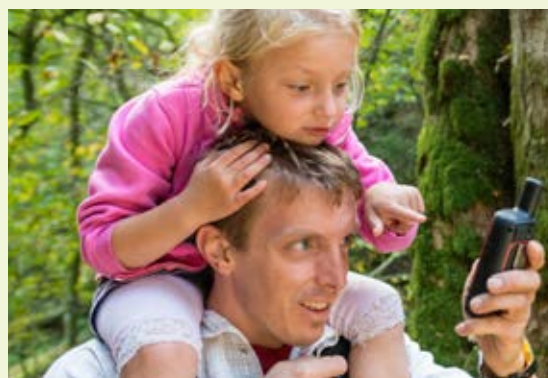
Smart visitor tools

In addition to an attractive offer, rural strategies have to reach out to potential visitors to let them know what they can find, why they should visit and how they can organise their stay.

EAFRD support can be used to develop online tools such as **web platforms and marketing campaigns** that present the diverse range of local businesses and attractions in different ways.

More specific tools can include smartphone applications – **apps** – which help people to make the most of their time in the local area. By improving the visitor experience, such tools can have the double benefit of increasing visitor numbers and increasing their potential to spend money with local businesses.

See the following pages for a case study of a project from a Belgian region which developed an online tool and app to attract a new generation of visitors to use local hiking trails.

© GO Eastbelgium

© GO Eastbelgium

Joining up the local offer to attract tourists in rural Bulgaria

The Borino municipality in southern Bulgaria benefitted from EAFRD funding to develop new tourism attractions and tools to facilitate access to natural and historical landmarks in the region. The project shows a good example of taking an integrated approach to promoting rural tourism.

Community-driven

The project came to life after a Local Action Group (LAG) in the Western Rhodope mountainous region successfully involved local residents in proposing ideas for the creation of new tourist attractions to complement the already well recognised natural attractions in the region.

This started with information campaigns in several villages to involve local residents in the development of the area through LEADER/CLLD funding. At one of the meetings, a resident proposed to recreate an attraction used at village holidays and fairs dating back to the 1930s – an early prototype of a Ferris wheel.

"Such 'crazy local ideas' come to life exclusively through LEADER funding. It would have been very difficult to recreate such a specific local activity through other RDP Measures. This is the main strength of the LEADER approach – a single individual or community is given the opportunity to realise its dreams."

Bilgin Asanov
Coordinator, LAG 'Western Rhodope'

Towards an integrated approach

The idea to recover the Ferris wheel prototype was further expanded in close collaboration with the local community into a project to include a total of 14 tourist attractions complementing and promoting natural landmarks in the region such as the caves 'Yagodina' and 'Dyavolsko gyrlo' ('Devil's throat').

The attractions include a 20 metre-tall boom lift offering a panoramic view of the mountains, an ornithological station equipped with telescopes and binoculars allowing the observation of rare birds and a 62 kilometre-long cycling trail.

To facilitate access to these and other attractions in the area, the project provided for the construction of two info centres and relief maps highlighting hiking and cycling trails, as well as all natural landmarks attracting thousands of tourists annually.

These activities were designed to complement another EAFRD-supported project by the LAG. This involved the construction of a 20 kilometre-long wooden trail

© LAG 'Western Rhodope'

Stakeholders tapped into their own cultural history to recreate a local attraction from the 1930s.

called 'Devil's path' that goes around the mountains and offers hikers the possibility to see and experience previously inaccessible sights.

Both the LAG and the municipality are keen to initiate further activities to improve infrastructure around and facilitate access to these various attractions. Plans and ideas include the construction of parking lots, observation decks, bridges, shelters and info points.

Using modern technologies

As part of the integrated approach, the LAG has thought about and developed ICT tools to support awareness and promotion of the area. A dedicated website was already created to promote the 'Devil's path' trail. The project also provided an online reservation option for hotels and guest houses in the region.

As a next step, following the construction of all the new attractions in 2015, the LAG, jointly with the Borino municipality, will officially launch and promote them via the dedicated website. A smartphone application will also be developed to provide hikers and cyclists with an easy way to navigate through the various mountain trails.

These smart tools are seen as an essential part of further promoting this attractive rural destination to a new generation of visitors. This is based on both

expanding the local attractions and activities available and developing the tools to make this real and accessible for potential visitors.

"Through the realisation of these tourist attractions, we strongly hope that the Borino village will transform into a genuine centre for various tourist and information services."

Municipality of Borino
http://dyavolskapateka.org

ICT tools will be increasingly used to promote new and updated attractions such as the 'Devil's path'.

Project Name	Access to natural and historical landmarks and attractions in the Municipality of Borino
Type of beneficiary	Municipality
Period	2015
Project funding	Total budget: € 137 672 EAFRD contribution: € 110 137 Local contribution: € 27 535
Further info	• http://dyavolskapateka.org • http://www.nsm.bg/sites/default/files/DP_MIG%20VZR-Viensko%20kolelo_M313f.pdf
Contact	• mig_vzr@abv.bg • Obshtina_borino@abv.bg

Promoting rural tourism in the Belgian Eifel with smart hiking tools

'GO Eastbelgium' brought together five municipalities in the Belgian Eifel to develop an online hiking tool with GPS and smartphone app. The state-of-the-art technology enables a new generation of hikers to discover long-forgotten routes and paths, attracting new visitors to the area.

Promoted by the Local Action Group *'100 villages, 1 Future'* – in the German-speaking community in Belgium (Belgian Eifel) – five municipalities[1] joined forces with the East Belgium Tourism Agency (TAO) and local tourism offices to develop the 'GO Eastbelgium' hiking tools.

The aim was to use modern technologies to give new life to a traditional form of rural activity and give a stimulus to the local economy by attracting a new generation of visitors. It sought to exploit the fact that many hikers and ramblers now find it more convenient to plan routes using online maps and to make use of their mobile phone in the field rather than a foldout map and compass.

(1) Amel, Büllingen, Burg-Reuland, Bütgenbach and St. Vith.

"I believe in the complementarity of GPS and paper maps. A track on a GPS is useful help to plan a route. Using it with a map gives you the flexibility to change your plans very easily."
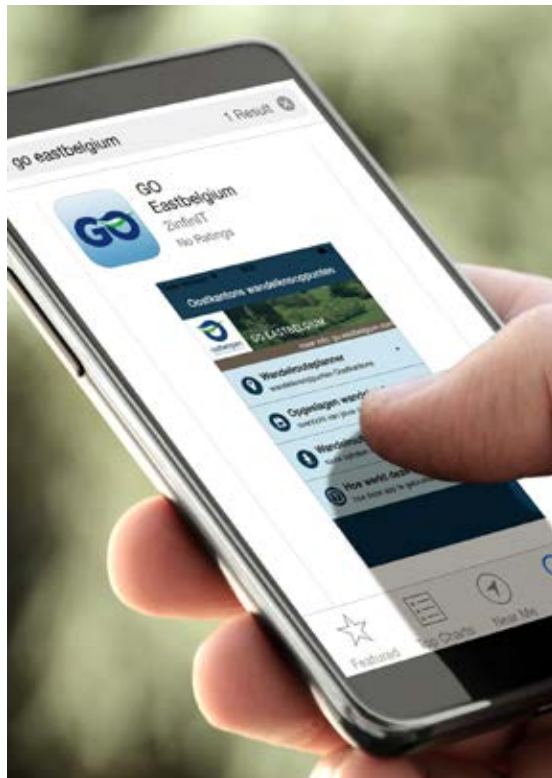
Peter Christiaensen
Hiker

The project provided an online tool for hikers to plan their excursion in the Belgian Eifel.

A similar project, 'DigiRoute 42', in the Flemish Ardennes, served as inspiration to apply the 'node system' used in Flanders for bicycle routes – nodes are the points where paths intersect, thus creating a network of paths and more options for the rural tourist. The aim was to create a uniform hiking trail system and road network over the whole LAG area of 629 km², all of which would be supported by GPS, online planning tools and a smartphone app.

© GO Eastbelgium

A smartphone application provides routes and local information to walkers with or without an internet connection.

Coordinate and cooperate

Developing the content for the GO Eastbelgium online planning tool and mobile app involved the successful cooperation of local stakeholders from the different municipalities and tourism offices. They provided an inventory of existing trails, old maps and quality criteria to give the technology experts the content they needed to create the tools.

First, local transport and tourism associations researched and defined the hiking trails, followed by the identification of thematic routes which would add value. Local knowledge was used to ensure that busy roads were avoided and local attractions and businesses highlighted in the development of the routes to provide for the best possible hiking experience. Hiking standards were also incorporated.

"The hike planner made our villages closer, by working together, we have made further plans for our communities. Our example shows how a seemingly small project financed by European LEADER subsidies can bring about real and positive change on the ground."

Bernd Niessen
Tourist Information office of
Amel-Eibertingen-Valender V.o.G.

Some farmers were initially reluctant to see historic footpaths between villages restored because they cut across farmland. The project promoters were able to change their minds by explaining how their region would benefit from tourism if they cooperated. The LAG actively involved these farmers during the analysis and revision phase of trails and paths. The added value was that the farmers helped to identify those historic footpaths which had been lost, but could be used again.

The new tools and beyond

One of the main outputs was a virtual planning tool, which can be accessed via the website or downloaded onto a smartphone via an app which can then be used with or without an internet connection. The tools can be used in Dutch, French and German.

The tools offer 919 km of trails, which are cross-linked by a system of nodes, GPS coordinates, thematic routes and pinpointed local attractions. The interactive map shows information on the elevation profile and distance of any route selected.

The GO Eastbelgium website was visited 22 000 times by 16 500 different users, whilst the app was downloaded 1 200 times. According to the project leader, Gilbert Küpper, this has led to an increase in visitor numbers and is only the start of things to come.

The LAG is keen to build on the successes of the project to develop further effective cooperation between various stakeholder groups to promote tourism, gastronomy and hospitality in the Belgian Eifel.

Project Name	GO Eastbelgium
Type of beneficiary	Local Action Group '100 villages – 1 Future'
Period	2011 – 2013
Project funding	**Total budget: € 82 650** EAFRD contribution: € 37 200 Regional contribution: € 37 200 Local contribution: € 8 200
Further info	http://go.eastbelgium.com
Contact	Gilbert.Kuepper@wfg.be

6.Sustainable communities

Smart approaches to rural development need to ensure that rural communities are vibrant and attractive places to live and work. Approaches that focus on economic and work opportunities alone will not overcome all of the barriers to local rural development.

Business development in agriculture, forestry and other rural sectors can help to maintain jobs in rural areas. However, it is also essential that there are schools, shops and other local services to make rural communities viable places to live and work. Positive cycles can be created by ensuring the existence of sustainable local services alongside business development.

New service models

New models of flexible, service delivery are typically needed in order to meet local needs in an efficient and cost-effective way. A common approach is to provide **mobile services** which enable locally delivered services in proportion to the real need. These can include mobile libraries, banks and healthcare services.

A different – or sometimes complementary – approach is to offer telephone or **online services**. These can offer an immediate response to certain needs of users irrespective of their location and often including out-of-hours provision. They are typically supported by access to more traditional services at other times. For example, telephone or online health services can address needs remotely that do not require or can precede a visit to a mainstream health facility.

Accessible local transport is a key issue for rural areas, especially for the most vulnerable members of the community. Smarter, more viable solutions to running a sustainable public transport network include using online booking systems to enable **on-demand public transport** tailored to the specific needs of community members.

See the following pages for a case study from Wales of an on-demand, accessible bus service to link rural people with other villages, local towns and wider transport networks.

Community-run shops and services

Run as not-for-profit enterprises, **community-run services** can use community investment of time and/or money to overcome the barriers that prevent public or private providers from serving their area. EAFRD can be accessed to support communities in developing and implementing such initiatives.

Community shops can guarantee the provision of basic goods to a village, making it a more attractive place to live. They can also support local producers and develop a local offer to attract tourists and second-home owners. Such shops can also serve as a 'hub' for the provision of other services, including post offices, village noticeboards and broadband internet hubs.

See the following page for a LEADER cooperation project that developed citizen-based solutions for meeting the service needs of local communities in Germany and Austria.

A variety of other local services can also be supported by community-driven processes. Some models focus on providing structured tools to organise the **sharing economy**. These include 'time banks' which enable local people to offer others services according to their skills and abilities and receive alternative support in return, without the need for a financial transaction.

© Miselerland Integration Couch

Resident-based solutions sustain rural communities in Germany and Austria

The 'Quality of Life through Proximity' project involved the participation of citizens to develop and exchange solutions for the lasting provision of basic services and local supplies in rural areas. It was a transnational LEADER cooperation project across the German-Austrian border.

The aims of this EAFRD-funded project were to identify, exchange and develop citizen-based solutions to the closure of local services, including shops, health services, banks and post offices. These challenges often emerge when a lack of local jobs, demographic change and population decline leads to low local purchasing power.

Cooperate to innovate

To start the initiative, funding from the LEADER Cooperation Measure supported the establishment of a joint, transnational forum between various municipalities and stakeholders from Germany and Austria. Spearheaded by the German Local Action Group (LAG) 'Nordschwarzwald', the project was joined by another three German LAGs and three partner LAGs from Austria.

Exchange visits were organised between the Austrian and German partner regions and a six-module training programme developed for all partner areas. These activities focused on the identification and dissemination of good ideas for developing citizen-led solutions to problems facing village life.

Experts from SPES – a German association focusing on local governance and local service provision – facilitated the process, while coordination and reporting was the responsibility of the LAG managers.

"People quickly realised that the creative power of villages depends on the presence and participation of their citizens. Moderating the process with the help of our experts helped participants focus and be constructive."

Ingrid Engelhart
Project coordinator

Local people from 33 participating areas worked on a voluntary basis to exchange ideas and practices. The objective was not simply to copy, but to tailor possible solutions to best meet the actual needs of each participating community.

Citizen-based services

The LEADER cooperation project identified and operationalised many innovative concepts. Services have been developed and explored on topics including: the elderly; energy; family; local supply; culture; mobility; ecology; demography; industry; gastronomy; children; adolescents; agriculture; and tourism. Many examples can be found on the project website.

An interesting example is the 'Time Bank 55+' that registers the help one resident aged 55 or over provides to another and allocates them 'time credits', which they can then exchange for a service from another member of the scheme. All services are equal and only measured in the time provided, whether

Community shops – such as this one in Vorderstorder, Austria – can provide local access to basic goods and a hub for local activities.

© Lebensqualität durch Nähe – LQN

gardening, providing lifts, help with paperwork or shopping etc.

"At my age I do not want to just sit around and do nothing. I would like to be in touch with my neighbours and be of assistance as long as I can. Hence I drive them around in my car to the doctor's office, the seniors' afternoon meetings, or help with other errands."

Hannelore Foerch
76-year-old resident and Time Bank 55+ participant

In the municipality of Vorderstoder, in Upper Austria, local people provided a joint investment of € 50 000 of seed capital to set up a village shop. The 220 m² shop offers goods including local farm produce and features a café. It provides a solution to the local supply of goods when the private market cannot.

Concepts turn into lasting solutions

Such local initiatives were supported by awareness-raising activities to promote use of the schemes by local residents, as well as their replication in other areas. For example, the project was covered by a series of radio programmes on the German station SWR1. It ended with a final symposium focused on knowledge transfer of the identified schemes.

The project shows that with a bit of support and guidance, communities are often able to develop their own solutions to some of their needs for goods and services. This is without the need for large subsidies or significant external intervention. Targeted EAFRD support can make the difference in highlighting what can be done and how to go about it.

"The practical orientation of the project was its major strength. It showcased to partners the solutions to issues that they face back home, and that were easy for them to implement."

Ingrid Engelhart
Project coordinator

Project Name	Lebensqualität durch Nähe – LQN (Quality of Life through Proximity)
Type of beneficiary	Local Action Groups
Period	2009 – 2011
Project funding	**Total budget: € 89 568** EAFRD contribution: € 28 706 National contribution: € 30 409 Private contribution: € 30 453
Further info	www.lqn-leader.de
Contact	engelhart@spes.de

An on-demand local bus service connects residents in rural Wales

'Bwcabus' is an on-demand local bus service tailored to the needs of rural passengers who can pre-book over the phone. The initiative has demonstrated that an integrated rural transport network can help improve accessibility, reduce car dependency and assist in lifting rural communities out of deprivation.

Many villages and small towns in rural areas across Europe have become isolated as uncompetitive bus services are cut to save costs. An initiative in west Wales, however, is showing that new approaches to rural transport linked to strategic bus routes can deliver a sustainable model of integrated public transport.

The Bwcabus initiative started from a 2008 ERDF project. It was able to access EAFRD support in 2015 to ensure continuity of service provision. The initiative was led by Carmarthenshire County Council, in partnership with Ceredigion County Council, Traveline Cymru and the University of South Wales.

A passenger-focused bus service

'Bwcabus' (book-a-bus) is a local bus service that seeks to respond to the real needs of rural communities. In addition to a number of fixed routes,

Bwcabus operates an on-demand service, which users can pre-book.

The bus service is supported by a website that provides passengers with detailed information on the service, including the location of bus stops, fares and how to book. Once they have registered for free, passengers are able to pre-book their journeys using a dedicated telephone booking service.

The bus service operates Monday to Saturday from 07:00 to 19:00. Passengers must book before 19:00 for travel the next morning or before 11:30 to travel that afternoon.

The service enables people to travel between local towns and villages within the Bwcabus zone or connect to the main line bus or train services to travel further afield. A particular advantage is in enabling those without cars to access key services in nearby towns at appropriate times.

This includes access to health and education services, as well as to employment opportunities.

"Without Bwcabus I would no longer be able to keep my current job as I have no other means of transport and a taxi would prove too expensive."

Melanie Heath
Bwcabus' longest serving passenger, Llandysul, Wales

A fully accessible service

The elderly, vulnerable and people with reduced mobility are typically most affected by restricted transport services. Bwcabus is already making a significant contribution to the quality of life of such residents, improving their access to services, employment and opportunities for social interaction.

"This is a wonderful service and I don't know what I would do without it!" Healthcare is an issue to me right now and access to appointments is very important. Before Bwcabus it was extremely difficult as we only had a bus once a week."

Mary Jennings
Bwcabus Service user, Rhydlewis, Wales

To further support this, all Bwcabus buses have low, wide, accessible entrances – wheelchair ramps are available on request. This makes them accessible to people with reduced mobility, wheelchair users and people with young children in prams or pushchairs.

Whilst most users are asked to meet the bus at their nearest stop, passengers with reduced mobility or those in particularly remote locations can request to be picked up and set down at or near to their home address, providing it is safe and practical to do so.

A boost to the local economy

In addition to meeting the needs of individuals, the new bus service has generated an overall increase in passenger journeys which has provided a boost to local businesses and the local economy. This is because, as well as bringing workers into the town, the service also brings in customers.

A 2016 study of local businesses in the town of Newcastle Emlyn has found that business owners have noticed a difference since the service was introduced. "It brings in customers who find it difficult to travel," highlights Gaynor Jones, branch manager of Clynderwen and Cardiganshire Farmers Ltd.

"Bwcabus has proven that [it] can increase the frequency of public transport use, improve accessibility, encourage a reduction in car use, and assist in lifting rural communities out of deprivation... I am delighted to hear that businesses in rural areas are also benefiting from the service."

Councillor Hazel Evans
Carmarthenshire's Executive Board
Member for Transport

Project Name	Bwcabus
Type of beneficiary	Local authority
Period	2015 – 2016
Project funding	**Total budget: ~€691 000** RDP contribution: ~€292 000 Public contribution: ~€399 000
Further info	www.bwcabus.info
Contact	MRPhillips@carmarthenshire.gov.uk

Providing an on-demand bus service can be more practical for rural users and more cost-effective for service providers.

© Bwcabus

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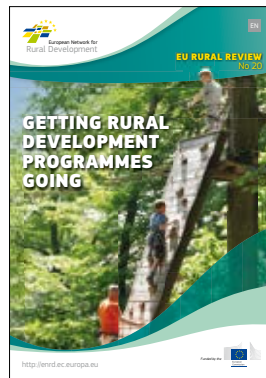
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