



Market Failures in Rural Areas

Responding through providing public
infrastructure, better accessibility and
new forms of working

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This Short Report was developed by the Public Infrastructure and Social Services Community of Practice in May 2020 to address market failure examples and potentially new governance arrangements in Frankfurt/Rhein-Main, Helsinki, Mid Wales, Tukums, Valencia.

The main sections cover:

- Introducing the issues surrounding rural market failure
- Key lessons from the ROBUST project
- Relevance of public infrastructure and social services in this context for selected Living Labs
- How rural market failures are being overcome from the local/regional government perspective, as well as alternative models of service delivery

1. Introduction

Reduced competitiveness and poor growth in rural areas is one of the main concerns for regional development in the EU (European Commission, 2010). Many rural areas face major challenges due to remoteness, insufficient infrastructure and public facilities, as well as limited access to markets and services. The access to services is related to one of the principal European policy objectives: territorial cohesion (Noguera, J. and Ferrandis, A. 2014). Access to certain services is considered to be a central element of the quality of life, and the improvement of their accessibility, a mechanism of achieving greater social inclusion and social justice. However, it requires a cross-sectorial integrated approach to plan location decisions, service delivery and, for example, transport provision together (Farrington, J. and Farrington, C., 2005). Market failures can result from, and in turn compound, these challenges. Meanwhile, public institutions and stakeholders seek to rectify market failures by putting, for example, into place public transport services which the market is not supplying.

These ongoing challenges call for urgent rural revitalisation measures. The COVID-19 pandemic crisis has proven the ability to overcome rural market failures and enhance local resilience marked by a lack of resources and even a lack of information.

The ROBUST partners are convinced that the success in creating synergies is largely determined by decisions made at local and regional levels. We argue that **different ways of working** could represent a means of tackling rural challenges. This report investigates **how innovative responses to rural market failures** can offer opportunities for positive change, including providing public infrastructures and improving accessibility. We describe some good practical examples from the **ROBUST project's Living Labs** in **Frankfurt/Rhein-Main (DE)**, **Helsinki (FI)**, **Mid Wales (UK)**, **Tukums (LV)** and **Valencia region (ES)**.

2. Purpose and Key Lessons

Economic agents have focused their efforts on urban areas in seeking greater profitability, and institutions lost the good will to encourage or intervene on this fail. The EU Commission has launched urgent measures to overcome the lack of services, it even aims to collect views from stakeholders on current opportunities and challenges in rural areas, on aspirations for rural areas by 2040 and the actions needed to achieve these aspirations ([public consultation have](#)

[your say](#)). ROBUST partners believe that creating strong, mutually supportive linkages between rural and urban areas is key to realising smart, circular and inclusive development for a sustainable Europe. Then, **how can we build rural-urban connections through public infrastructure & social services?** This report highlights three key lessons from five ROBUST case studies.

ROBUST's Three Lessons

1. The role of market mechanisms should be addressed in promoting the rural-urban cooperation.
2. Local governments should adopt alternative models of service delivery to relieve the lack of public goods provision, as well as promote new ways of satisfying the needs of the people (which are not answered either by the market or government).
3. New forms of working and coordinating means making stable connections between people and place, building trust, promote participation and create positive externalities.

3. Thematic relevance

Market failures is a situation in which the allocation of resources by the market is not efficient. In the case of infrastructures and services in rural areas, market failures can result in local needs for provision and access not being met, or rather, the market restricts accessibility to a degree that can be considered unacceptable in a social and political context (Farrington, J. and Farrington, C., 2005). Government is supposed to amend rural market failures but it also fails due to lack of will. This disruption affects economic growth in rural areas and hamper rural-urban synergies. However, there are wide differences in how the market can work in different rural and urban locations, largely depending on the combination of regional and/or local circumstances.

In economic terms, rural areas are frequently associated with the shortage of goods and services compared to urban ones. The exodus of private companies and, above all, public sector cuts have been detrimental to the social and economic viability of many rural areas. Private sector companies with an exclusively rural market would perhaps run bankrupt without profit simply because the demand in rural areas is low and transaction costs are correspondingly high, and are not covered by sales. The typical transaction cost problems there are accessibility and information asymmetries, both on retailers and consumers.

Retail markets frequently play an important social function to the rural centre (FAO, 2003) and have recently contributed to its resilience. However, upstream inputs from the local agriculture in retail trade is negligible in any EU country (Eurostat Input-Output tables). Main clients of local agriculture (including the smallholders) are wholesale trade and food processing industry for the domestic and international markets even though more direct local marketing would be something desirable. Despite that, there are positive data indicating a slight increase of the volume of retail trade for food, drinks and tobacco in the last year (see Figure 1).

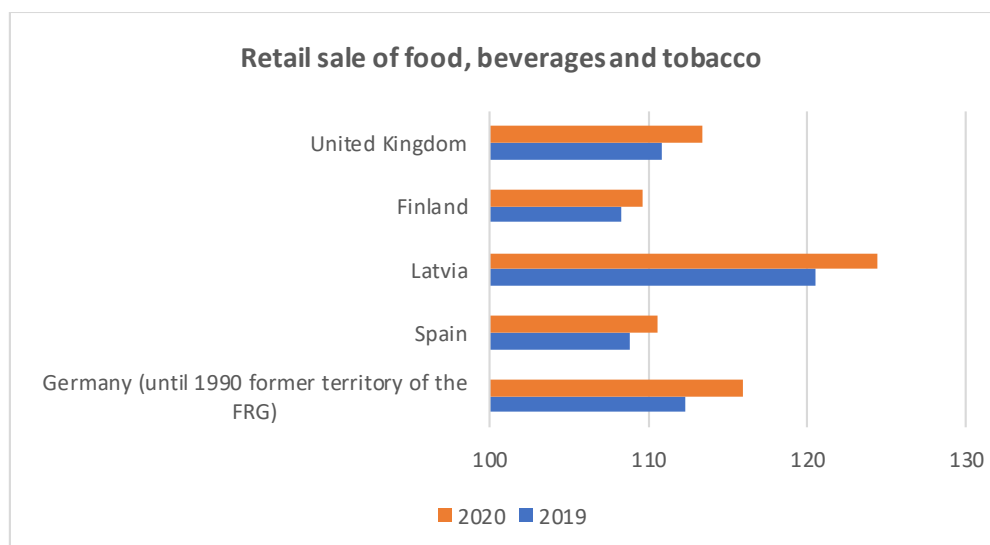


Figure 1: Retail trade deflated turnover – total. Unit of measure: Indicator, 2015=100. Business trend indicator: Index of deflated turnover (Volume of sales). Source: Eurostat (2020).

These issues about how to satisfy needs in rural areas from public and private services encourage us to ask ourselves about other forms of working in government and stakeholders through a more holistic approach that, in turn, revitalises rural areas. The current economic crisis in the pandemic is providing new social and technologies responses (e-commerce, telecommuting and telehealth) which could be part of the solution to market failures through providing public infrastructure, better accessibility and new forms of working.

Innovative responses to rural market failures will provide sustainability over time and effective use of resources; some potentially innovative examples from ROBUST living lab studies are illustrated further below. Rural communities are organised inside a network with the aim to address a particular market according to the rural and local circumstances. However,

collective action strategies could depend less than they used to on endogenous stakeholder decisions and those actions are more dependent on exogenous interests. Network collaboration and partnerships are a big challenge in many rural areas when it would make it easier to communicate information to rural costumers even beyond the municipalities and creating links with urban areas.

Rural-urban linkages include flows of information on market mechanisms, for instance from price fluctuations to consumer preferences, and information on employment opportunities (Tacoli, 2003). Rural markets are complex and different from urban markets. It is quite challenging for any type of market to evolve and remain sustainable, through demand and supply in rural areas themselves. There is agreement about the importance on rural communities to enhance rural-urban market integration (Woods and Heley, 2017) through rural change agents rooted in rural context while maintaining the link with the urban (Mayer et al. 2016). This balance will certainly help rural communities stay in place. Thus, there is a pressing need to find more innovative and efficient approaches to local development. According to Vladislav and Baum (2008), rural market failures must be recognized as a cause of the emergence of a wide variety of governance arrangements. Likewise, the commercial businesses, public sector and voluntary organisations may generate added value but mainly if they can rectify their interests, not only with a short-run commercial but also a long-run social and cultural focus.

From the experiences of living labs, three potential forms of addressing market failure are apparent in rural areas, in terms of infrastructures and service provision:

1. The market has failed to provide necessary services and infrastructures in some areas, making alternative policy mechanisms desirable to act as a supply driver. It is usually alleviated by subsidies to the private sector or funds to support local infrastructures.
2. Markets more generally can result in some areas being less economically successful or more vulnerable, making it more difficult for local government action to provide adequate infrastructures and services.
3. Insofar as infrastructures and services support market function, poor or inadequate provision can contribute to market failure.

Local/regional agents and stakeholders have the opportunity to meet the challenges that attend the infrastructures and service provision from any adverse effects of market failure such as lack of resources and social inequalities. Likewise, it will require to overcome challenges and needs linked to their interaction with networks and alternative coordination mechanisms for seeking changes in the management. Different challenges and opportunities are presented in Table 1 to consider the innovative responses to rural market failures.

Table 1: Opportunities and challenges with rural cooperation and development strategies

Opportunities	Challenges
<ul style="list-style-type: none"> • Adapting to policy environment: taking advantage of regional strategies and policies often unknown. • Evidence-based policies by use of small-scale spatial data. • Funding from public- private partnerships. 	<ul style="list-style-type: none"> • Rural-urban links as challenging geographic context: there are many competing views and interests that are not always easy to combine. • Rural diversification to help creating an economic base. • Equally innovative and smart development strategies (e.g. optimizing the delivery of public services by using ICT). • Reducing regional competitiveness and lack of well-connecting public services.

Accordingly, the Living Lab's experiences can inspire **new cross-sectoral relations and governance arrangements**:

- The specific economic structure and labour market of a region and its applicability for enhanced teleworking and reduced GHG emissions: E.g. 44 percent of jobs in the NUTS 2 region Darmstadt, to which the Regionalverband Frankfurt/Rhein-Main belongs, have a teleworking potential. This potential not only contributes to reduced carbon emissions but also fewer traffic accidents, and – at the moment (April 2020) – less exposure to Covid-19 (Fadinger and Schymik, 2020).
- The responses to market failures in rural areas are typically collaborative actions, different in nature and focus. They should certainly contribute to new rural-urban and cross-sectoral partnerships and strengthen especially network governance arrangements. Network collaboration between associations, rural entrepreneurs or labour markets and public

sector providers could be more efficient and sustainable over time in solving needs (not just in providing transportation systems for a specific aim and population). Support structures for these communities or making public procurement accessible to small producers and local providers through them, would give many potential opportunities for rural development.

4. How are rural market failures being overcome?

Two main solutions to market failures have emerged. First, councils and local/regional government may step in where the market fails to deliver appropriate services. Alternatively, different models of service delivery may look beyond the public sector.

4.1. Local and regional government solutions

Local and regional governments are frequently the main drivers in economic development. Local government responses to market failures are often of two types:

- The local government becomes the service provider;
- Adopting policy mechanisms to attempt to re-stimulate the market that has failed.

In the region of Tukums (Latvia), the service of the museum and the cultural house (a public good) is under-priced and not viable in the local market. To correct this market failure, public funds are mobilized to keep the two infrastructures alive. Although sometimes public spending cuts have limited the local investments and councils have had to look for other ways. In Mid Wales (UK) the local government steps in to provide the service like purchasing a community transport bus fleet, or becoming an internet service provider (ISP), or it introduces a Dynamic Procurement Systems (DPS) in rural public transport as a means of opening out the tendering process to alternative suppliers. In Valencia, regional government has planned to take part of the on-demand transport. However, rural areas need to be understood and adapted to local needs from a more cross-sectoral perspective.

In predominantly rural Monmouthshire, Wales, only three out of 22 existing bus routes are commercially viable (Systa 2018). In the UK, the Public Contracts Regulations 2015 allow for using Dynamic Purchasing Systems (DPS) in public procurement. These are also supported by European Union Directives on public procurement. Essentially, a DPS is an online system which

potential suppliers can join at any time, provided that they meet a certain set of minimum criteria. DPS can be used to stimulate local markets by making bidding for contracts more accessible to small and medium-sized enterprises (SMEs) and local businesses (Local Government Association 2017).

Much of rural Wales (which are part of NUTS 2 regions classified as “less developed” –GDP per inhabitant < 75% EU average) entails a challenge for local governments to raise sufficient taxes to provide more than the bare minimum of services. Likewise, it forces to restrict services to the national minimum. Certainly, rural areas face particular challenges, but they also offer particular opportunities by appropriate collaboration and cooperation between stakeholders (Ji et al., 2019; Steiner and Teasdale, 2019).

A certain shift towards a collaborative mind-set is taking place from the Regional Government in Valencia through work packages dedicated to depopulation (AVANT) taking in consideration both local councils and stakeholders. Recently, it has launched a first initiative in favour of the local economic development through a "Way of St James" through depopulated towns and the idea is to continue implementing other initiatives in the most vulnerable municipalities. However, the right circumstances need to take place in order for it to happen. Unfortunately, the economic potential and profitability of the local marketplace in Tukums has not been interesting enough for the private manager to develop the infrastructure and activities for a/ the market. Currently, the municipality is negotiating the purchase of the infrastructure and buildings of the marketplace, to take over the development of the marketplace as an important part of the town's social life.



Photo 1. Public Infrastructures and Social Services CoP members working together at the ROBUST General Assembly Meeting in Riga (Latvia).

4.2. Alternative models of service delivery

Leggett (2016) stated that “there is a long tradition of communities in rural areas taking action on for themselves to provide a wide range of services that in urban areas would be provided by the state or the market”, although there can sometimes be an expectation that rural areas do not need investment in services because they are ‘resilient’ and will find their own solutions. Rural market failures can be solved by using private market solutions, entrepreneurs, social enterprises or voluntary collective actions. The major difference between them is the extent of satisfying social needs rather than for profit.

But as for the collective action groups also work on incentives like financial support, social recognition, expectation of reward etc. It is thus just an informal organisation of local trade and services, instead of businesses. But without working on internal local supply and demand forces including an incentive profit for its “producers”, it would end up in free-riding on collective goods cheaply produced by few. Hence, it is not at all a sort of altruism that is often suggested when talking of rural self-help initiatives. Similarly, European Commission (2017) boosts the social enterprise whose profits are mainly reinvested to achieve its social objective. UK governments have emphasised the importance of social enterprise in the delivery of public services whether through grants to help them achieve financial sustainability, business support, or the outsourcing of public services. Still, relatively little is known about the activities carried out by them (Steiner and Teasdale, 2019).

The geographical context affects the activities and on how to address the rural market. Through the geographical context of each case study, we have identified four different ways of working that contribute to the economic development of the rural area:

- Collective action through formal and informal groups
- Collective action to promote business development
- Community-led social enterprises
- Rural cooperatives

Collective action through formal and informal groups: Helsinki activists calling themselves rural-urban dwellers (*citymaalaiset*) promote multi-locality and a lifestyle in which civil society

combines the benefits of city life (e.g. cultural activities) with the benefits of rural life (e.g. living in a huge beach house). Similarly, it happened in a rural area in Valencia, due to the lack of public transport adapted to local needs. They created a group themselves with the aim of pooling the routes and sharing the car. Whereas in Frankfurt, rural and urban employees together with administration would potentially contribute to climate protection if they jointly agreed on reducing about 20% of commuting activity through home office/teleworking to avoid unnecessary commuting (Issa and Bergs, 2020).

Collective action to promote business development. An example, in Mid Wales, could be the joint operation of different services when developing rural service hubs where multiple services can be accessed at a central point – e.g. a village that can no longer commercially sustain a separate post office and a bank merges these services into a shop that also offers free WiFi. Helsinki has promoted a retail and distribution network of local food products directly from farmers to consumers (REKO). REKO operates in social media and is run by volunteers - and more and more by farmers themselves.

Community-led social enterprises: Mid Wales supports this business model that trades for a social purpose by, for instance, taking a village shop into community ownership and running it on a volunteer basis.

Rural cooperatives: Helsinki and Valencia show experiences from entrepreneurs or residents of a certain village joining forces to purchase and build, for example, better IT connections and electricity supply. Another example comes from Tukums, the Cooperative Credit and Deposit Union of Pure (one of the Tukums's villages). Currently its goal is to offer more flexible and advantageous credit and deposit services to their members. All county inhabitants can join for very small member fee, so they can meet their needs. Union offers its services only to private persons. In Frankfurt (as everywhere in Germany), there are local rural marketing and savings cooperatives organised under a big umbrella cooperative business that alone is processing about 60 percent of German milk production for the domestic and world markets. So these local associations have become a powerful player in food production, distribution and banking at the national level. They even run petrol stations.

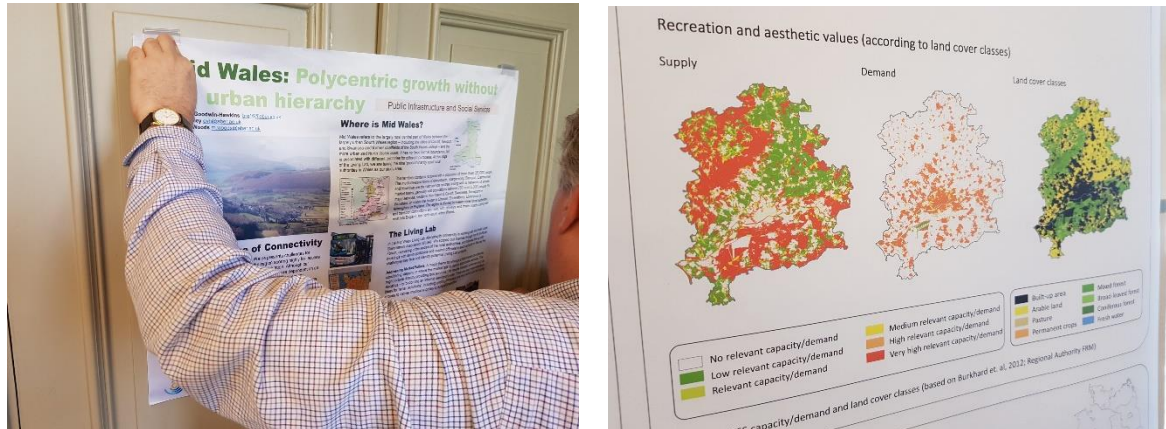


Photo 2. The Public Infrastructures and Social Services COP helped guide discussions about smart solutions for mobility, healthcare, and connectivity challenges in rural areas.

5. Conclusion

Market failures are seen as the main problem of rural challenges. Changes in lifestyle by global process (e.g. unequal regional employment opportunities) have led to new forms to address the inefficiency of infrastructures and services in such areas. The lack of local markets for supplying primary goods and services or even the existing digital divide appears to be one of the major market failures that link rural and urban territories.

The success of the functioning of collective actions through new forms of network lies in the simultaneity and balance between the social, endogenous, territorial and commercial aspects. However, urban-rural links clearly present a challenge in addressing failures. Rural and urban connections where the city is the centre could succumb to a less sustainable approach without eulogising enough the social. Fortunately, the pandemic has refused to accept this fact for satisfying the needs and improving social-welfare in rural areas and so new efforts from government are emerging as public service provider.

It deserves further empirical findings and improve through understanding this disruption to rural growth with innovative responses and spatial and dynamic contexts that clearly provide different conditions for enhancing mutually beneficial relations along rural-urban.

6. References

- European Commission (2010) Europe 2020: A Strategy for smart, sustainable and inclusive growth. <http://eur-lex.europa.eu/LexUriServ.do?uri=COM:2020:FIN:EN> (accessed 15.05.20)
- Fadinger H. and Schymik, J. (2020) The Effects of Working from Home on Covid-19 Infections and Production: A Macroeconomic Analysis for Germany. Dept. of Economics, University of Mannheim.
- Farrington, J., & Farrington, C. (2005). Rural accessibility, social inclusion and social justice: Towards conceptualisation. *Journal of Transport Geography*, 13(1), 1-12. <https://doi.org/10.1016/j.jtrangeo.2004.10.002>
- FAO, 2003. Identifying the need for rural markets [WWW Document]. URL <http://www.fao.org/3/y4851e04.htm#TopOfPage> (accessed 30.04.20).
- Issa, M, Bergs, R. (2020) Less commuting and climate protection: An estimation exercise for the Frankfurt/Rhein-Main region, Bad Soden (Horizon2020 research grant 727988).
- Ji, X., Ren, J., & Ulgiati, S. (2019). Towards urban-rural sustainable cooperation: Models and policy implication. *Journal of Cleaner Production*, 213, 892-898. <https://doi.org/10.1016/j.jclepro.2018.12.097>.
- Kydd, J. and Dorward, A. (2004). "Implications of market and coordination failures for rural development in least developed countries," *Journal of International Development*, John Wiley & Sons, Ltd., vol. 16(7), pages 951-970.
- Leggett, J., (2016) Market failure, 'merit goods' and rural proofing. URL <https://www.ruralsussex.org.uk/opinions/market-failure-merit-goods-and-rural-proofing/> (accessed 30.04.20)
- Local Government Association (2017). A guide to dynamic purchasing systems within the public sector. Available at: https://www.local.gov.uk/sites/default/files/documents/4%2030%20DPS%20Guidance_04_Web.pdf (accessed 15.04.20)
- Mayer, H., Habersetzer, A. and Meili, R. (2016) Rural-urban linkages and sustainable regional development: the role of entrepreneurs in linking peripheries and centers, *Sustainability*, 8: #74
- Noguera Tur, J., & Ferrandis Martínez, A. (2014). Accesibilidad y provisión de Servicios de Interés General en las áreas rurales de la Unión Europea: Un análisis a partir del Eurobarómetro. *Boletín de la Asociación de Geógrafos Españoles*, 64, 377–404.
- Steiner, A., Teasdale, S. (2019). Unlocking the potential of rural social enterprise. *Journal of Rural Studies* 70, 144–154. <https://doi.org/10.1016/j.jrurstud.2017.12.021>

Systa (2018). Monmouthshire Rural Transport Study: Final Report. Monmouthshire County Council. Available at: <http://monmouthshire.biz/project/non-statutory-services-theme-rural-transport-study/>

Tacoli, C. (1998). Rural-urban interactions: a guide to the literature. *Environment and Urbanization* 10, 147–166. <https://doi.org/10.1177/095624789801000105>

Valentinov, Vladislav and Baum, Sabine (2008). The institutional economics of rural development: beyond market failure. *Journal of Central European Agriculture* 9 (3): 457–462.

Woods, M. and Heley, J. (2017). Conceptualisation of Rural-Urban Relations and Synergies. <https://rural-urban.eu/sites/default/files/D1-1%20Conceptualisation%20of%20Rural-Urban%20Relations%20and%20Synergies.pdf> (accessed 15.04.20)