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Innovative Approaches to Services of General Interest in Rural Areas

What Germany can learn from the experiences of other European countries

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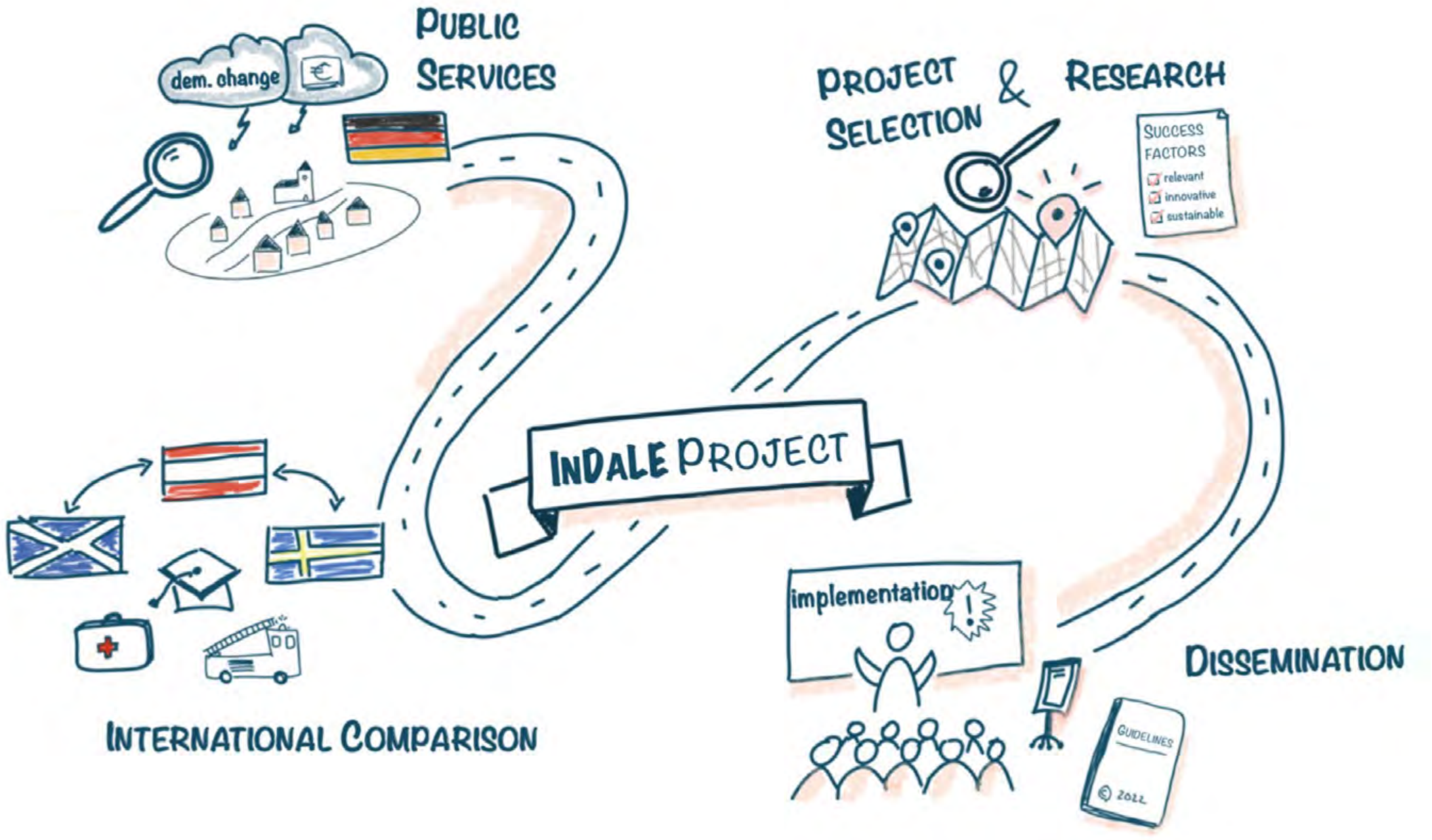
On behalf of the Federal Ministry for Food and Agriculture (BMEL) the Centre of Excellence Rural Development within the Federal Office for Agriculture and Food (BLE) is responsible for the implementation of the Federal Programme for Rural Development and Regional Value Creation (BULEplus). This includes the management of pilot projects and regions, competitions, research projects, knowledge transfer and public affairs.

ILLUSTRATION:

Roadmap of the InDaLE-Project



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Carl von Ossietzky Universität Oldenburg

Road to Gerling (Salzburger Land, Austria)

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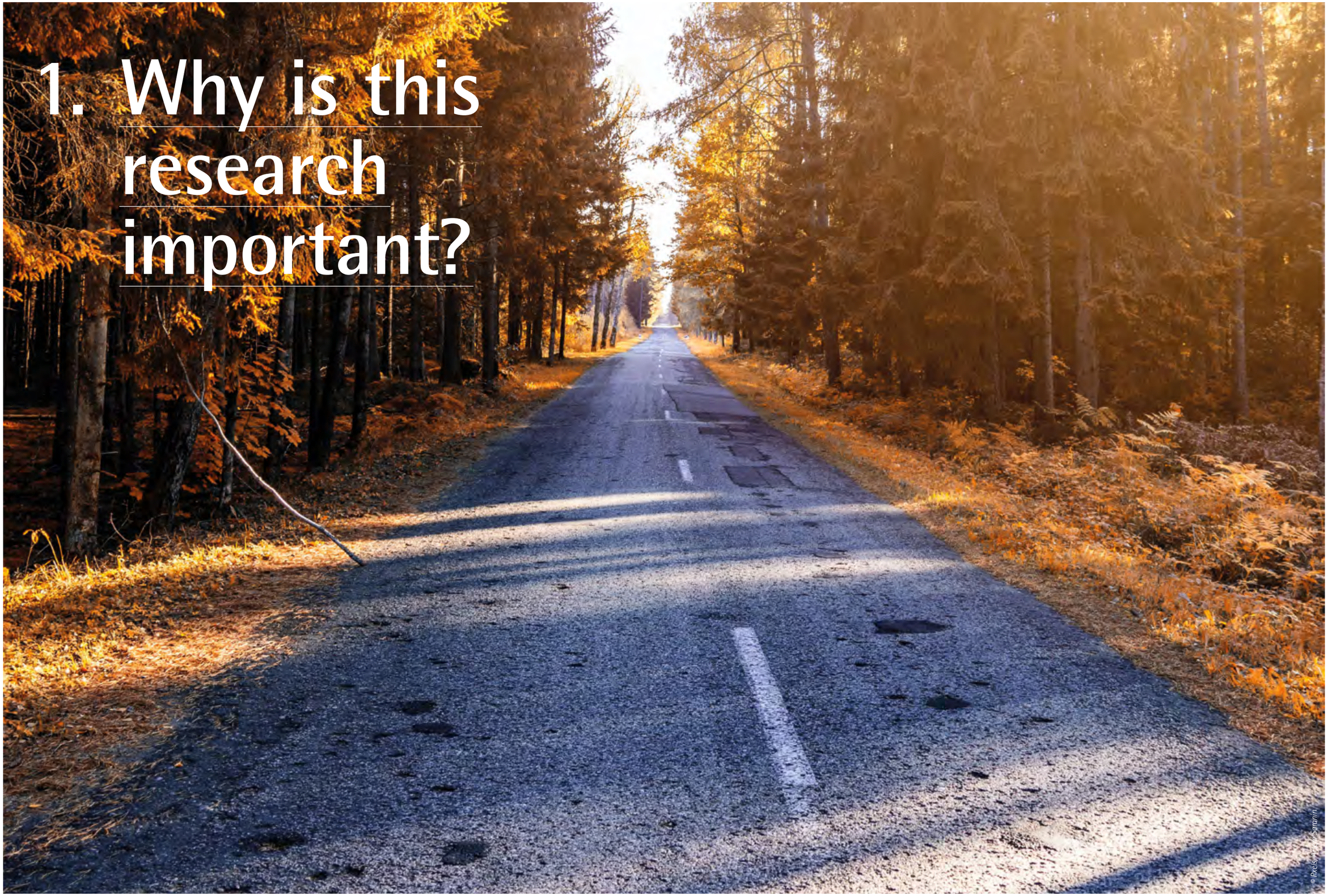

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1.1 What it is all about

The research project InDaLE (Innovative Approaches to Services of General Interest in Rural Areas – What Germany can learn from the experiences of other European countries) investigated innovative approaches to services of general interest in Austria, Sweden, Scotland and Germany, and examined their transferability and applicability to rural areas in Germany. The analysis of experiences of adapting infrastructures in other European countries is used to develop innovative approaches in Germany and can offer new solutions.

Many rural areas in Germany are facing growing challenges due to the consequences of demographic and social change, in particular the long-term migration of younger people out of rural areas and the ageing of those who remain. In order to meet these challenges, innovative approaches are required to ensure the provision of services of general interest. The key questions are, however, what such innovative approaches look like in concrete terms and how they can be consolidated in Germany and thus supplied on a permanent basis.

Innovative approaches of this sort are often based on social innovations. Wolfgang Zapf (1989: 177) suggests that this involves finding new ways of achieving goals, especially new forms of organisation, new regulations and new lifestyles.

Despite years of research, there is still little agreement about which criteria favour the successful consolidation of an innovative approach or which success factors positively influence such an approach.

InDaLE first searched for pilot projects in the countries of Austria, Scotland and Sweden. The projects selected demonstrate innovative approaches to safeguarding services of general interest and are also considered to be consolidated for the long term. In a second step, comparable pilot projects were identified in Germany.

The research project focused on three services of general interest that have particular qualities in other European countries:

- Post-school education: there is to date little well-founded knowledge about the effects of post-school education on regional development in Germany,
- Medical services and care: which are particularly important for quality of life and well-being in different phases of life in rural areas,
- Fire services and hazard protection: local volunteer fire brigades have ensured public safety for decades but are now disappearing, especially in regions characterised by out-migration and ageing populations.

The InDaLE research project (2020-2022) was conducted by five universities and research institutions. The following table provides an overview of the participants and their areas of responsibility.

Valley scenery near Saalfelden (Salzburger Land, Austria)

1.2 Who we are

The InDaLE research team in 2021

TABLE 1:
The InDaLE project team

Institution	Contributors	Responsibilities
Leibniz University Hannover, Geodetic Institute	Prof. Dr. Winrich Voß, Alice Gebauer, Dr. Jörn Bannert	Project coordination; conceptual questions of consolidation and transferability; knowledge transfer
Carl von Ossietzky University Oldenburg, Applied Geography and Environmental Planning	Prof. Dr. Ingo Mose, Nathalie Tent	Post-school education; Country: Scotland
Technical University Dresden, Geodetic Institute	Prof. Dr. Alexandra Weitkamp, Dr. Andreas Ortner, Juliane Freyboth	Medical services and care; Country: Sweden
Thünen Institute of Rural Studies, Braunschweig	Dr. Annett Steinführer, Dr. Alexandru Brad	Fire services and hazard prevention; Country: Austria
ARL – Academy for Territorial Development in the Leibniz Association, Hannover	Prof. Dr. Rainer Danielzyk, Dr. Alistair Adam Hernández, Dr. Barbara Warner	Pilot projects in Germany; knowledge transfer

1.3 Our project advisory board

TABLE 2:
Members of the InDaLE project advisory board

Advisory board post	Name	Institution during project work
Germany	Dr. Anne Ritzinger	Bavarian Administration for Rural Development
Germany	Dr. Jan Swoboda	German National Network for Rural Areas
Germany	Dr. Ludwig Scharmann	Saxon State Ministry for Regional Development
Germany	Klaus Einig	Ministry of the Interior, Rural Areas, Integration and Equality, Schleswig-Holstein, since 2022 Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR)
Germany	Prof. Dr. Claudia Neu	Chair of Sociology of Rural Areas at the Universities of Göttingen and Kassel
Germany	Dr. Jan M. Stielike	Institute for Geodesy and Geoinformation at the University of Bonn
Austria	Dr. Ingrid Machold	Federal Institute of Agricultural Economics, Rural and Mountain Research
Scotland	Stefan Kah	European Policies Research Centre at Strathclyde University Glasgow
Sweden	Assoc. Prof. Dr. Josefina Syssner	Centre for Local Government Studies at Linköping University
The Netherlands	Prof. Dr. Dirk Strijker	Chairholder Mansholt Chair for Rural Development at Groningen University

The Project Advisory Board and the InDaLE research team 2022

2. What was our approach?

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2.1 Our key concepts

The objectives and international focus of the InDaLE project required a common understanding of key concepts. Extensive research of the (national and international) literature provided the basis for this understanding. The following terms were defined for InDaLE: **"project"**, **"consolidation"** and **"transferability".**

Based on an extensive literature review, a definition of the term **"project"** was first developed for use in the course of the research project:

A project is a regional or local endeavour (originally) limited in time and focus and intended to test new ideas, developments and procedures for securing infrastructures and services of general interest.

Another key concept was that of **"consolidation"**. The InDaLE team defined the following criteria on the basis of an extensive literature review:

- A consolidated project is financially self-sustaining beyond the funding period.
- It can be consolidated in various dimensions or impact areas (see Figure 1).
- It can develop during the funding period and, for example, have a different organisational form or structure after the end of the funding period to that at the beginning of the funding period.

On this basis, we defined project consolidation as follows:

Projects, project structures or initiated changes that are successfully maintained for at least two years after a funding period are considered to be consolidated. The project services continue to be made available to the target group, who also still demand the services.

The form of the project can change dynamically and the consolidation can take place in different dimensions (or impact areas).

Innovative approaches can also be considered as consolidated if they diffuse into other areas, i.e. are adopted and successfully applied by other regions or countries, for example.

In the course of the literature research on consolidation, various factors were identified that promote or hinder consolidation (Hernández & Schneider 2021). Individual factors can be assigned to different dimensions or impact areas in which a project can become consolidated. In the InDaLE project, we differentiated between the following impact areas (see Figure 1):

- substantive impact area
- organisational-structural impact area
- political-administrative impact area
- financial impact area

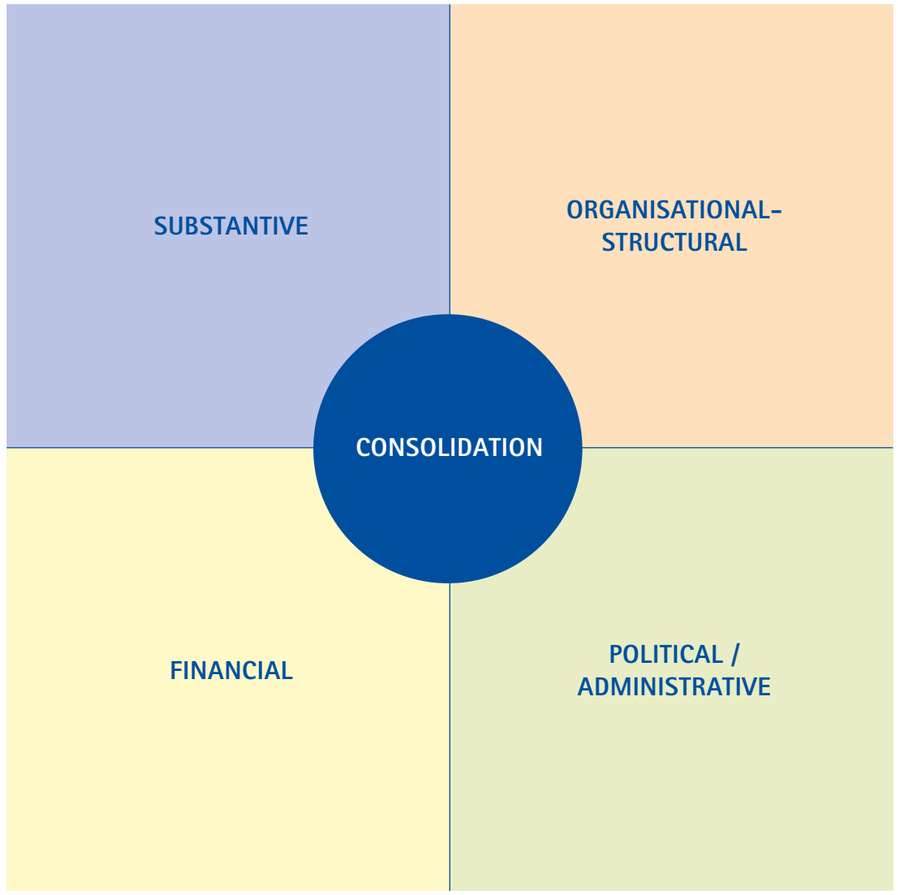
The financial impact area focuses on the financial sustainability of a project. A sustainable financing concept, which is drawn up at the beginning of the funding programme and considers financing beyond the end of funding, is one such success factor. The substantive impact area concerns the preservation of the substantive output of a project or the project's substantive objects or goals.

Most of the factors that determine the success or failure of a project can be linked to the organisational-structural impact area. These are mainly factors relating to the organisation and methods of a project. An important success factor is, for example, the existence of a central key figure who assumes a leading or managing role in the project and acts as a motivator for other participants.

The political-administrative impact area includes not only political bodies and actors but also administrative bodies and the social discourses that influence the project. This impact area primarily represents the degree of support that the project receives from social and political actors.

The impact areas and the corresponding success factors are summarised and visualised in Figure 2.

FIGURE 1:
IMPACT AREAS (DIMENSIONS) OF CONSOLIDATION
(source: the authors)



Fire brigade locker room in the House of the Fire Brigade and Associations in Maishofen (Austria)

FIGURE 2:

Success factors for consolidation and their allocation to impact areas

(source: the authors)

FAVOURABLE CONDITIONS:	BEFORE BEGINNING	FUNDING PERIOD	AFTER FUNDING PERIOD
	IMPACT AREA 1: CONTENT-RELATED		
	Flexible implementation with clear pursuit of goals		
			Maintaining the substantive focuses, services, ensuring the intended benefits
	IMPACT AREA 2: ORGANISATIONAL-STRUCTURAL		
• PROJECT DESIGN: Consider consolidation right from the beginning	Project coordinator with management function		
Define clear project goals	Incorporation into existing structures and working		
	methods Integration via stakeholders and key persons		
• ORGANISATION:	Acquisition and integration of volunteers, development and establishment of a (specialist) network		
Reach out to partners and networks early on	Ongoing evaluation		
		Demonstrate indispensability	
Plan implementation to be flexible and open-ended	Motivation and expertise of employees: leadership, integration, training to fulfil the project purposes, goals and activities, appreciation		
		Creation of new organisational units, increased reach of the project	
	IMPACT AREA 3: POLITICAL-ADMINISTRATIVE		
	Involvement of the municipalities, support from political structures and the administration, social acceptance		
		Change of perception and embedding in the political discourse necessary: not a "special project", but anecessary structure and supplement	
	IMPACT AREA 4: FINANCIAL		
	Establishment of financial viability, development of a sustainable financing concept		
	Minimisation of costs		
	Integration of existing resources (e.g. labour), redistribution of resources		Transition to regular public financing, financing by demand; economic viability
	Checking availability of alternative funding		

There are no generally applicable definitions for project **"transferability"** in the literature. Most sources emphasise that the transferability of a project depends on various conditions that can play a role in transfer processes.

However, the literature mentions numerous factors that can influence transfer processes. These factors are summarised and categorised in Table 3 below.

TABLE 3:
Success factors and hinderances for the transferability of good solutions (e.g. for services of general interest)
(source: the authors)

Influencing factors	Success factors	Hinderances
National conditions		
Geographical location of the states/regions involved	Proximity (due to more frequent exchange of information, similar cultural background, common language, similar political and economic system)	Distance (often due to different cultural, political and economic systems)
Social conditions	Alignment	No alignment
Financial conditions	Sufficient financial resources	Lack of financial resources
Political conditions	Support from political actors, political continuity	No support
Cultural conditions	Adaptation to cultural conditions	No adaptation
State of development/ national characteristics/ regulations of the receiving country in relation to the topic to be transferred	High level of development/knowledge, topic to be transferred is given high priority in the national discourse Consideration of the interests and needs of the receiving region	Low priority Lack of benefit for the receiving region
Project-related conditions		
Characteristics of the executing/ participating institutions	Joint pressure to act, same target vision, benefits for all actors, no competitive thinking, trust, commitment, flexibility, clear definition of responsibilities, support from management level, support from external partners, public participation, public relations, sufficient financial and time resources, existing infrastructure as a basis, expertise	Institutional differences, lack of information/insufficient knowledge about the new concept and its surrounding structures, lack of troubleshooters, individual interests, lack of commitment, competition, mistrust, novelty of the concept is a risk to implementation: lack of willingness to take risks, lack of participation and networking, lack of designated responsibilities, lack of resources
Characteristics of project contents	Formulation of needs/ simple concept design, direct link between needs and solution, flexibility of the elements to be transferred	Complexity of the elements to be transferred, too many goals

The factors identified in the literature as influencing transfer processes were used as a basis for the following definition of **"transferability"**:

Transferability refers to the targeted transfer of tried-and-tested innovative concepts, ideas, project approaches and project focuses from one region or country to other regions or countries.

Transferability corresponds to local feasibility, which depends on various factors that are either inherent to the object of investigation or are determined by regional or national conditions.

Agricultural enterprise (Gotland, Sweden)

2.2 Our methodology: Project selection and data analysis

View across the Isle of Skye (Scotland)

The InDaLE team defined the following criteria for the **pre-selection of innovative projects in the study countries**:

- Must be relevant for services of general interest in Germany,
- Must be of innovative character,
- Must continue to exist for at least two years after the end of the project term or funding period,
- Goals or changes implemented or resulting from the project must be established or recognised at least two years after the end of the project term or funding period.

The pre-selected projects were then assessed using a **benefit analysis**. This allowed the projects to be ordered for a final selection per area of services of general interest in the study countries. The following criteria were included in the benefit analysis:

- Incorporation into existing structures
- Financing model
- Relevance for services of general interest in Germany
- Innovative character
- Increased reach

For the projects evaluated and selected on this basis, a wide range of data and information was collected using various methods (see Figure 3).

FIGURE 3:
Analysis grid for InDaLE
(source: the authors)

Context		**Data collection**
(Social-)spatial embedding	– Spatial structure – Trends und challenges	– Shared pool of data and research
Sphere of services of general interest	– Governance structures – Welfare state model	– Document analysis – Literature research – Interviews with experts
Projects		
Testing and innovative character	– Innovative approach	– Interviews with people from the project setting – Document research
Project progress and consolidation	– Before and after the funding period – Impact areas	– Interviews with project participants – Questionnaire on user benefits
Analysis		**Data analysis**
Transferability to Germany	– Differences and similarities between the foreign example and the German context – Barriers and adaptation	– Joint evaluation

The analysis grid included a range of criteria to adequately assess the framework conditions of the projects on a social level and in their settings.

87 guided interviews were conducted with various groups of people from the pilot projects in the study countries.

The guided interviews were analysed and interpreted using the project coding manual, which aimed, among other things, to identify success factors and inhibiting factors for the successful consolidation of the projects under investigation (see Table 3).

The results from the literature review and the guided interviews were subjected to ongoing validation by the project advisory board, consisting of national and international experts (see Table 2).

3. What did we investigate?

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3.1 Profiles of the investigated services of general interest

Campus of the University of the Highlands and Islands on the Isle of Skye (Scotland)

Post-school education

Post-school education is defined as the continuation or resumption of organised learning after the end of a first phase of education of varying length (InfoWeb Weiterbildung n.d.). On the one hand, a distinction is made between higher education or vocational, general and political further education (BMBF n.d.) and, on the other hand, between formal (degree-orientated), non-formal (continuing education) and informal (everyday) education (Eurostat 2016: 14f.). Since the 1970s, the EU has placed growing emphasis on lifelong learning, a concept that understands learning as an ongoing process that continues throughout the entire lifespan. Such learning should be based on equal opportunities but nonetheless focus on individual development (European Commission 2001: 10).

In **Germany**, the legislation and administration of higher, adult and further education are almost exclusively the responsibility of the federal states. In addition, so-called "common tasks" are defined in which the federal government and the federal states cooperate (Eurydice 2022). Equal access to high-quality learning opportunities is understood by German municipalities to form part of decentralised services of general interest (Andrzejewska et al. 2012: 17).

In **Scotland**, all aspects of the national education system are decentralised to the regional Scottish Executive. The legal basis is provided by a series of Education (Scotland) Acts, which regulate the organisation, administration and responsibilities of the national education sector. Among other things, they provide for partnership-based cooperation between central and local government and the involvement of local partners in planning processes and implementation (Pilz 2010: 22f.). In **Sweden**, the national government has overall responsibility and sets the direction for national education. The Education and Higher Education Act lays down overarching learning objectives, the implementation of which is planned, realised and evaluated relatively autonomously by the municipalities and tertiary education institutions. The municipalities are legally obliged to provide basic municipal adult education (Eurydice 2022b).

The institutions of formal post-school education are diverse in all three countries and include state and private universities, universities of applied sciences and art colleges as well as institutions for higher education and vocational training that are independent or embedded in organisations. In **Germany**, non-formal further education institutions include municipal institutions (e.g. adult education centres), private and church institutions, trade unions, chambers of industry and commerce, political parties, associations, public administration institutions, education centres and specialist academies and colleges (Eurydice 2022a: n.p.). In **Scotland**, public adult education can, for instance, involve the acquisition of certified vocational qualifications (Scottish Vocational Qualifications). Unlike in Germany, the boundary between initial vocational apprenticeship and further vocational training is fluid in Scotland (Pilz 2010: 36, 43f.). In **Sweden**, in addition to apprenticeships, formally certified shorter courses for higher vocational training adapted to the labour market are offered in cooperation with companies. As well as municipal adult education, adult education centres, study associations and private providers also offer various non-formal education programmes (OECD 2000: 27-31; 41f.).

With a few exceptions, public institutions of higher education in **Germany** are financed by the federal states, with the necessary funds being made available by the ministries of education and/or research. Under certain conditions, those in need can apply for state financial support to cover a proportion of the costs (Eurydice 2022a: n.p.).

In **Scotland**, the Scottish Further and Higher Education Funding Council (Scottish Funding Council for short) has been responsible for the public funding of vocational and tertiary education at colleges and universities since it was founded in 2005. The publicly funded organisation Scottish Enterprise provides financial resources for vocational apprenticeships and further training (Pilz 2010: 25f.). Citizens pay no tuition fees for either public higher education or vocational training in **Sweden**. Accredited institutions of tertiary education are financed directly out of state funds from the Ministry of Education and Research, while municipal education funds come largely from municipal tax revenues. Up to the age of 56, Swedes are entitled to subsidised student loans for accredited post-secondary education (Eurydice 2022b: n.p.).

Challenges in rural areas

Europe's formal higher education institutions are traditionally characterised by standardised educational concepts that focus on urban areas (Arbo & Benneworth 2007: 21). This is still a barrier to meeting the needs of post-school education in rural areas (Batterbury & Hill 2004: 38-40). Specifically, access to education in rural districts is hindered by individual and financial hurdles, a frequent lack of transport infrastructure and, in view of advancing digitalisation, inadequate internet connectivity in some places (Macintyre & Macdonald 2011: 3, 8, 11). Due to deficits in regional education and employment opportunities, there is a tendency for young people in particular to leave their rural home regions in many countries (Moses 2022: 45). As a result, (potential) skills and knowledge are lost at a local level, while the demographic trend towards an ageing population is further intensified. Education and training programmes that are adapted to local needs and regionally anchored knowledge transfers are therefore important for the economic prosperity and development of a (rural) region, also because they are believed to promote innovation.

Medical services and caree

Medical services and care are among the core areas of public services of general interest and cover a broad spectrum. They include, firstly, general and specialist medical care for the public and inpatient care in hospitals and specialised clinics. Secondly, outpatient and inpatient care for the elderly population also falls within this field. Due to the wide range of services covered by this area, it is one that will sooner or later be utilised by everyone. Against this backdrop, the quality of these services clearly has a great and direct influence on the quality of life of service recipients.

In **Germany**, the Federal Ministry of Health (BMG) is responsible for shaping health policy at federal level, preparing laws and drawing up administrative regulations (BMG 2022). Specialised institutions and authorities support this work and deal with overarching health policy issues. Among other things, they draw up recommendations for the authorisation of medicines or treatments. This forms the basis for state guidelines and the framework for medical care by the federal, state and municipal authorities.

Sweden's healthcare system is regulated nationally but administered locally. Primary healthcare policy is determined by the Ministry of Health and Social Affairs. The provinces and municipalities finance and provide health services.

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Rural outpatient centre in Neuhardenberg (Märkisch-Oderland, Germany)

This is financed by tax revenue. Three basic principles apply in Sweden's healthcare system: everyone is entitled to the same dignity and rights, regardless of their position in the community (human dignity). Those with the greatest needs are prioritised (need and solidarity). If decisions have to be made, there should be an appropriate balance between costs and benefits, whereby the costs are seen in relation to the improvement in health (cost-effectiveness) (The Commonwealth Fund 2020).

The healthcare system in **Austria** is publicly organised. The federal government, states and municipalities as well as social insurance and statutory interest groups are responsible for sub- areas of the healthcare system (GESUNDheit.gv.at, 2019). The federal government is generally responsible for legislation (in the hospital sector only for basic legislation), the healthcare professions and public healthcare and pharmaceuticals. Implementing legislation and ensuring hospital care is the responsibility of the federal states. (GESUNDheit.gv.at, 2019).

Health administration is also carried out and organised by the federal states, supported by the municipalities. The healthcare system is financed by a mix of tax revenues, social insurance contributions and private contributions. The healthcare system is financed according to the principle of solidarity (income, age, etc. do not play a role) and thus guarantees fair access to healthcare services (GESUNDheit.gv.at, 2019).

Challenges in rural areas

Rural areas in particular face major challenges in medical services and care. For example, an ageing population has a greater need for care, combined with the desire for a self-determined life in old age (An der Heiden et al. 2012). Homecare and outpatient care services are thus both called upon to provide good care counselling and information. However, with a declining working population, deficits in the financing of services and overburdened municipal budgets are foreseeable.

General practitioners in rural areas are also often older than average, and younger doctors increasingly find working in rural areas unattractive (higher workloads and below-average earning opportunities) (Winter 2020: 304-306). Many medical practices are finding it impossible to fill vacancies, leading to an allocation problem which negatively impacts rural regions ("rural doctor problem") (Schade 2012). The decline of healthcare facilities in rural areas leads to long journeys for patients and to care deficits in the general practitioner sector. This also applies to the accessibility of pharmacies and hospitals. Targeted solutions are urgently needed in the area of medical services and care.

Fire services and hazard prevention

The public service of fire services and hazard prevention consists of three areas of responsibility: fire protection and technical assistance (the responsibility of fire services), civil protection (coordinated by the state) and rescue services of various kinds (provided by relief and rescue organisations) (Stielike 2018: 290 ff.). The focus of attention in InDaLE is on volunteer fire services, which are primarily active in the first two areas. The range of tasks performed by fire services goes far beyond preventive and defensive fire protection and includes a large number and variety of technical assistance services (e.g. recovery of vehicles involved in accidents, assistance in the event of flooding) and, in some federal states in Germany, emergency care in rescue services.

There are five types of fire services in **Germany**: volunteer fire departments, professional fire departments, plant fire brigades, compulsory fire services and federal fire services. 95 per cent of German firefighters are volunteers (Steinführer & Brad 2022: 132). Volunteer fire services are established throughout rural regions, professional fire departments only operate in cities, while some medium-sized towns have full-time on-call brigades. According to the fire protection laws of all federal states, the maintenance, training and further training, financing and equipping of a fire brigade and the creation of a fire service requirements plan is a mandatory municipal task. Municipalities receive financial support from the state via the fire protection tax, municipal fiscal equalisation and other special funds, including finance for building work and the purchase of equipment. To support training, the responsible ministry of each federal state (usually the Ministry of the Interior) operates a state fire services college.

Historic fire station in Jahnsfelde (Märkisch-Oderland, Germany)

In **Austria**, fire services and hazard prevention is organised in a similar way to Germany (Wolter 2011). The proportion of volunteers in the fire service is even slightly higher: 99 per cent of fire service members are volunteers, and professional fire brigades only operate in the nine state capitals. Municipalities and civil protection authorities have similar duties to those in Germany. Through the State Crisis and Disaster Management Agency, the federal government carries out a similar coordination role as the federal inter-ministerial coordination in Germany. The clearest differences between Germany and Austria can be summarised in three points. Firstly, the Austrian state fire brigade associations have the status of public corporations and are therefore responsible for operating fire training centres and control centres. As in Germany, the rural fire services are financed via state subsidies.

A second difference involves the decoupling of the fire services from the rescue services. Unlike in some German federal states, the Austrian fire services are not involved in rescue services. The third difference concerns the tasks of the federal government, which fulfils a similar role to the German federal government but is organised differently: first, Austria does not have an institution similar to the German Federal Agency for Technical Relief (THW); second, civil defence is the responsibility of the Civil Defence Association, which, unlike Germany, has structures at state, district and local levels.

In **Scotland**, unlike in Germany and Austria, responsibilities for fire and civil protection are bundled in a central organisation called the Scottish Fire and Rescue Service (SFRS) (Taylor et al. 2018). SFRS serves as the national fire service and fulfils its role independently under the supervision of the Scottish government. The operational level of the SFRS is divided into three geographical areas of responsibility that cover the whole of Scotland. Unlike in Germany and Austria, the Local Councils are not responsible for the funding and maintenance of fire services or for the training of firefighters. At the local level, fire services are categorised into full-time fire brigades, part-time fire brigades and volunteer fire brigades according to the various forms of employment and commitment of firefighters.

Challenges in rural areas

Fire services and hazard prevention in rural areas in Germany is predominantly provided by volunteers. Volunteer fire departments are a key institution here. One of the most profound challenges for volunteer fire departments in Germany relates to the relationship between the number of firefighters and the number of incidents. On the one hand, the number of volunteers has been decreasing over many years, on the other hand, the number of incidents has been increasing (Steinführer & Brad 2022: 135).

The second key challenge relates to the financing of fire services. Smaller municipalities with structural budget deficits find it especially difficult to finance an efficient local fire and rescue system in the long term.

A third challenge often been ascribed to demographic change but relates to ensuring the availability of firefighters during working hours.

This has been complicated by the mobility requirements of the world of work, the transformation of many rural communities into almost purely residential areas ("dormitory towns") and the relocation of workplaces, meaning that volunteers now often work far away from their homes.

The fourth challenge is linked to the complexity of firefighting technology and operations and the skills required to operate it. The continuous updating of technology is not only important for the safety of firefighters in their work, but is also a motivating factor for volunteers, particularly in combination with adequate further training programmes.

The fifth challenge relates to factors that encourage volunteers to get involved in the fire service. Financial incentives are typically do not contribute towards increasing motivation. However, volunteer firefighters thrive on recognition, which can be expressed in various ways, e.g. through appropriate equipment, non-material incentives or the existence of appropriate strategies aimed at recruiting and retaining active recruits (Steinführer 2014).

Hilly landscape (Germany)

3.2 Country Profiles

Museum village on the Outer Hebrides (Scotland)

Germany

The Federal Republic of Germany (FRG) is a democratic and social constitutional state in the centre of Europe, which consists of 16 federal states. Germany is a founding member of the European Union and a member of the European Monetary Union. With around 84 million inhabitants, the country is the most populous and one of the most densely populated countries in Europe.

Spatial and settlement structures in Germany are subject to change. Overall, regional differences in development are giving way to small-scale differentiation (Wolff et al. 2020). Since 2011, east-west migration has weakened considerably, resulting in very small-scale, fragmented developments in both east and west. This has benefited cities on the one hand and rural areas with particular economic strength or specialisation on the other. Another trend is the strengthening of metropolitan centres as a result of the reurbanisation processes of the 1990s and 2000s (Brake and Herfert 2012).

It is to be expected that the disparities between structurally strong and weak sub-regions will continue to increase in some regions. The more sparsely populated a country is, the more likely it is to shrink. Overall, the population will continue to age.

In order to understand the administrative structure and the system of government in Germany, it is crucial to know about the underlying principle of federalism. As a federal state, Germany consists of a central state (the federation) and 16 federal states, each of which has its own constitution, an elected parliament and its own government. This means that both the federation itself and the federal states have statehood and sovereignty, which are thus divided between the two (legislative powers of the federal government and the federal states). The municipalities are granted a guaranteed right of self-administration by virtue of the constitution (Article 28 of the Basic Law).

The planning system in Germany has three levels, which are legally, organisationally and conceptually separate. The levels are connected vertically via the principle of mutual feedback and the requirements of mutual adaptation ("principle of countervailing influence").

Federal spatial planning provides the legal framework for and represents the highest level of the German planning system.

The term "Daseinsvorsorge" is understood in the German-speaking world as "broadly defined services of general interest that the individual needs to lead a fitting life and whose fundamentally market-based provision is therefore subject to regular state influence" (Milstein 2018, authors' translation). The term Daseinsvorsorge should not be viewed as the direct equivalent of the English term "services of general interest" (BMVBS 2013).

Austria

The Federal Republic of Austria is a semi-presidential parliamentary democracy and has a state structure comparable to that of Germany. The nine federal states exercise legislative powers within the framework of a federal and state constitution. Austria's spatial structure is strongly characterised by the high mountain ranges of the Alps, which make up 70 percent of the country's surface area. These mountain regions feature settlement structures along deep valleys, a low population density and, in some cases, difficult accessibility.

Due to the limited land utilisation possibilities in the mountain regions, settlements in Austria are unevenly distributed across the national territory. Austria's major cities grew demographically and economically between 2009 and 2019 (ORÖK 2021: 81, 97). This resulted in pressure on building land and an increase in housing costs. Many regions have to adapt to the key challenges of climate change, especially in terms of civil protection. Austria is particularly exposed to dangers typical of mountainous regions (e.g. avalanches, mudslides and flash floods). The increase in commuting and multi-local lifestyles (e.g. due to a separation of the locations of home and work) lead to heightened pressure on transport infrastructure (ÖROK 2021: 47).

Compared to the other countries analysed, the population distribution and demographic trends in Austria are more balanced between urban, rural and intermediate regions – around a third of Austria's population lives in each of these three spatial categories. Rural areas are home to most of Austria's small and medium-sized enterprises (BMLFUW 2017).

The federal structures stipulated in the constitution mean that the administrative structure is decentralised with a number of administrative levels: the federal government, the federal states, the districts and the municipalities. The federal government and the nine federal states share legislative, executive and financial responsibilities. The federal states have their own legislative bodies, state governments and state administrations, allowing them to fulfil their state tasks. Districts are purely administrative authorities that assume the tasks delegated to them by the federal states and the federal government. The lowest state administrative unit is the municipalities, which are assigned tasks by the federal and state governments. The federal constitution guarantees them municipal self-administration (independent field of activity).

In Austria, the federal states are responsible for spatial planning. The federal government is responsible for some sectoral planning areas with a spatial impact, such as railways, forests, water and federal roads. The federal states are also responsible for certain sectoral planning, such as state roads, nature conservation and land acquisition. The federal states have legislative and executive powers for supra-local spatial planning.

Understandings of services of general interest in Austria are similar to in Germany: securing services of general interest is considered essential to realising the normative spatial planning principle of equivalent living conditions (ÖROK 2021: 156 ff.). As in Germany, services of general interest are provided by public, private, civil-society and hybrid actors (Brad et al. 2022). In Austria, as in Germany, the established, comprehensive range of services of general interest has faced major challenges in recent years and decades, particularly in shrinking or structurally weak regions.

Landscape near Windeck (Siegtal, Germany)

Moored boat in Portree, Isle of Skye (Scotland)

Scotland

The United Kingdom, consisting of the four states of England, Wales, Northern Ireland and Scotland, is a representative democracy with a parliamentary system of government. It is organised as a central unitary state, but also exhibits characteristics of decentralisation (Ismayr 1999). Scotland comprises the northern third of the main island of Great Britain and, as an autonomous state, has its seat of government in the capital Edinburgh. From here, the First Minister and the Scottish government control most aspects of domestic policy.

The head of state of Scotland, and indeed of the rest of the United Kingdom, has been King Charles III since 8 September 2022. The official languages are English, Scots and Scottish Gaelic, although the latter is only a majority language in the Outer Hebrides.

Scotland's landscape is characterised by highly rural regions, which make up 98 percent of the country's area. With a total area of around 78,000 km^2 and a population of around 5.5 million people, Scotland has an average population density of 70 inhabitants per square kilometre, making it one of the most sparsely populated countries in Europe (Statista 2022).

The majority of the population lives in the Central Lowlands, a belt of lowlands between the country's mountain ranges to the north and south. This is where some of Scotland's largest cities are located, including Glasgow, Edinburgh and Perth. Scotland's rural regions, on the other hand, are characterised by low population density and dispersed settlement structures. The Highlands and Islands cover almost half of the country, just under 40,000 km^2, but only nine per cent of the population live there (Moses 2022).

Demographic change and its impact on (economic) development are of key importance in Scotland. The number of over-60s is forecast to increase by almost a third by 2045 (National Records of Scotland 2022). There is a discrepancy here between rural and urban regions. While the proportion of over-65s nationwide was 19 per cent in 2018, the municipalities with the highest proportions of over-65s were predominantly rural. This situation is exacerbated by the migration of young adults to urban regions for education (National Records of Scotland 2019).

Rural houses (Sweden)

Today, Scotland's autonomy is represented by an elected national parliament and a national government. Since 1996, Scotland has been divided into 32 council areas. In this single-tier local government system, the districts, towns and parishes are combined into a single authority and administered centrally. These council areas and the two National Park Authorities, the Cairngorms and Loch Lomond & the Trossachs, also have primary responsibility for the provision of a range of planning services. They are in charge of development planning, development management and the implementation of planned projects. In addition, Strategic Development Planning Authorities (SDPAs) and various authorities such as Scottish Natural Heritage (SNH) are involved in various local planning processes in a number of areas (Scottish Government n.d.).

The Scottish planning system applies the place principle approach. This involves, in particular, collaboration with stakeholders and local communities (Scottish Government 2021: 68).

In Scotland, services of general interest are generally provided by UK national programmes in the National Rural Network. The key players at UK central government level are the Departments of Transport, Health, Environment, Food and Rural Affairs. At Scottish government level, the areas of healthcare and education are core competences that are not explicitly under the jurisdiction of the UK government.

Sweden

Sweden is the largest Scandinavian country in terms of area. The democratic country is a parliamentary monarchy. This means that political power lies with the parliament and the government; the monarch has representative functions. According to the Sustainable Development Report (2022), Sweden is one of the most sustainable countries in the world and has above-average energy independence. The country already generates 60 percent of its energy from renewable sources, particularly hydropower.

A special feature of Sweden is the uneven distribution of inhabitants within the national territory. While the south of the country is more densely populated and has a higher proportion of urban centres (e.g. Stockholm, Gothenburg, Malmö), sparsely populated, peripheral areas dominate the landscape in the north of the country. Despite this, over 90 percent of households have broadband access.

Population growth is forecast for Sweden, 80 percent of which will be concentrated in the urban regions in the south and centre of the country, while municipalities and regions in the north will experience a decline in population. Age structure is expected to develop in a similar fashion. Overall, the average age of the population is expected to continue to rise, particularly in the peripheral, northern regions (Grunfelder et al. 2018).

Sweden is a unitary state with three levels of government: national, regional and local. The Swedish constitution regulates the general responsibilities of the individual administrative levels. While the national level is primarily responsible for the legal framework, the sub-national level has a high degree of autonomy and self-determination (Jann and Tiessen 2008). This is expressed at regional and, in particular, local level in the form of regional and municipal self-government (BMVI 2015; Förster et al. 2014).

The aim of spatial planning in Sweden is to make decisions on how the state's land and water areas should be used. The aim is to achieve the greatest possible consensus between all the actors involved. All three administrative levels have certain competences in shaping spatial planning in Sweden, with the local level (the municipalities) bearing the main responsibility for spatial planning (Boverket 2022).

Within the framework of municipal self-government, the local and regional level is responsible for a large proportion of welfare state tasks. Against this backdrop, Sweden is facing growing challenges in ensuring the provision of services of general interest. Innovative approaches (e.g. e-health applications, telemedicine or more efficient mobility services in peripheral regions) are increasingly being used to improve the efficiency of services provided and to bridge the large distances involved, particularly in peripheral regions.

3.3 Profiles of the investigated projects

FIGURE 4:
Investigated projects

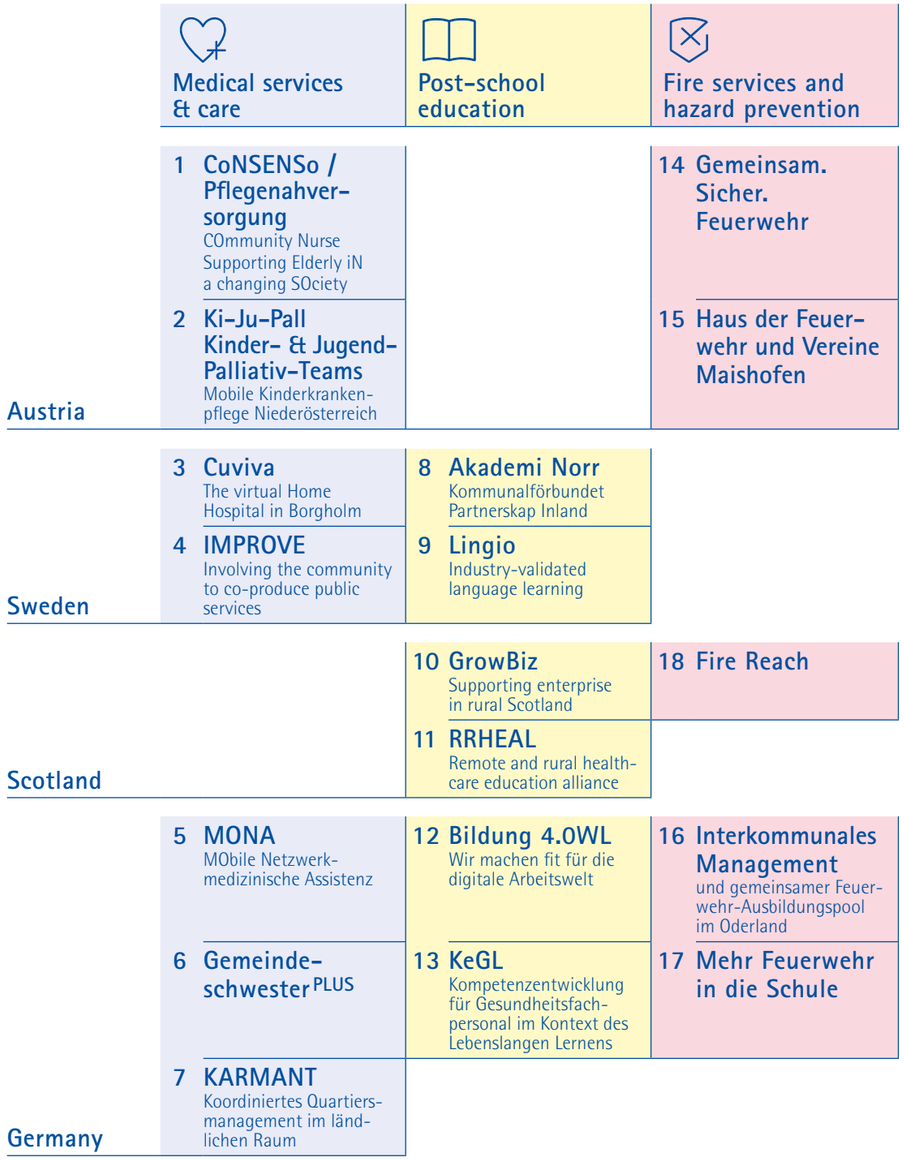


TABLE 4:

Projects analysed in the service of general interest: Post-school education

Country	Project title	Project focus
Sweden	Akademi Norr	Association of individual municipalities to ensure higher education in rural areas. Decentralised learning opportunities in the form of community learning centres. *Web: https://www.akademinorr.de/ (Swedish website)*
Sweden	Lingio	Six-month language courses via an app for various professional fields. Combating the shortage of skilled workers by facilitating language access for immigrants. *Web: htttps://www.lingio.com/sv/?hsLang=sv (Swedish website)*
Scotland	GrowBiz	Community-based enterprise support for rural businesses across Scotland. *Web: https://www.growbiz.co.uk*
Scotland	Remote and Rural Healthcare Education Alliance (RRHEAL)	Coordination and establishment of new offers for education in the health sector, adapted to rural conditions. *Web: https://www.nes.scot.nhs.uk/our-work/remote-and-rural-healthcare-education-alliance-rrheal/*
Germany	Kompetenzentwicklung für Gesundheitsfachpersonal im Kontext des lebenslangen Lernens (KeGL)	Needs-based and modular certificates offered at universities for competence-oriented further training of healthcare professionals for research, development, testing and integration into study programmes. *Web: https://www.ostfalia.de/cms/de/g/kegl/*
Germany	Bildung 4.0WL – Wir machen fit für die digitale Arbeitswelt	Shaping change along the entire education chain by education and industry players in light of the digitalisation and knowledge intensification of the worlds of education and work. *Web: www.bildung40-owl.de*

TABLE 5:

Projects analysed in the service of general interest: Medical services and care

Country	Project title	Project focus
Austria	Ki-Ju-Pall Kinder- & Jugend- Palliativ-Teams	Mobile palliative care for children, adolescents and young adults in Lower Austria provided by palliative care teams consisting of qualified carers, nurses and paediatricians. *Web: https://noe.moki.at/index.php/ki-ju-pall*
Austria	CoNSENSo / Pflegenahversorgung	Establishment of care coordinators in test municipalities in Carinthia as an interface between service-users, family members, organisations, doctors, hospitals and other healthcare providers. *Web: https://www.ktn.gv.at/Themen-AZ/Details?thema=131&detail=986*
Sweden	Cuviva	Establishment of a home hospital at the health centre in Borgholm: patients monitor their health independently at home with the help of a digital solution. *Web: https://cuviva.com/en/offer*
Sweden	IMPROVE	Implementation of e-health applications to support outpatient care for elderly people in need of care. *Web: https://improve.interreg-npa.eu/news/show/service-e-health-services-for-home-care-staff-in-vaesternorrland-sweden/*
Germany	Mobile Netzwerks- medizinische Assistenz (MONA)	Care and counselling of patients in the outpatient sector with the support of telemedicine and electromobility, with a particular focus on general practitioner home visits. *Web: http://www.modellvorhaben-versorgung-mobilitaet.de/modellregionen/bad-kissingen-rhoen-grabfeld/*
Germany	Gemeindeschwester PLUS	Home visits for the very elderly aged 80 and over who have no need of care. The preventive focus is on housing, psychosocial counselling and social space orientation (drawing on resources in the neighbourhood). *Web: https://mastd.rlp.de/de/unsere-themen/aeltere-menschen/gemeindeschwesterplus/*
Germany	Koordiniertes Quartiersmanagement im ländlichen Raum (KARMANT)	Development of concepts for elderly care and integrated neighbourhood care counselling in five rural model communities in the district of Meißen. *Web: https://rpv-elbtalosterz.de/redavorpilotprojekte sowie http://www.kreis-meissen.org/9442.html*

TABLE 6:

Projects analysed in the service of general interest: Fire services and hazard prevention

Country	Project title	Project focus
Austria	Gemeinsam. Sicher. Feuerwehr.	Professionalisation of fire safety education and better integration into the formal education system. Creation of curriculum-compliant teaching materials for kindergarten, primary school, secondary levels I & II. *Web: https://www.gemeinsam-sicher-feuerwehr.at/*
Austria	Haus der Feuerwehr und Vereine Maishofen	A new home for the traditional music band of Maishofen, the Maishofen volunteer fire department, the young farmers association and other clubs in Maishofen. *Web: https://www.maishofen.at/Unser_Maishofen/Haus_der_Feuerwehr_und_Vereine*
Scotland	Fire Reach	The project offers young people the opportunity to visit their local fire services and improve their teamwork and communication skills. *Web: https://www.itsyourchoice.co/fire-reach.php für eine beispielhafte Umsetzung; (englische Webseite)*
Germany	Gemeinsamer Feuerwehr- Ausbildungspool und Interkommunale Manage- mentstrukturen im Brand- und Katastrophenschutz	Securing the future viability of volunteer fire departments in the Oderland region through inter-municipal coordination (management structures), hazard planning and a joint firefighters training pool. *Web: http://www.oderlandregion.de/seite/203103/feuerwehr-koordinator.html*
Germany	Mehr Feuerwehr in die Schule	Recruitment of young people for the youth fire brigade and the operational department. Conveying content on fire safety education and fire safety information. *Web: https://feuerwehr-in-die-schule.de/mehr-feuerwehr-in-die-schule*

MAP 1:

Germany

Political-administrative boundaries

Medical services and care

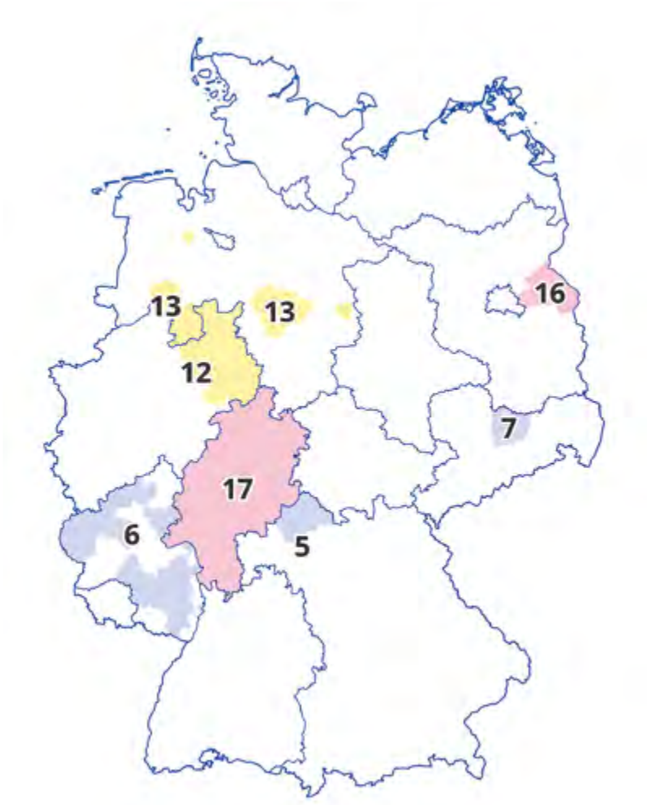
5: MONA
6: Gemeindeschwester PLUS
7: KARMANT

Post-school education

12: Bildung 4.0WL
13: KeGL

Fire services and hazard prevention

16: Interkommunales Management
17: Mehr Feuerwehr in die Schule



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MAP 2:

Austria

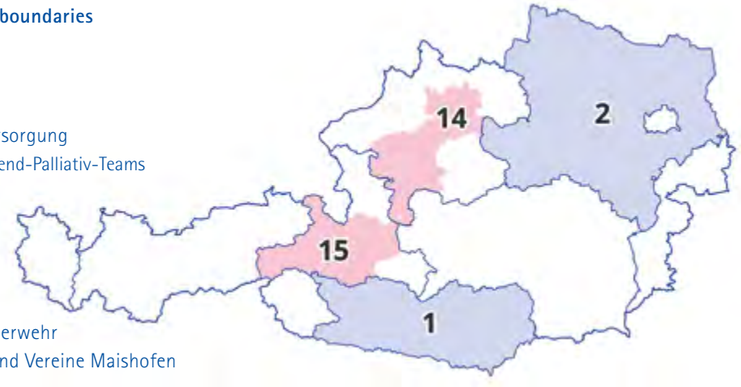
Political-administrative boundaries

Medical services and care

1: CoNSENSo Pflegenahversorgung
2: Ki-Ju-Pall Kinder- & Jugend-Palliativ-Teams

Fire services and hazard prevention

14: Gemeinsam.Sicher.Feuerwehr
15: Haus der Feuerwehr und Vereine Maishofen



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MAP 3:

Scotland (GB)

Political-administrative boundaries

Post-school education

10: GrowBiz
11: RRHEAL

Fire services and hazard prevention

18: Fire Reach

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MAP 4:

Sweden

Political-administrative boundaries

Medical services and care

3: Cuviva
4: IMPROVE

Post-school education

8: Akademi Norr
9: Lingio

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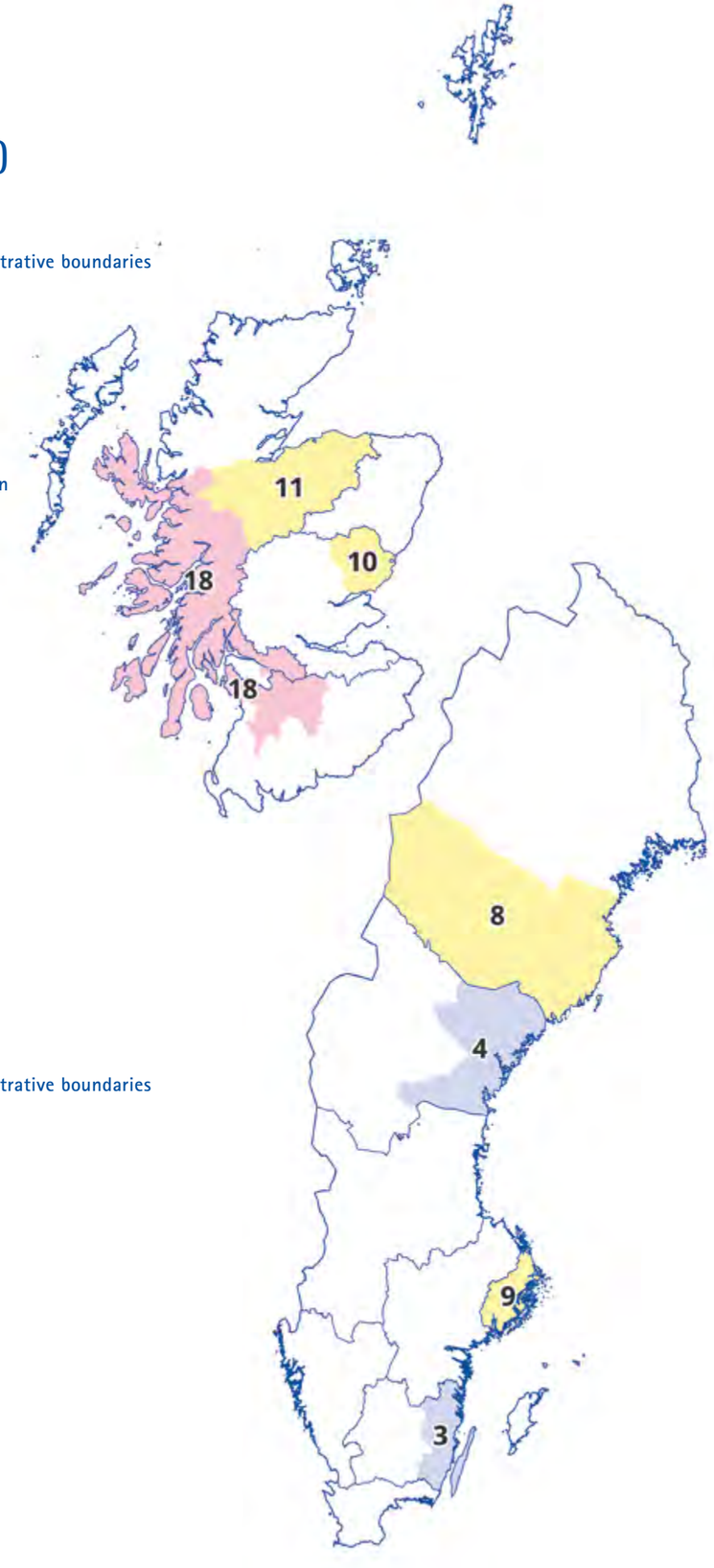

4. What did we find out?

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4.1 Our key findings

Diverse land use in rural areas (Goldene Aue, Germany)

Issues relating to the provision of services of general interest in rural areas have been the subject of extensive (spatial science) research for some time, but there are still areas that have been comparatively little researched. Of the areas of public services analysed in the InDaLE project, this applies to post-school education and fire services and hazard prevention. New perspectives have been opened up in the three services of general interest examined, particularly in medical services and care (Key Findings, Section 4.1) by digitalisation. The InDaLE project focuses less on initial findings from simulation games or pilot projects and more on the subsequent essential issue of consolidating successful services of general interest in order to ensure actual progress is made (Theses on Consolidation, Section 4.2). With recommendations for the leading players in the three services of general interest, the findings are transferred to Germany (Recommendations for Action, Section 4.3).

Post-school education

he role and significance of post-school education for the development of rural areas has not yet been adequately recognised or empirically investigated. The selection of Scotland and Sweden for the field of post-school education proved extremely useful and fruitful. The surveys on post-school education in these two countries generated a number of findings that have been little, if at all, discussed in German-speaking countries. The emergence and mode of operation of decentralised, network-like institutions of post-school education in the rural periphery, such as the Norr Academy in Sweden, deserve particular attention. This represents a concept of distance learning that is based on the use of modern information and communication technologies. The same applies to the University of the Highlands and Islands in Scotland, which was repeatedly cited as a model in the course of our research, but was not the subject of any further targeted research of our own. It should also be mentioned the special role played by bottom-up civil society initiatives, such as the GrowBiz project. This was primarily the result of a private initiative by committed local people who were keen to provide start-ups, small businesses and the self-employed in rural areas with unbureaucratic and low-threshold information, advice and training services. It has since developed into a professional business consultancy that has become an integral part of rural regional development in Scotland. Both areas of experience open up valuable perspectives for the transferability of corresponding approaches to Germany.

Four subject areas were identified as being central to the provision of post-school education:

Hybrid teaching formats: Combining digitalisation and local contact

Post-school education programmes are traditionally centralised and their content is currently primarily geared towards urban contexts.

The lack of further education opportunities in rural areas is a major reason for the migration of young people to urban regions. They often do not return to their home regions even after completing their studies, training or further education due to the lack of suitable jobs or further education and training opportunities. To support the sustainable development of rural regions, it therefore seems important to create local opportunities for post-school education. The focus of such educational options should also reflect regional needs. Making educational opportunities locally available in rural regions involves decentralising the education system. In order to facilitate organisation and finance, approaches that use digital media to combine distance learning with face-to-face formats (e.g. personal contacts in learning centres) have proven suitable. Digital learning methods can particularly help to overcome problems of accessibility. However, personal exchange remains essential for learners.

Networking

Networking, both at different political levels and between projects at home and abroad, has proven particularly important for the consolidation and further development of post-school education projects in rural areas. Networking with political actors (e.g. the municipal administration or regional government) can help to put the problems and challenges of post-school education in rural contexts on the political agenda and sensitise society as a whole to such problems.

Exchange between post-school education projects with similar objectives and challenges, at home and/or abroad, makes mutual learning possible. In addition to internal project development, this can also strengthen and promote personal motivation. The practice-based exchange of knowledge and experience is seen as enriching by all participants. Even within a project, diverse teams with different professional backgrounds, skills and practical experience are conducive to good communication and cooperation.

Financial and political support

Post-school education projects have a particularly good chance of successful development if they receive broad political support. This applies in particular to state financial support for the projects, which can be seen as a good basis for resilient funding and consequently for the establishment and consolidation of the projects. At the same time, state funding of the projects is made possible through close cooperation and regular dialogue between politicians and project staff. In one of the projects we analysed, this even led to the representatives of a funded project occupying an important position in the political consultation set-up. Policymakers thus receive deeper insights into the tasks and challenges of post-school education in rural areas, and the needs, goals and plans of projects are communicated more broadly.

Voluntary work

Another aspect that has emerged as a potentially relevant pillar for post-school education is the role of voluntary work. It became clear that volunteers not only have a supporting role, but can actually be the driving force and basis of the projects. The basic intention of volunteering lies in the intrinsic motivation to make a contribution to regional development and post-school education and to pass on experience in this context. Monetary gain, on the other hand, seems to play a subordinate role here.

People who have learnt from the experiences of others through mentoring often later become involved in passing on their own experiences and tools, which can promote the sustainability of projects. Finally, it became clear that a few key people were particularly important for the functioning and consolidation of the project. From a long-term perspective, it proved important not only to acknowledge and publicly recognise the commitment of these individuals, but also to secure their functional roles for the future: in other words, to establish functions instead of individuals.

Medical services and care

The foreign case studies in the area of medical services and care illustrate that innovative projects play an important role in securing healthcare provision in rural areas and continue to be of particular importance for research. A high level of innovation can be observed in the area of e-health in particular. The use of e-health products can intensify contact with patients and also enable more comprehensive monitoring of physical and mental well-being.

Acceptance is of major importance here but was not evident in all sub-areas of the projects. The successful use of e-health products requires the acceptance of a range of stakeholders, including political decision-makers, the general public and the users themselves. To increase acceptance, targeted information offerings, open communication and opportunities for the public to help shape the processes are required. It goes without saying that a prerequisite for e-health is that everyone has access to the products.

Both providers and users of e-health products require extended knowledge in order to be able to handle the innovative solutions safely. Training and further education modules therefore need to be developed to create integrated services and bridge the divide between the medical and care sectors.

It is not possible to identify universal solutions for securing medical services and care in rural areas, as local and regional characteristics must be taken into account. However, volunteers are important in all countries and should also receive support and appreciation. The focus here should be on systematising the possibilities for support and appreciation. Inter-municipal collaboration and interdisciplinary coordination and cooperation can also help to close existing or anticipated gaps in services.

In the area of medical services and care, the importance of three topics should be highlighted:

Increased efficiency and cost-effectiveness of services

The introduction, application and establishment of innovative solutions and products in the field of e-health, such as telemedicine and telemonitoring, are required. Increased efficiency and cost-effectiveness of services can be achieved by overcoming the restrictions of fixed locations and improving the bridging of distances.

The projects demonstrate various solutions for securing services of general interest in sparsely populated and shrinking areas. An established use of e-health services such as telemedicine or telemonitoring enables, for example, communication with doctors and the monitoring of health data. People requiring treatment can collect the necessary data independently at home, thus supporting medical services. In the care sector, direct communication with care staff can enable better coordination and support for people in need of care at home. Digital solutions can be helpful here, such as cameras for monitoring patients, digital care counselling and electronic aids.

Community nurses also play an important role in public healthcare. They are the first point of contact for people in need of treatment and care and offer care counselling and initial diagnoses for minor illnesses. In some cases, specially qualified community nurses can also prescribe medication. Their apprenticeships are often linked to extended training, which contributes to the creation of qualified specialists.

Cooperation and overcoming the divide between the medical and care sectors

It is important to prioritise innovative solutions and products that aim to use and promote inter-professional collaboration and knowledge exchange. Overcoming the divide between the medical and care sectors helps to ensure integrated services. This is crucial in order to ensure integrated care for the people receiving treatment.

Road near Maishofen (Austria)

The use of interfaces can both optimise care and improve the cost-effectiveness of care and therapy. New solutions can be developed through closer collaboration with key stakeholders and target groups from the fields of medical services and care.

The joint development of new approaches and openness to innovative ideas make it possible to find targeted and problem-orientated solutions. Important stakeholders who are not normally directly involved in the process are given the opportunity to participate and help shape the process. This ensures that different perspectives and experiences are incorporated and the best solutions can be found.

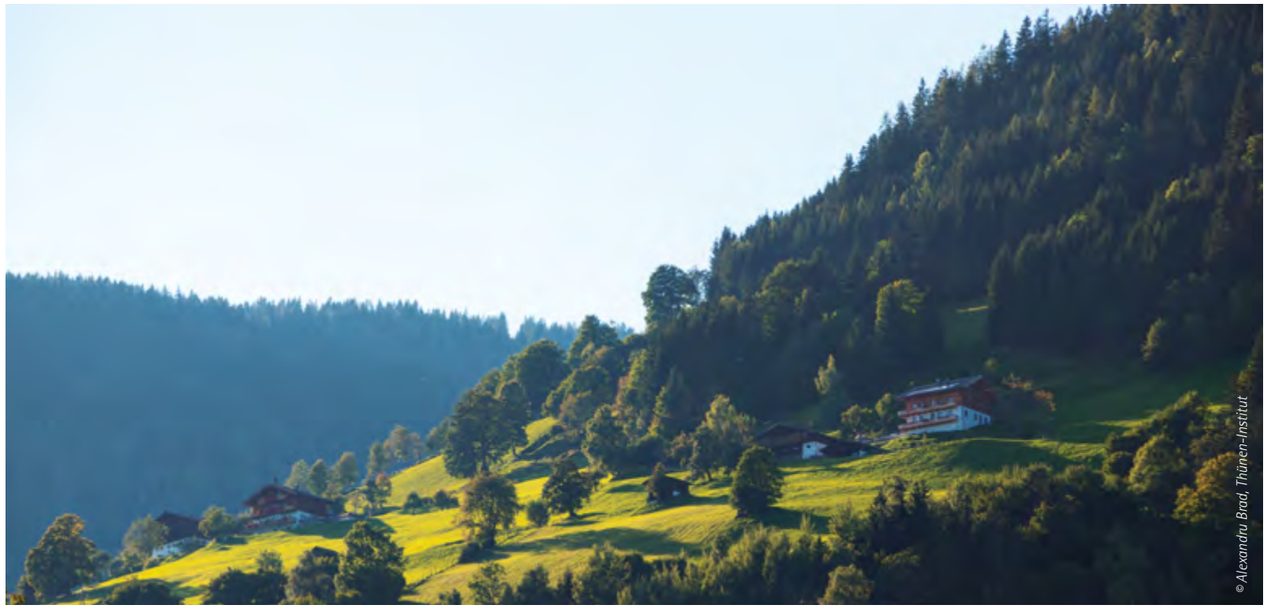
For the successful adaptation and subsequent consolidation of innovative projects for medical services and care in rural areas of Germany, it is of great importance to generate new concepts and products, or further develop existing ones, in order to close current or expected gaps in services. Creating parallel offers as alternatives to established solutions and products should be avoided, especially if the latter are already financially viable. It is important to have the ability to flexibly adapt demand-orientated solutions and products to changing circumstances.

Training and further education programmes in combination with the expansion of support services for volunteers

Career prospects should be identified for medical staff and carers – in particular, high-quality and lucrative training and further education programmes should be created. In parallel, staffing gaps can be closed by recruiting trained personnel. Volunteers must receive more recognition by expanding support services in order to maintain their commitment.

To achieve this, it is crucial to attract key people with expertise, management skills and assertiveness and to retain them in the projects. Flat hierarchies can help to speed up decision-making processes and improve communication and cooperation with all those involved.

It is also important to offer the projects a platform through public relations work and to promote discussion of solutions and products between those responsible and project staff. Communication and cooperation can be used to support participation and create acceptance among the public.



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Mountain farmhouses (Zell am See, Austria)

Fire services and hazard prevention

In the lively German debate on the reorganisation of services of general interest, questions of fire and hazard prevention or technical assistance have rarely arisen. However, the few existing studies on the motives and factors related to volunteers' commitment to civil protection (Kietzmann et al. 2016, Wenzel et al. 2012) indicate that the fulfilment of mandatory municipal tasks by volunteers should by no means be taken for granted. While the importance of the social role of volunteer fire departments is frequently emphasised, especially in rural areas, they are also indispensable for public safety in Germany, in Austria and in other countries not considered in InDaLE.

Preventive and reactive fire protection can also be achieved with a different system that is less reliant on volunteers. This was the key finding of our contrasting comparison with Scotland. One of the overarching solutions identified in InDaLE for the challenges faced by this service of general interest is improved fire safety education. This should be organised more systematically than it currently is and not just aimed at younger children. Other findings relate to a changing stakeholder landscape and the partial shift and redistribution of traditional responsibilities, including an expansion of full-time functions. Finally, questions arise regarding the future operational capability and the adjustments to services of general interest that may be necessary in light of extreme events caused by climate change, which are increasing in number and intensity in many places.

In our investigation of various pilot projects in Germany and abroad but also by comparing individual projects, four topics have emerged that we consider to be essential for the future of fire services and hazard prevention and, in particular, volunteer fire departments in rural areas:

Regional coordination and support for volunteers

The traditional fire service system in Germany – just like that of Austria – is based not only on a great number of volunteers but also on the principle of local provision (one settlement = one fire service). In view of the challenges facing the fire services, the sustainability of this organisational model is anything but certain in many rural communities. However, closures and mergers of fire brigades are usually controversial locally and hardly politically desirable. One potential solution is the regional coordination of emergency response, which can relieve the burden on local fire services. This does not mean that fire services should be merged, nor does it mean that a new hierarchy should be introduced, for example, as is the case with establishing special bases for fire services complementary to local fire departments. Rather, regionalisation refers to the supra-local coordination or assumption of some of the non-operational tasks of the fire services, extending beyond the legal obligations. This includes, for example, the maintenance and joint procurement of equipment, the organisation of joint training and the targeted introduction of full-time personnel. The local fire departments should be involved in the concrete organisation of such regional or inter-municipal coordination. Experience from the analysed projects show that such an independent regional approach also requires multi-level coordination between the Ministry of the Interior responsible for fire services and hazard prevention, the districts and the municipalities, in line with the legally defined responsibilities. Regional coordination can be initiated and supported by funding, however, the political will to establish such a coordination is primordial.

Professionalisation and expansion of fire safety education

In Germany, fire safety education is generally limited to kindergarten and primary school. It is usually organised locally and designed to give children a basic understanding of how to handle dangers. Fire service associations and the responsible ministries have recently identified the need to systematise fire safety education on the one hand and to extend it to higher school levels on the other.

The underlying assumption is that this will increase public awareness of the challenges faced by fire services, and could thus reduce the number of call-outs in the future and improve the recruitment of new firefighters. The prerequisite for this is a greater professionalisation of fire safety education, which requires cooperation between a number of ministries and the involvement of educators to design teaching materials. Teaching programmes created in this way could relieve the burden on local fire departments carrying out fire safety education in different types of schools and for different age groups.

The projects analysed in InDaLE in Austria, Scotland and Germany focus on the teaching of topics relevant to the fire service not only in studies, but also in other subjects such as chemistry, history and English. Thanks to this knowledge, children can act as multipliers in society, spreading knowledge about the tasks and the voluntary nature of fire departments, and may even consider joining the youth fire brigade themselves. A fundamental difficulty is that fire safety education is not a separate school subject and in rural areas depends largely on the commitment of local volunteers, unlike police and traffic education, for example. This approach is also difficult to coordinate countrywide – even if support for fire safety education is made available, there is no guarantee that such programmes will be adopted at the local level.

Social visibility of volunteer fire departments and volunteering

In rural areas, the committed involvement of volunteers in the fire department, especially over many years, can no longer be taken for granted. This is mainly due to changed working environments and the long-term transformation of the social and demographic structure of rural areas. In addition, cost issues and discussions about increasing the efficiency of services of general interest dominate much of the public debate. However, fire services are not simply provided by the municipalities, but also require a great deal of voluntary commitment, which – we assume – much of the "non-firefighter" public know little about. It can therefore be assumed that improving the social visibility of volunteer fire departments (local, regional, supra-regional) could make a significant contribution to ensuring long-term operations. The analysis carried out in InDaLE focused on an Austrian example of a mixed use fire service building, in which space was also created for local clubs and other mandatory municipal tasks. This allowed for closer contact between the fire brigade and local associations, while at the same time guaranteeing the daytime availability through the employees of the municipal company (in this case, the waste recycling centre), many of which volunteered as firefighters.

However, such an approach is not a panacea. It remains an ongoing task of the fire service and its associations, at various levels and with the support of the relevant local political and administrative players, to present their areas of responsibility and to improve their visibility. Nonetheless, a prominent position in the municipality (signalling that the fire services are valued by the community) can provide an impetus for this visibility and motivate the volunteers. At the same time, such activities show the commitment of the local community to its fire service beyond simply providing the necessary appliances.

"Under the radar": partial relocation and redistribution of traditional responsibilities

In rural areas, the division of responsibilities for the compulsory municipal task of fire services and hazard prevention has for decades almost exclusively involved voluntary involvement on the one hand, while on the other hand material and technical equipment has been provided by the local authorities themselves. However, this way of organising public safety can no longer be taken for granted, especially in rural communities characterised by population decline, ageing and economic structural weakness. Declining, or at least precarious, membership figures are complemented by higher overall numbers and a changed type (e. g. more responses to damages caused by extreme weather) of interventions. At the same time, there are also other actors with important roles in ensuring emergency response on a voluntary basis – in particular employers who release employees for deployments.

For many years, both introspective and external critique of the fire service has repeatedly highlighted the complex challenges and the fact that fire protection and technical assistance can no longer be guaranteed everywhere and at all times. However, from a nationwide perspective, we found no evidence that this critique been systematically acknowledged or addressed. It is also not apparent that there has been any overarching attempt to reorganise local civil protection. Instead, it is individual activists in local fire brigades, county councils, fire service associations and state ministries of the interior who are trying to change the system with great personal commitment and sometimes in the context of targeted federal and state funding initiatives. The measures and strategies for securing the future of fire services and hazard prevention that are currently tested do not fundamentally question the volunteering-centered system. However, in our opinion, many can be interpreted as changing and transferring responsibilities. Such measures include, for example, the partial introduction of full-time positions, the extension of age limits for membership, the establishment of inter-municipal or intra-regional cooperation and the increased attention paid to fire safety education for the public in order to improve self-protection. The landscape of actors in fire services and hazard prevention is thus changing and expanding, and private organisations, citizens and the state are being included in new ways. This partial shift and redistribution of traditional responsibilities can therefore be described as an incipient paradigm shift, the scope and possible long-term effects of which have not yet been adequately addressed either in practice or in research.

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Fire brigade motto (Lehde im Spreewald, Germany)

4.2 Our theses for the successful consolidation of pilot projects

Interior of House of the Fire Brigade and Associations in Maishofen (Austria)

The challenging task of consolidating innovative services of general interest – not only, but especially in rural areas with structural economic weaknesses that are undergoing demographic change – requires creative and innovative strategies in order to be able to react to specific framework conditions, models, technological innovations and the changing wants and needs of citizens and users. The requirements are formulated in theses and structured according to the four impact areas of consolidation (see Section 2.1).

Impact area: substantive

Innovative projects for services of general interest in rural areas are more likely to be consolidated if ...

Thesis 1

... they address local and regional needs in a targeted manner and flexibly take them into account during practical implementation.

- Modular strategies and local cooperation are key success factors, as demonstrated by the Gemeinsam.Sicher.Feuerwehr and Fire Reach projects, for example. New forms of cooperation can be created by further developing existing services or initiatives (e.g. Ki-Ju-Pall, CoNSENSo), often in conjunction with digital services (e.g. GrowBiz, Bildung 4.OWL).

Thesis 2

... through participation and active networking, the creative drive of the relevant actors is awakened, and trust and acceptance are established among the participants.

- The project and its objectives must be supported by all those involved and must be accepted, implemented and passed on by the addressees (e.g. Gemeinsam.Sicher.Feuerwehr). A number of factors are important for a project to gain the necessary acceptance and to give a "confidence boost" to new formats of cooperation (e.g., Ki-Ju-Pall, Fire Reach). They include at least a few successes, financial and human resources and, above all, the "staying power" of those responsible for the project.

Thesis 3

... knowledge and capacities are built up through the further training of project actors, the exchange of experience and knowledge with others and reflection about individual (learning) processes.

- Innovative and sustainable projects are learning projects: the actors undergo further training and network beyond their fields of activity, e.g. in the Ki-Ju-Pall project palliative care teams work with a university, while in Gemeinsam.Sicher.Feuerwehr fire departments work with educators. Joint critical reflection about the chosen strategies is a key factor here.

Impact area: organisational-structural

Innovative projects for services of general interest in rural areas are more likely to be consolidated if ...

Thesis 4

... they are implemented within the framework of new inter-municipal, inter-sectoral and/or cross-level cooperation. New or adapted forms of organisation are also required for consolidation.

- Innovation in consolidated projects can also lie in new forms of collaboration (e.g. IMPROVE, GrowBiz). The main goal of joint action may be to gain a critical mass of users or to design offers in a financially efficient manner (e.g. Akademi Norr). Synergies are discovered through joint discourse, also in order to be able to lobby effectively (Gemeinsam.Sicher.Feuerwehr). Cooperation with political decision-makers can lead to the creation of positions for coordinators and multipliers, such as in the Mehr Feuerwehr in die Schule project.

Thesis 5

... motivated and professionally competent key individuals mediate between levels, sectors, disciplines and their respective logics, advocating for the projects. If these individuals leave or cease to engage, the projects can lose their impetus and become unsustainable.

- Key persons take on coordinating tasks and, for example, promote cooperation beyond their own project networks. They are often involved in specialist networks and/or political bodies (e.g. Ki-Ju-Pall, Akademi Norr, GrowBiz). Their high personal motivation also results from their expertise, which in turn greatly increases people's willingness to accept them (e.g. KARMANT, RRHEAL). It is therefore very important to

House of the Fire Brigade and Associations in Maishofen (Austria)

secure and finance the positions of key individuals (KARMANT) and in particular to support their direct networks. It is also a key factor to establish "functions instead of individuals" in order to allow a flow of knowledge between employees and a sharing of responsibilities.

Thesis 6

... volunteers are provided with relief on the one hand and, on the other, are integrated in an appreciative and balanced manner to ensure the provision of project services.

- Innovative projects for services of general interest often thrive on a balance of voluntary work and professional structures. The projects examined here always have a certain amount of professional support, which in some cases is responsible for particular project modules (e.g. Gemeindeschwester^{PLUS}, Lingio, Bildung 4.0WL). When working with volunteers, expectations must be set and common goals developed (Fire Reach). While full-time employees fit into the institutional framework and can, for example, set binding standards (Gemeinsam.Sicher.Feuerwehr), volunteers often know the local and regional needs better and can contribute informal knowledge to the design of the projects (GrowBIZ).

Impact area: political-administrative

Innovative projects for services of general interest in rural areas are more likely to be consolidated if ...

Thesis 7

... municipal authorities have sufficient human and financial resources to take up and continue to support innovative approaches and solutions.

- The ability of rural municipalities to act is of fundamental importance for the successful consolidation of innovative projects in all three services of general interest, whether through direct sponsorship (CoNSENSo, Akademi Norr) or through intermediary organisations (KeGL). They can also take on important roles as co-financiers (IMPROVE, Lingio), or they can provide infrastructure or human resources (Haus der Feuerwehr und Vereine Maishofen, Akademi Norr). The availability of funds also depends on the political priorities established in the municipalities themselves. Also of relevance are tensions between mandatory and voluntary tasks in municipal settings. Adequate (state) funding is often indispensable, especially for small municipalities.

Thesis 8

... municipal and/or state politicians recognise the need for and importance of the tested innovations at an early stage and support them with public relations work or political persuasion.

- Political prioritisation plays an extremely important role here. Requirements are often made clear to politicians in a targeted manner via interest groups (MONA, Mehr Feuerwehr in die Schule) and only reach the political agenda thanks to lobbying (GrowBiz, Cuviva). The continuation and development of innovation-promoting programmes and the direct involvement of political representatives are associated with, among other things, a higher level of awareness of the project and greater legitimisation of the goals and measures (Akademi Norr).

Thesis 9

... sufficient political and social attention is generated during the project term so that the necessary changes to the governance model (e.g. laws, organisational forms) of the relevant service of general interest are initiated.

- Innovative approaches are usually linked to new roles and organisational forms of the actors involved. National or international cooperations, programmes or joint projects can then be the basis for jointly developed solutions, e.g. for a governance model (RRHEAL). Legal or regulatory adjustments are necessary in order to make the innovative approaches sustainable in the long term (MONA, KARMANT, KeGl). Legislative reforms can also be the impetus for innovative projects (RRHEAL, Gemeindeschwester^{PLUS}, Cuviva).

Impact area: Financial

Innovative projects for services of general interest in rural areas are more likely to be consolidated if ...

Thesis 10

... funding is secured for as long as possible. Sustainable private-sector business and financing models or regular public funding should follow project funding and are preferable to the constant development of new funding sources.

- Projects are more likely to be successful in the long term if public funding is secured, at least in central areas (RRHEAL, Haus der Feuerwehr und Vereine, Mehr Feuerwehr in die Schule), regardless of funding or legislative periods. If a project can eventually pay for itself, private investors are often involved today (Lingio). However, if local authorities can finance projects without external funding bodies, there are no financial bottlenecks when it comes to the transition to regular funding after the end of the project (IMPROVE, Fire Reach). Acquiring project-bound funding is (too) time-consuming and personnel-intensive (GrowBiz) and is at best a bridge to reliable long-term funding.

Thesis 11

... project stakeholders are in a position to secure stable funding despite complex funding requirements and rigid funding programme rules.

- The structure and quality of project management have a major influence on the consolidation of innovative projects, including the transparent presentation of the funding framework and the associated requirements (deadlines, reporting, etc.) through information and advisory services. A clear, simple and flexible funding framework increases the likelihood that cooperation on an equal footing and consolidation will be successful (Ki-Ju-Pall, MONA, Lingio). However, the continued employment of staff, for example, is often made more difficult by the funding conditions. Prompt and mutual flows of information, open communication and persuasion are key factors (Lingio). Recognising and jointly assessing project risks also plays an important role (Akademi Norr, Bildung 4.0WL, Interkommunales Management Oderland).

4.3 Our recommendations

Lake (Sweden)

Comparative studies, especially of an international nature, are still rare in spatial science as well as in research on services of general interest. One of the reasons for this is the considerable effort required for the necessary empirical surveys. Our studies have confirmed that this effort is nevertheless worthwhile – after all, foreign governance models and other practices stimulate reflection on alternatives for the design of services of general interest. This approach also allows us to make statements about the possible transferability of the selected approaches, which would have been difficult to assess on the basis of concepts and strategies alone. Through the various workshops and conferences held in Germany, it was also possible to facilitate and continue discussion processes that have fed into the recommendations and from which both science and practice have benefited equally.

Post-school education

→ Coordinated identification of future educational needs

In order to secure and further develop post-school educational opportunities in rural areas, a strategic focus is required. Cooperation between companies, education providers and public administrations is an important building block here. A central coordination office is ideal for this purpose. As experience abroad has shown, the establishment of such coordination centres has many advantages. For example, the dialogue skills of the individual partners benefit from chaired meetings, while a transparent overview of all education providers avoids stressful competition. In addition, comparatively small user groups can be bundled through inter-municipal cooperation and specialised educational offers can be realised more easily.

Joint strategic education planning is based on mutual trust between the partners. It allows the coordination of joint funding tactics in order to successfully acquire funding. Regional needs analyses are also a key task of an education coordination centre. On the one hand, deriving needs-orientated learning offers from such analyses ensures that learners benefit from career prospects in the region after completing their training. On the other hand, local companies can draw on trained specialist staff. In this way, educational programmes that are tailored to local needs become a positive location factor for a region and can improve the local quality of life.

The economic development organisations of the districts, the chambers of industry and commerce or regional management institutions are suitable for implementing or supporting central coordination tasks. However, existing capacities should be assessed to determine whether they already enable efficient planning or whether a new coordination centre should be established. In addition, the job centre responsible for the region in question should be involved in the assessment of educational needs.

- In order to secure and expand the provision of post-school education in rural areas of Germany, it is advisable to...

... co-operate closely with local companies from the private sector and public employers to assess future educational needs at regular intervals by means of needs analyses. This strategic planning requires the inter-municipal, regional establishment of centralised coordination.

→ Increased use of digital tools

The expansion of post-school education programmes in rural areas is particularly dependent on the use of modern digital tools. In view of the geographical hurdles faced by many rural areas, the use of digital resources represents a major added value. The decoupling of locality and educational offers means that great distances can be overcome and individuals have access to a comprehensive – supra-regional, national and even global – range of learning opportunities. The prerequisite for the utilisation of such offerings is the provision of high-speed internet access to all rural areas.

As in-person teaching cannot be transferred 1:1 to online formats but must rather be appropriately adapted, online teaching should be included in teaching qualifications in the future. If online teaching is successfully implemented, critical minimum numbers of participants can be achieved more easily, as digitalisation increases the catchment area of the course. As a result, the quality of local learning programmes is improved, while the costs for the individual can be reduced due to the larger number of users.

Despite the many advantages of distance learning, not all learners have sufficient potential for independent learning. Spaces for meeting and exchanging ideas with other learners are still needed, e.g. to maintain motivation in the face of persistent obstacles. There should also be professional contact persons who are available locally to answer questions and who can create the organisational conditions necessary for successful education and training. As experience from abroad shows, the presence of contact persons in addition to online formats improves completion rates among participants in training programmes and further education measures.

- In order to secure and expand the provision of post-school education in rural areas of Germany, it is advisable to ...

... counteract the geographical hurdles in rural areas by increasing the use of digital resources. As not all learners have sufficient potential for independent learning, there is still a need for locally available personal contact persons so that a combination of distance learning and personal encounters can be created.

→ Creation and appreciation of flexible learning opportunities suitable for everyday life

An important prerequisite for the successful establishment of post-school education programmes in rural areas is that they receive the necessary recognition and that participants in the relevant measures receive the necessary appreciation and support.

To this end, further education programmes that focus on lifelong learning and the associated added value must be given greater prominence, especially among employers. Targeted cooperation between companies and educational providers can be important here.

Flexible training and education programmes enable people with family and work commitments to access further education close to home – or even at home. Modular training blocks play a special role here, enabling participants to continue earning their living at the same time as pursuing further education. The length of the programme can then be linked to the completion of modules rather than to the period spent learning. Further training and adjustments in personal career paths could thus be made possible for a growing number of people, without them having to move and despite them having full-time employment and families, while employers would also benefit from having well-trained staff. Experience from abroad has shown that in particular rural regions facing strong structural change can expect their resilience to be strengthened by the targeted propagation and promotion of post-school education programmes. This requires not least the interlinking of different educational contents and a more interdisciplinary orientation of the programmes in order to meet the increasingly complex challenges that society and the economy have to deal with.

- In order to secure and expand the provision of post-school education in rural areas of Germany, it is advisable to...

... establish a permeable and flexible educational structure that can adapt to the diverse everyday situations of learners. Crosscutting learning programmes enable the interlinking and interdisciplinarity of knowledge, which is particularly needed in rural areas.

Medical services and care

→ Closing existing or expected supply gaps

Rural areas are particularly affected by demographic change, i.e. the ageing of society and a simultaneous exodus of young people. This problem poses a particular challenge for structurally weak and sparsely populated areas in a difficult financial situation. The main requirement for ensuring the provision of health services and care is the efficient utilisation of resources. Innovative approaches and technologies support solutions to the problems described above. An important requirement here is to develop new services in such a way that they do not create competition with existing and established services. This requires skilled coordination and foresight.

- In order to secure and expand the provision of medical services and care in rural areas of Germany, it is advisable to...

... endeavour to create new concepts and products, or further develop existing ones, to close current or expected supply gaps. The creation of parallel offerings to already established, financially viable solutions and products should be avoided.

→ Use of e-health approaches such as telemedicine and telemonitoring

Rural areas often have a less dense network of medical infrastructure. For this reason, e-health solutions in the form of various applications and products have great innovative potential to improve services and care. Digital tools enable closer contact between patients and carers without physical distance being an obstacle. The temporal dimension can also be bridged as waiting times can be better coordinated and spent in the patient's own home – the service and comfort of patients can be improved and an increase in efficiency achieved. This can involve patients initiating contact, but it can also offer carers the possibility of monitoring and supervision. Hospital stays can thus be significantly reduced, enabling the elderly population in particular to spend as much time as possible in their own four walls. In addition to cost savings, the quality of care can be increased while resources are utilised more efficiently.

- In order to secure and expand the provision of medical services and care in rural areas of Germany, it is advisable to...

... introduce, apply and establish innovative solutions and products in the field of e-health such as telemedicine and telemonitoring. By breaking away from fixed locations and bridging distances, it is possible to increase the efficiency and cost-effectiveness of services.

Mountain village (Austria)

Advertising for the volunteer fire department (Germany)

→ Promoting inter-professional collaboration and integrated services

Inter-professional cooperation promotes and strives to eliminate the separation of the medical and care sectors by means of innovative solutions. The focus here is on cooperation between different professions and private stakeholders such as the relatives of the person who is ill or in need of care. By linking counselling and coordination for people in need of care who still live at home, gaps in care and support can be bridged and integrated care services can be created. Optimised cooperation and care can be created through the interaction and cooperation of service-users, family members, volunteers, care services, doctors and hospitals. Active exchange generates added value that benefits everyone involved.

- In order to secure and expand the provision of medical services and care in rural areas of Germany, it is advisable to…

… prioritise innovative solutions and products that aim to use and promote inter-professional collaboration and knowledge exchange. Bridging the divide between the medical and care sectors helps to ensure integrated services.

→ Actively pursue education, training and participation

In addition to the training of specialists, the provision of further training opportunities plays a central role in enabling staff to adapt to changing circumstances and to continue to guarantee and even improve medical services in rural areas. Innovative and, above all, low-threshold approaches that also involve service-users and their relatives or volunteers are of great importance. In particular, including e-health services enables improved care with a more efficient use of resources, the provision of knowledge about applying for benefits and care services, and improved recognition of additional resources and deficits.

- In order to secure and expand the provision of medical services and care in rural areas of Germany, it is advisable to…

… offer people career prospects through high-quality and lucrative training and further education opportunities. At the same time, gaps in staffing can be closed by recruiting skilled workers. Volunteers deserve greater appreciation through the expansion of appropriate support services.

Fire services and hazard prevention

→ Volunteers need full-time staff

In regions affected by the shrinking and ageing of the population, where there has long been a shortage of active firefighters and, in particular, a shortage of qualified volunteer firefighters, or where such a shortage is to be expected, the establishment of a full-time regional coordination centre at supra-local level (e.g. county) should be considered. This would allow volunteers to concentrate more on tasks related to fire services in the narrower sense. Training and further education, equipment maintenance and procurement measures could also be carried out more efficiently and a continuous exchange between the local fire brigades on current problems and solutions could be established.

- In order to secure the provision of fire services and hazard prevention in rural areas of Germany in the long term, it is advisable to …

… provide volunteers with more full-time support at regional level for coordination, administration and routine tasks in order to relieve the burden on volunteers in local and municipal fire departments.

→ Improving the ability of the public to protect themselves

Fire safety education is one of many everyday tasks of the fire services, which in rural areas is predominantly undertaken by volunteers. Despite frequently being carried out with a great deal of individual commitment, overall fire safety education tends to be unsystematic and based on the personal preferences and teaching skills of the volunteers. Improved coordination and systematisation of fire safety education requires cooperation between the fire services and hazard prevention departments and education departments across sectors and levels. To date, fire safety education has focused on kindergarten and primary school children, although professional materials are available that can be used in various school subjects for older children and young people. Finally, fire safety education for adults should also be expanded in order to improve the public's ability to protect themselves.

- In order to secure the provision of fire services in rural areas of Germany in the long term, it is advisable to…

… improve the public's ability to protect themselves across all age groups in cooperation with all permanent organisations and authorities.

→ Greater visibility of interest groups

The state fire service associations could take on a leading role, or at least a more active one, in the formulation and coordination of strategies to secure the future of volunteer fire services. Of course, the implementation of such strategies must not impose top-down solutions and should only take place in constant consultation with the local fire departments. At the same time, as the main lobby group alongside the German Fire Service Association, the state fire service associations should start to insistently sensitise politicians, the media and the public to the challenges of volunteering in civil protection and the problems of securing the future of the volunteer fire service in Germany.

- In order to secure the provision of fire services and hazard prevention in rural areas of Germany in the long term, it is advisable to …

… encourage the state fire service associations to take on a more active and more visible role in representing the interests of volunteer fire departments.

Further information

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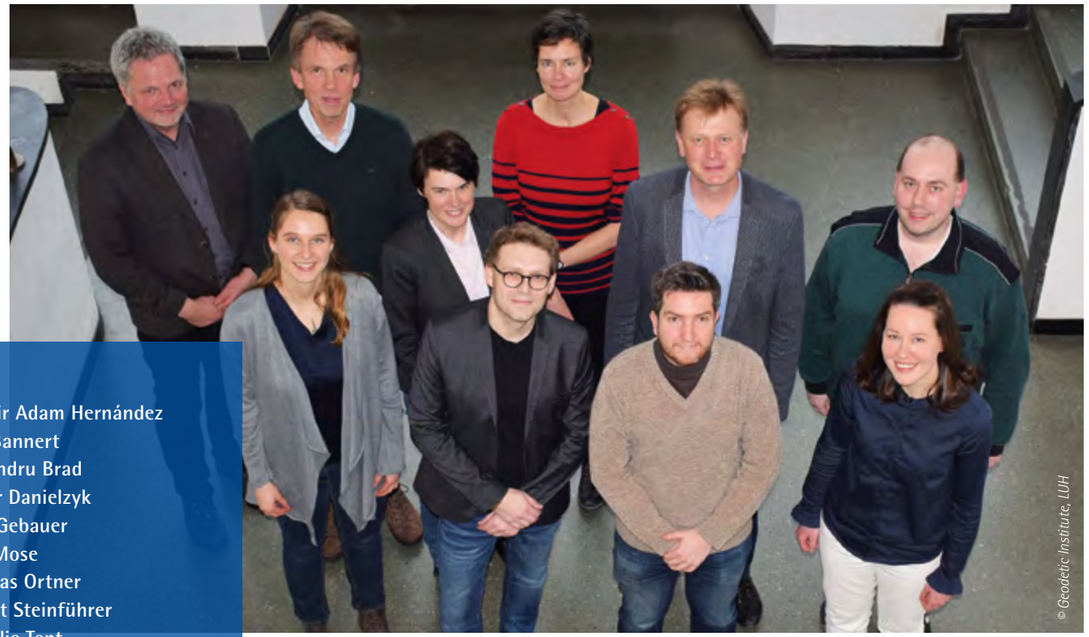

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