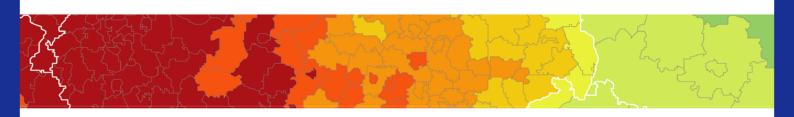


Inspire policy making by territorial evidence



PROFECY – Processes, Features and Cycles of Inner Peripheries in Europe

(Inner Peripheries: National territories facing challenges of access to basic services of general interest)

Applied Research

Final Report

Annex 10
Case Study Report.
Wolfsberg (Austria)

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PROFECY – Processes, Features and Cycles of Inner Peripheries in Europe

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Abbreviations

CLLD Community-led Local Development

EC European Commission

EFRD European Fund for Regional Development
EGTC European Grouping of Territorial Cooperation

ESF European Social Fund

ESPON European Territorial Observatory Network

EU European Union

EUSALP EU Strategy for the Alpine Region ('Macroregional Strategy')

GDP Gross Domestic Product GP General Practitioner

ICT Information and Communication Technology

IP Inner Periphery

LAU Local Administrative Unit

LEADER Liaison Entre Actions de Développement de l'Économique Rurale

LDS Local Development Strategy

NUTS Nomenclature of Territorial Units for Statistics ÖIR Österreichisches Institut für Raumplanung ÖROK Österreichische Raumordnungskonferenz

R&D Research and Development SGI Services of General Interest

SME Small and Medium-Sized Enterprises

TEP Territorial Employment Pact
UMZ Urbanized Metropolitan Zone
VLW Verein Lavanttaler Wirtschaft

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Executive Summary

The case study area Wolfsberg in the province of Carinthia is an area situated between the Carinthian centre Klagenfurt and the Styrian centre Graz. Accessibility of the region was very difficult for a long time due the remoteness of the area being surrounded by mountain ranges and limited access by different transport facilities. Nevertheless natural resources and coal industry led to the emergence of a substantial industrial development (metal processing, pulp industry) which translated also in a considerable share of employment in the industry sector.

The region benefitted from infrastructure improvement (in highway connection) and linkage to other spaces and recently showed quite satisfying economic performance indicators. In terms of defining Inner Peripheries it is therefore only addressed by population decline indicators and difficulties of service provision for parts of the region. A differentiation of the area is therefore highly needed if problem patterns are to be analysed in a coherent and comprehensive manner. Remoteness is hence experienced at the edges of the case study area, but to a much lower degree in the central parts of the region.

Classification of the region as Inner Periphery is also difficult as the case study is located within a larger space of low performing regions in southern Austria, and thus comparison with the neighbouring regions hardly results in negative indicators.

The main triggers for regional development are seen in the negative demographic development (with serious consequences for diverse social aspects and economic issues of the region), a spatial concentration process of services, trade and settlements (making the provision of SGIs for specific groups of society and areas at the edge of the case study more difficult), an increased relevance of knowledge development and networking (which is felt as a pressure for high-quality education and skills development, but at the same time losses of skilled workers for the region) and an enhanced awareness for increased planning tools and control mechanism for regional development.

The scenario tool underpins the high importance of demographic development for regional actors and its crucial relevance for future regional development. Drivers of "hard" infrastructure development (improvement of transport network) and education is acknowledged, but complex inter-linkages of regional systems are only sketched roughly.

The appreciation of regional amenities encompasses increasingly its natural resources and landscape features as a core asset, but so far is hardly making use of that potential. The main reason for the lack in adapting the regional activities towards such needs can be seen in limited interaction (although awareness for the requirement to increase linkages and knowledge development is growing) with actors and institutions from other regions, and a lack of regional cooperation in order to elaborate a comprehensive regional development strategy.

1 Introduction of the case study background

1.1 General information and location in European Space

The Austrian Case Study Wolfsberg is one of the 99 political districts of Austria (district number 209). It is located in the southern part of Austria, in the province of Carinthia (NUTS-2 level: AT21) and is part of the NUTS-3 region Unterkärnten (AT213). According to the urban-rural typology the NUTS-3 region Unterkärnten is classified as preliminary rural, close to a city, due to the accessibility of nearby cities of Graz (in Styria) and Klagenfurt (in Carinthia) for large portions of the regional population. In addition to the district of Wolfsberg the NUTS-3 region Unterkärnten covers also the district of Völkermarkt and the district of St. Veit an der Glan. The total area of the NUTS-3 region Unterkärnten is 3,376 sq km, thereof more than one third is covered by the district of Wolfsberg (974 sq km). The district of Wolfsberg has a population of 53,400 inhabitants (2016) with almost half of it living in the main city of Wolfsberg (25,000).

The district of Wolfsberg, or the "Lavanttal" as it is called by the inhabitants is a broad valley spreading out its settlements on the hills of the surrounding mountain ridges. The river Lavant is flowing through the valley having its source in the North and heading in a north-south direction towards the river Drau at the border with Slovenia. Lavanttal borders to the Carinthian districts Völkermarkt and St. Veit an der Glan in the West, to the Styrian districts Murtal, Voitsberg and Deutschlandsberg in the North-East, and to Slovenia in the South (see Map 1.1).

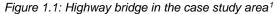
The valley is surrounded by the South-East Alps, Packalpe and Seetaler Alpen in the northern part where it is more narrow and woods industries prevail, and Koralpe and Saualpe in the southern part where the valley is much broader, including a small relatively flat area. The highest mountain peaks are Großer Speikkogel with 2,140 m above sea level (Koralpe) and Ameringkogel with 2,187 m above sea level (Packalpe). Because of the mountains surrounding the region, Lavanttal has long been a rather isolated economically lagging area with certain parts in the south hard to reach until the middle of the last century. The socio-economic development of Lavanttal has therefore always been closely connected to road and railway connections and large infrastructure undertakings due to its specific topography. The long-established railway connection running through the valley form north to south, from Zeltweg (Styria) to the city of Wolfsberg and Lavamünd, is now mostly used for the transportation of goods (most important for a large cellulose industry) and fails to connect the main current agglomerations of the case study area.

Wolfsberg: Location of case study area Knittelfeld Graz Köflach Voitsberg Reichenfels Sankt Leonhard Preitenegg im Lavanttal Frantschach-Sankt Gertraud Deutschlandsberg Wolfsberg Wolfsberg Sankt Georgen Sankt Andrä im Lavanttal Sankt Veit an der Glan Sankt Paul im Lavanttal Lavamünd Völkermarkt Klagenfurt am Wörthersee Slovenj Gradec © ESPON, 2017 Local level: LAU2 Wolfsberg case study area Source: ESPON PROFECY Origin of data: TCP International/BABF, 2017; LAU-2 units RRG GIS Database, 2017 **NUTS-3 regions** CC - UMS RIATE for administrative boundaries Country boundary

Map 1.1: Geographical location of the case study area in regional and national scale

A milestone in the connection of the region with important agglomerations in the East and West has been the building of the Austrian highway number 2. The highway linking the national capital Vienna with Northern Italy via the main cities Graz and Klagenfurt crosses the region of Lavanttal and thus establishes enhanced accessibility towards these destinations. There are three highway exits in the case study region enabling to reach the next centres in less than an hour (Klagenfurt in about 40 minutes, and Graz in about one hour). The construction of this highway was a particular priority in Austria's transport system as it links areas that were not well accessible before. While the Lavanttal got access to the highway in 1986, the full function of the whole route was only achieved when in 1999 the last part of it (between Völkermarkt and Klagenfurt) could be opened. Moreover, there were limitations in transport volume due to partly

reduction on one line so that a major improvement in 2007 when the second major bridgee through the valley was built meant the full functionality of the highway.

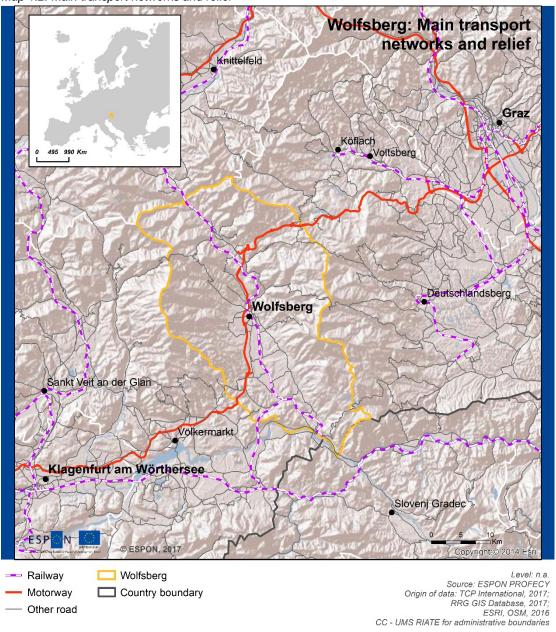




The building of the highway through Lavanttal led to an important change in the perception of the region's socio-economic development, formerly viewed as a lagging region towards understanding the region as a place with various economic opportunities. This shift and the current more positive perception has been mentioned in many expert interviews.

Presently the main infrastructure project is the building of a high-speed railway connection, linking the cities of Graz and Klagenfurt through a completely new railway construction involving in particular the construction of a long tunnel through the Koralm ('Koralmtunnel'). The new railway connection will link the region through a station in its southern part (in St. Paul in Lavanttal) with these two main destinations. It shall be finished in 2023 and will result in far shorter train travel times. Thus, another large infrastructure project will shape the future of the region, a development which is perceived as tremendous opportunity but also as including considerable threats to the development of the region (see chapter 2.5).

Map 1.2: Main transport networks and relief



The case study Lavanttal cäonsists of nine municipalities, some of them covering really large areas. The largest municipality is the main city Wolfsberg, which has an extension of 279 sq km, the smallest St. Paul in Lavanttal with 47 sq km. Through a wave of amalgamation of the municipalities in the 1970ies the current administrative structure of Lavanttal evolved from the previous 32 municipalities. With regard to the analysis of small-scale differentiation and implications for processes of "Inner Peripheries" it seems important to underpin that the presently existing nine municipalities include numerous small localities in the more peripheral parts.

1.2 IP delineation outcomes

Constituting a space between two major agglomerations (in Styria and Carinthia) historically Lavanttal has experienced important features and periods of peripheral situation and processes. Although presently it may not emerge in its total area as a typically, and highly affected inner periphery zone, according to average accessibility and depletion data used in the four types of delineation, these characteristics are relevant in many parts of the case study area. It can therefore rather be described as an area which is continually in risk of becoming an inner periphery and hence provides an instructive example to describe processes of peripheralization and strategies to overcome those threats. The most obvious issue with regard of areas being at risk is the decline in population within the last decades, starting (at least) since the 1970ies until now. Though, this negative population development is not visible in the result of the revised calculation of Delineation 4², which defines an Inner Periphery in demographic development according to a standardized population density below 50% of neighbouring regions and negative mean annual change rates in time period 2000-2015 the regional problems and negative processes at the case study level were captured in the previous project analyses^a. The former delineation criteria were set at a standardized population density below 75% of the average of the neighbouring regions, which, also due to missing economic data at this point, was our basis for the selection of the case study within this type of delineation. As further analysis will reveal demographic change including outmigration, ageing and commuting is a severe threat the region has to deal with.

As regards delineation 3 that classifies areas of poor access to SGIs, the region of Lavanttal is also not classified as "Inner Periphery" area according to the final definition³. It thus would look like the area is well provided with all types of SGIs (banks, cinemas, doctors, hospitals, pharmacies, schools, retail and train stations). Although the deficiencies measurable through statistical data at the NUTS-3 level might be low and don't lead to an inclusion as IP area according to the selected definition, there are a number of important indications of risks and low provision of SGIs if one takes a closer look. To begin with, in delineation 3 the average overlay share of all raster cells which were identified as inner peripheries with NUTS-3 region boundaries is about 22% for all types of SGIs, with the highest overlay share of poor access to banks (25%), hospitals and primary schools (24%) and the lowest overlay share for poor access to Urbanized Metropolitan Zones UMZ (18%). As the threshold is set at 30% the region is not classified as IP, though about one quarter of the population has a poor access to almost all of the selected SGIs (see for more details on the internal disparities, chapter 2.3).

Furthermore, when analyzing data comparatively with regard to shares of SGI per sqkm and per capita it shows that there are only few NUTS-3 regions in Austria which have lower shares

^a It could be noted that those analysis underscored the selection of the case study indicating the long-lasting negative demographic trends, in comparison to its neighbouring regions. At the same time, the changes in the delineation result also underscore the dynamic aspect of the regional situation and spatial processes, in general.

per sqkm and per capita in the provision of SGIs like doctors, hospitals, retail and schools than in our case study. Particularly with regard to doctors the NUTS-3 region Unterkärnten has the lowest share of doctors per head and per sqkm in Austria. This leads to the conclusion that a large share of inhabitants of the region (already) live near to a local centre with low travel time to the next chosen SGI while for the others who live in more remote parts of the region, the accessibility is not as good (see also chapter 2.3). The high rates of outmigration, particularly from the less accessible municipalities of the area within the last decades support this assessment. Furthermore available data of SGIs highlight that in particular the availability of doctors in the region is in general low. This is confirmed by the experts who complain about long waiting periods for medical treatment and difficulties to get an appointment.

Because of the highway and therefore the good connection to the relevant neighbouring agglomerations, plus a fine-meshed net of municipality roads (though often in bad shape as interviewees emphasize), it is possible to reach the internal regional centres (city of Wolfsberg and St. Andrä) in due time and accessibility by car seems to be no issue in the region. On the other hand public transportation is in very bad shape at present with long driving hours to the main agglomerations Graz and Klagenfurt and almost a complete lack of connections for many spatial relations within the region. The "old" railway track through Lavanttal (single-track and non-electrified) has been reduced to goods transportation for the larger part of the route and the now complementary buses are concentrated on transportation of pupils. This leaves the inhabitants completely dependent on car mobility and population groups without individual transportation means (particularly elderly people, young people) are increasingly dependent on support by individual transportation opportunities of friends, relatives etc.

However, the highspeed railway connection under construction ('Koralmbahn') will be finalized in 2023 and this is highlighted widely and endorsed, but also debated in expert interviews. As a consequence of the high-speed station in the region a further linkage to other areas of the case study was sought. Finally, this led to the improvement of the old railway route from Wolfsberg to St. Paul in Lavanttal through electrification (which is currently underway). It thus will link the future station of the highspeed railway with the regional centre Wolfsberg. However, these developments and adaptations cannot solve the main inner regional connectivity problems of public transport, an issue which is currently also dealt with in some activities of the LEADER programme.

Although the train connection to the main agglomerations will become much better through this infrastructure investment in about six years time the fast connection may turn out to be also a severe challenge for the future prosperity of the region (see chapter 2.5).

1.3 Basic socio-economic characteristic

As characterized above, the region is a highly typical area of Austria with large shares of mountain areas, a diversified settlements structure that includes both a small town as its center and various other municipalities characteristic of rural features of many parts of Austria. With a population number of 53,400 inhabitants the case study Wolfsberg has an average population density of 55.2 inhabitants/sq km which is a level quite similar to the type of low-density rural areas in Austria. This appearance is supported by a small number of settlements with a higher population number in the case study, and a particularly large share of scattered settlement along the slopes of the mountains of the area surrounding the two sides of the central valley along the small river Lavant (which gives the historical name to the area 'Lavanttal').

While the population development of the case study was positive, at least from the 19th century until the 1960s (see detailed presentation in 2.1), since then a negative trend of population development is observed. In particular over the last decade population decline was significant with about 6.5% at the case study level which depicts a much worse development than for the whole region of Carinthia or the national situation of Austria. (Table 1.1) The negative trend of demographic development hits younger age groups much more than other age groups so that they are more likely to leave the small-scaled area of the case study and also the NUTS3 region Unterkärnten for eduational and employment reasons (which is supported by statements of experts in the interviews). Due to regression trends in natural demographic development and negative migration tendencies (see also Table 1.2) the district, as well as the larger region have to face considerable ageing. The gender composition points towards a slightly higher share of the male population compared to whole Austria.

Table 1.1: Basic demographic characteristics of the Wolfsberg district

Indicators ⁴	Wolfsberg district	Unter-kärnten (NUTS3)	Carinthia (NUTS2)	Austria
Population density (2013) - per km ²	55	45	58	101
Total population (2013) – inhabitants	53,707	151,440	555,473	8,451,860
Population development (1999-2013) - %	-6.5	-6.2	-1.5	5.9
Population development age 18-30 (2002-2013) - %	-16.8	-15.7	-7.5	6.1
Old age dependency ratio (2013) - %	31.9	31.7	31.7	28.1
Gender imbalance (2013) - female/male %	0.978	0.959	0.943	0.953

The negative population trend which is the most striking challenge mentioned by the experts is mainly due to the on-going high negative migration balance and an outstanding shift from a significantly positive towards a negative natural balance (Table 1.2). This change was mainly

brought about by a continuously falling birth rate over the last decades, aligning the situation in these rural areas with the behavior in urban contexts.

Table 1.2: Indicators of population development in case study area and Carinthia (1981-2011)⁵

Indicators of population	Wolfsberg district Carinthia (NUTS 2)		S 2)			
development	absolute	in %	absolute	in %		
Change 1981-1991						
Population change	-134	-0.2	11,619	2.2		
through natural balance	1,858	3.3	9,623	1.8		
through migration balance	-1,992	-3.5	1,996	0.4		
Change 1991-2001						
Population change	308	0.5	11,606	2.1		
through natural balance	1,280	2.3	6,055	1.1		
through migration balance	-972	-1.7	5,551	1.0		
Change 2001-2011						
Population change	-2,587	-4.6	-3,231	-0.6		
through natural balance	-323	-0.6	-6,192	-1.1		
through migration balance	-2,264	-4.0	2,961	0.5		

The negative data of the migration balance of the case study underscores the specific development problems of the area and is particularly interesting as in almost all regions of Austria over the last 15-20 years migration balance became more or less positive due to high immigration from international migrants, which was also the case for the rural areas^{6,7}.

The high out-migration tendency and the limited immigration by foreigners is underscored by the high level of the old age dependency ratio (attaining the high value of 31.9% in 2013) and the particularly low share of foreigners (4.2% in 2013) in the case study. Both figures are either above the regional and national averages (for the old age dependency ratio) or significantly below the respective comparison values. Also the share of male population is higher than for the regional and national comparative situations.

In contrast, to the strong outward-orientation of the young population and employed persons (see following Table 1.4) the economic performance and income level within the case study shows average and comparably satisfying levels. GDP is not calculated at the spatial scale of the case study, but nevertheless the data for the province Carinthia (119% of EU-level, 2013) and the NUTS 3 region Unterkärnten of which the case study is the eastern part (95% of EU-level) might be taken as a relevant reference level. The value for the NUTS 3 region Unterkärnten has risen recently indicating the slight improvement in the economic situation of the area. Although that level is above the EU average one has to take into account that the Austrian level is at 142% of the EU-level, thus indicating a positive economic situation.

Table 1.3: Basic socio-economic characteristics of the Wolfsberg district

Indicators ⁴	Wolfsberg district	Unter- kärnten (NUTS3)	Carinthia (NUTS2)	Austria
Unemployment rate (2013) %	5.6	6.4	5.3	5.1
Share of tertiary educated people (2013) - %	15.3	16.3	17.3	20.6
Main economic basis: Share of employees per sector (2013) %				
Agriculture	8.0	7.5	4.8	4.4
Industry, construction	34.7	30.5	23.8	23.7
Services	57.0	61.8	71.1	71.0
Other	0.3	0.2	0.3	0.9

Compared to provincial and national levels there is a high importance of jobs provided by industry and construction as well as by agriculture. The shift towards the service sector is not very pronounced (compared to the whole country) which is also confirmed by the comparably low share of tertiary educated people in the study area.

Many experts in the case study interviews also referred to the relatively good income level in the area and confirmed that for those who are active on a labour market the situation is good. As the commuting figures suggest there is a strong push factor towards other labour markets (and school locations) outside of the region which obviously dispose of a wide scope and attractive job placements for large groups of the population from the study area. Figures for 2015 displayed in the following Tables reveal the negative balance for both job and school commuters to many destinations outside of the area. Moreover, the numbers shown increased over the last years (increase since 2009 for job out- commuters by 7.2%) whereas negative school commuting balance decreased over the same period (by -18.2%).

Table 1.4: Employment commuters from and to the case study area Wolfsberg, 20158

Employment commuters	Out-commuting	Incoming commuters	Commuter balance
Region Völkermarkt	944	936	-8
Klagenfurt-Stadt	1,709	409	-1,300
Styria	1,274	1,050	-224
Vienna	591	207	-384
Rest of commuters	1,294	1,227	-67
Total	5,812	3,829	-1983

Table 1.5: School commuters from and to the case study area Wolfsberg, 2015⁷

School commuters	Out-commuting	Incoming commuters	Commuter balance
Region Völkermarkt	37	283	246
Klagenfurt-Stadt	292	7	-285
Styria	304	46	-258
Vienna	55	0	-55
Rest of commuters	135	11	-126
Total	823	347	-476

The distribution of economic activities measured by the shares of employees per sector shows a very stable pattern for the case study over the last years. While shares for primary sector (about 8%) and secondary sector (about 34%) remained more or less at the same level, these shares show a significant decrease at the average of the province of Carinthia and the national level of Austria as well. There is just a slight decrease of the very high share of industries in recent years, partly also due to several closures of big enterprises in the area (see also media analysis and interviews' comments on "big crashes", insolvencies etc.). These changes are also visible through the absolute figures of employment: A decrease of about 550 persons in the secondary sector, is largely compensated by an increase of about 450 persons in the tertiary sector employment. Some weaknesses in the adaptation process of employment are also due to the low share of tertiary education level in the region leading to a specific segment of jobs and limitations for enterprise development.

2 Characteristics of the case study: Patterns and processes

2.1 The evolution of IP case study region

As a characteristic mountain valley of the Eastern Alps the case study Lavanttal is featuring in large parts of its area difficulties of access, presupposing the area as inner periphery. While pass crossings to the eastern and western neighbouring regions have always been more difficult, a one track diesel railway connection to the north from the city of Wolfsberg to Zeltweg has already been completed in 1900. Additionally, the connection to the south, which was even more important during the Austrian-Hungarian Empire was brought on line in 1879 to Unterdrauburg/Dravograd in Slovenia. But with the end of World War I new borders between Austria and Slovenia were installed and since then the technically outdated north-south connection lost more and more of its importance and is now mostly used for goods transportation.

Cole mining is another feature that characterized the valley for a long time. Brown coal deposits were found in St. Stephan nearby the city of Wolfsberg and since the middle of the 19th century until 1968, when the mining was closed because of a severe accident with five death, the coal mining company of Lavanttal (Lavanttaler Kohlenbergbau Gesellschaft LAKOG) was the most important employer in the region. With the closing of the mining in 1968 over 1,000 workers lost their jobs. Only some of them were able to get a job within the area of the case study (mainly in construction and woods industries), while most of them had to look for a job at the transregional and national level⁹. This massive crisis, which is remembered and documented in a currently shown special local exhibition (June 2017 - April 2018) at the regional museum "Museum im Lavanthaus" in the city of Wolfsberg led to a phase of economic decline and regional restructuring, that took quite a long time. The Austrian regional report of 1995¹⁰ described the economic development of Wolfsberg in 1995 still as a region with many structural challenges. The main features that characterized the economic status were as follows: very low labour productivity, declining population numbers, employment chances significantly below the regional and national averages as well as below average dynamic in economic development, a high level of out-migration, and very high unemployment rates, particularly for women and older people. In the following years, due to that weak economic evidence the region was elegible for national funds for regional development and in 1995 classified as Objective 5b area according to EU structural funds.

With the construction of the highway in 1987 (and its full function in 1999) the economy started to recover, the new transport connection led to an opening of the valley, many (also international acting) companies (with more than 400 employees) were founded and/or extended, particularly in the area of metal processing and construction. In addition to those bigger enterprises also small and medium sized enterprises (with a focus on woods processing) have been established, mainly in the valley floor, where most of the working places are concentrated (over 90% are located in five municipalities Wolfsberg, St. Andrä, Bad St. Leonhard im Lavanttal and Frantschach-St.Gertraud¹²). These developments underpin the

strength of the industrial sector in the region. At the same time the analysis of structural economic patterns, and the statements in the case study interviews, reveal the incumbent weaknesses in the service sector, and particularly in tourism development. Diversification of farming sector is also rather weak and just shows a number of interesting examples. In particular, land management is strongly reliant on forest land use, as the land cover by forest is also very high.

The economic development of the region can also be analysed through analysing the distribution of jobs for different groups of society. In this regard the weak attractiveness for young people is striking and, in a similar way, the low level of the employment rate for women is noticeable. Although some activities to increase women employability in the region are underway, this aspect seems one of the important challenges, and a driver for behaviour of local population that tends to be overlooked in economic analysis.

Changing accessibility through big infrastructures – a solution to regional problems?

With the establishment of the highway and the current construction of the high speed railway the core parts of the region got/will get good access to adjacent regions and/or agglomerations and international transport networks. While these changes are widely endorsed and commented as enabling positive economic development and accessibility for local population to opportunities, there are also concerns and critical views on the implications of big infrastructures for the case study. This assessment was articulated in the strategy development process carried out about 10 years ago, and summarized like this: "In sum the new infrastructure linkage leads to manifold new external relations, facilitates the presence of economic actors on trans-regional markets and enables improved knowledge development and carrier development which could be also associated with contradictory consequences for the region: The higher qualification and skills development of people in the valley is combined with a 'brain-drain' which means the out-migration of highly educated people"6. In the interviews experts claimed that the tendency to migrate towards cities (including Wolfsberg) and largescale labour markets of Graz (and Klagenfurt), might be further fostered by high-speed infrastructure development and linkages of specific nodes. It is argued by interviewees that the high-speed train linkage (in 2023) might have the effect that Wolfsberg turns to a suburb of Graz, especially when large enterprises don't remain in the region and increasingly relocate in the vicinity of agglomerations. However, there is big uncertainty about future enterprise strategies and spatial effects of infrastructure improvements for the region. In particular, this relates both to large-scale effects and also to small-scale differentiation within the case study.

Processes and drivers leading to peripheralization

The case study region has, according to historical developments, experienced significant changes in its spatial positioning and economic performance. Historically, it has been acknowledged as a particularly remote area with weak economic development and gaps of regional development in comparison to more accessible regions. The situation has changed

substantially so that many local actors and stakeholders, but also observers and analysts don't speak any more of a "less-favoured" area but increasingly outline a picture of a renewed and thriving region which aims at accommodating to the new challenges of society and socio-economic development. Mossböck et al. 11 reason about the altered perception of the region and underpin the core relevance of trans-regional linkages and knowledge creation by referring to the concept of smart specialization as a guiding principle for regional development. This concept is also at the basis of the current Local Development Strategy for regional support programmes like the LEADER programme 12. Presenting the region as "smart region" is a clear indication for the objective where this programme and the conceptual visions should lead to.

Peripheralization processes are yet a continuous thread and widely seen as relevant in different spatial parts of the region. While a host of drivers are acknowledged as main influences for these processes, demographic development presents the most obvious indicator for the negative regional trends leading to increasing relevance of peripheralization⁶. In the case study demographic change is largely based on the long-term dependence of labour market integration of young people, and on trans-regional influences by accessible neighbouring and other national agglomerations disposing of employment opportunities for skilled workers. Over the last decades the negative population development has been influenced by migration movements which tend to show increasingly effects as natural balance of population development (births minus deaths) is less and less providing a positive result. Migration balance is particularly shaped by internal and national migration with a considerable surplus of outmigration in most rural regions⁵. However, since about 2-3 decades migration in rural regions is largely equalized through high rates of international in-migration, leading to a balance in inand out-migration, and in many rural regions even to a positive total migration balance. This implies that population development is largely affected by this shift in (large-scale) movements that appeared, however, almost unrecognized as they involve a continuous influx and steady increase of foreign population in rural regions. Through a more in-depth analysis of the migration movements it can be discerned that young people are a particularly strong group of migrants, in all directions. Internationally it has been revealed that female outmigration is in many rural regions preceding male migration movements in terms of the age of migrants 13. In a national study on age-dependent migration involvement the analysis of regional migration patterns by sex and age revealed that in most Austrian rural regions female out-migration is starting particularly early, thus indicating that school migration of female population seems to be more widespread than male migration for that age group (15-19) in rural areas¹⁴. For the case study this means for example that female out-migration for the age group of 15-19 years is 44% higher than for the male population of the same age group (for the period 2005-2015), but only 13% higher for the group of 20-24 years. For the group of 25-29 years the out-migration level between male and female population is almost the same. We have to recognize that also the in-migration flows are considerably larger for women and thus have a minor concluding effect for gender disparities (in this region). At the general level of age structure development, the strong incidence of young people's out-migration leads to an increase of old age groups in

the society of the case study, a problem which is widely mentioned by the interviewees as a main factor for regional problems, contributing significantly to peripheralization processes. Moreover, what we have to acknowledge for the case study is a very limited international immigration level, substantially below other comparable rural regions, which indicates the low attractiveness and/or openness of the region to migrants and new cultural influences. As could be shown in the analysis of commuters (in chapter 1.3 above) the mismatch between aspirations and skills of (young) people and local employment opportunities and development, and the perception of living conditions in the region contribute to this unfavourable population development. Despite the (still) rather positive economic performance of the large enterprises this reflects the threats of peripheralization, and contributes to the image of the region as an area-at-risk of peripheralization.

In the interviews common aspects on further issues impacting on peripheralization were addressed, particularly for the following issues:

- There is a considerable concentration of industrial activities on one sector (coal production) which is based on the historical structural pattern of industry production in the region. This has been developed and evolved towards a focus on metal processing. As jobs are concentrated on several big enterprises the regional labour market tends to be dependent from the fate of this private industries and mono-structural features bear a significative threat for future development. At least, the need for knowledge development and interlinkages and adaptation to current technological facilities is very high, and developments must not be overlooked. However, media analysis (and also interview statements) document discussion on economic development is largely shaped by repeated enterprise crises, insolvencies and failures, creating at times job losses and adaptation requirements.
- The structure of enterprises and jobs also strengthens traditional perceptions and images of jobs, in particular with regard to job distribution and involvement by sex. Female employment rates are rather low and hardly catch up. The problematique is less visible for interviewees who are hardly aware of these shortages, but some of them clearly address this as a major impact on peripheralization or increasing risk for the future of the region.
- A further aspect is related to the spatial internal structure of the region. With its concentration on a small central area (of economic, socio-cultural and settlement development) that is surrounded by wide-spread area of sparsely populated mountainous settlements the remote parts of the case study heavily experience all the features of hardly accessible areas. There is thus an internal division of the region observed, and highlighted in most of the expert interviews. In particular, this is aggravated by the almost completely reliance on individual transport systems as opposed to the "remainders" of public transport facilities. Discussion on closure of public transport (particularly in recent times of bus routes) adds to the main topic of

infrastructural changes through the future high-speed train connection. Peripheralization is felt particularly by social groups that are dependent on public transport, like old people and young people as well as other people with no appropriate access to individual transport facility.

- A further concern is with the development of knowledge infrastructure and related skills development of local population and how these match with enterprise needs. There is a disconnect seen between high-level education and knowledge provision oriented at (theoretical) knowledge advances and a lack of skills of craftmanship. Some argue that a focus on handicraft skills in the education of young people might be a useful strategy to boost regional development and particularly address the specific assets and opportunities of the region. However, there is no consensus on this strategy or alternative pathways, including particularly the role of high-level education (and lack of a university-type institution in the region), the need to trans-regional interlinkages and knowledge exchange and the openness to newcomers and the discussion of "new" innovative ideas. In particular, the role of women labour and aspects how to increase regional attractiveness and well-being factors is underestimated. At large, the threats of out-migration are translated into the concept of "brain-drain" exposed as a negative feature which is hardly opposed by strategic action.
- At a more abstract level, the region is characterized (according to many statements in the expert interviews) by "lone fighters" who are important and effective at the initial stage. However, often their role is seen as discouraging other interested persons from becoming active. As this is a very contested aspect, assessment is rather controverse. All in all, it is approved that strategic planning gains in importance and is a high-ranking issue for overcoming threats of peripheralization. In the discussion the various attempts of strategy development, loss of 'momentum' and overlaps and contradictions in approaches were highlighted. The regional perspective and a development approach focusing on the regional needs becomes increasingly important as the constructuion of the high-speed railway and the shifts in linkages to surrounding centres will impact on the regional position, opportunities and relative chances.

Peripheralization processes are sometimes seen at a remote distance by regional actors, but very much linked to the changes in the spatial network and relations. Experts are highly aware of internal differences and a lack of internal cooperation, and their impact on individual behaviours and regional performance. Despite the arguments of being a "smart" region and the options of smart specialization processes, the spatial dynamics are central for this region and place a particular weight on internal linkages. Nevertheless, external relations are seen by some strategies and actors as the prime driver, but still have to be appreciated more widely as constructive elements for future regional development.

Type 3 of the Interpretative models:

Areas showing complex negative processes due to low levels of interaction

Following from the assessment of peripheralization processes, it becomes clear that these complex processes of peripheralization cannot be addressed by single indicators. It moreover seems insufficient to conceive Inner Peripheries as the outcome of one of the delineations or one of the major impacting structure. As the discussion focuses strongly on accessibility and large-scale infrastructure development, the linkage of the region to neighbouring agglomerations might be interpreted as a solution to overcome peripheralization processes. Connectivity through "hard" infrastructures like highways and high-speed train accessibility might not be sufficient and has to be discussed in its consequences for the region.

Due to the ongoing negative population development processes in large parts of the case study the positive implications of further infrastructure improvements are contested. It seems essential how accessibility is shaped and used for the local people, in all parts of the case study. It means also that local population has to achieve an awareness of the regional opportunities and the value added of infrastructures and linkages in order to nurture their specific development potential.

Creative approaches and inter-linkages within the region and towards other places is greatly needed. The still restricted level of interaction might be one of the main challenges for the future. Cooperation in the region and between different local and regional actors is therefore crucial when approaches for overcoming peripheralization processes are looked for.

2.2 The case study against the region, country and Europe

Compared to the national averages the district of Wolfsberg is still considerably lacking behind population and economic development across Austria.

However, analysis of regional and national newspaper archives (see Annex 7) shows that the region is not largely exposed to general discussion of its development and hardly addressed as a nation-wide area of concern. Overall impression is that challenges and specific problems are reiterated from time to time and are a recurrent pattern of media reports. These refer particularly to themes that were also highlighted in the interviews like large-scale infrastructure development, the historical development of the region as a mining area, its perception as a remote and cut-off area from other parts of Austria, the situation, extension and difficulties and failures of big enterprises in the region, demographic concerns about out-migration, loss of young people and lack of appropriate skill matches for local enterprises, and a few number of reports on specific local assets, natural resources and positive examples of quality development (largely linked to marketing of high-quality food produce). Due to the focus of the analysis in detecting problems and issues that present the region as a peripheral area, the context of article presentation is overwhelmingly negative (or neutral), but some examples show specific initiatives and good practice how to overcome deficiencies. Authors who are mainly (local) journalists are reporting form a very positive perspective on the development of the region, and

the few reports from outside are more interested on the demographic challenges and perceive the case study as a lagging area. The emerging picture is not very often taken up to the national level and the region remains a part of Austria that needs "connection" (which has been achieved by large-scale infrastructure) and "integration" to other economic areas and activities of the country. It indicates a potential which is based on large enterprises and a need to enhance landscape and natural resource development which is so far somehow neglected in the strategic approach.

With regard to demographic development indicators show a downward trend in the region heading towards a concentration of population in the main regional centre in the valley floor while remoter parts of the region suffer from severe outmigration, loss of young people, overageing and trends of land abandonment. While the municipalities of Wolfsberg and St. Andrä in the cental valley have a population density of 90 inhabitants per sqkm, the more remote municipalities range between 40 inhabitants per sqkm (Bad St. Leonhard) and Preitenegg with only 14 inhabitants per sqkm. Considering the size of the main municipality Wolfsberg it is important to take account that most of the inhabitants are residing in the central parts of the valley, which means that the spatial concentration of inhabitants is even more pronounced.

With a negative population development of 5% from 2002-2013 in the case study area and a population development of the young-age group of minus 17% (while the old-age dependency ratio increased from to 26% to 32% over the same period), the region shows an opposite development trend compared to the Austrian average (5% general population growth and 6% increase of population aged 18-30 years in the same time period, see Annex 2, Table 1b). The following Figure 2.1 shows the population development of the case study (district Wolfsberg) starting from 2002 (Index 2002=100) up to 2015 and compares this regional population trend with trends of the province of Carinthia and of Austria.

Wolfsberg: Population density (2013) per sqkm in the case study area Knittelfeld Graz Köflach Voitsberg 500 1.000 Km Deutschlandsberg **Wolfsberg** Sankt Veit an der Glan Völkermarkt Klagenfurt am Wörthersee Slovenj Gradec ESP N © ESPON, 2017 Local level: LAU-2 units Source: ESPON PROFECY Origin of data: TCP International/BABF, 2017; RRG GIS Database, 2017 CC - UMS RIATE for administrative boundaries Wolfsberg Population density 0 - 15 Country boundary 16 - 30 NUTS-3 regions 31 - 50 51 - 75 **76 - 100**

Map 2.1: Population density in municipalities of case study area

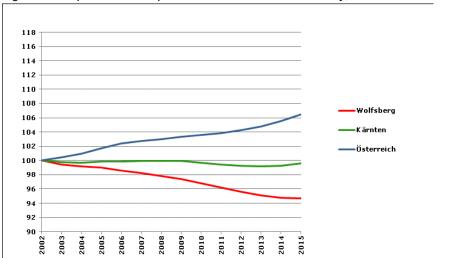


Figure 2.1: Population development 2002-2015 in the case study, Carinthia and Austria¹⁵

Most local experts are well aware of this demographic challenge, and almost all of them mentioned outmigration as a particular feature and threat to regional development, particularly indicating the strong push and pull factors for younger people to leave the region and the resulting increase of the share of old age groups in the case study ('ageing') as one of the most crucial problems in the region. "Young faces are missing in the region" is a conclusive statement by one of the interviewed experts (expert 9) who explained this assessment by referring to the lack of (well paid) jobs in general and particularly missing appropriately attractive jobs for people with higher qualification and skills which leads to outmigration. Hence important skills and capacities are lost for the region ('brain drain') and reduce the development potential of future socio-economic activities.

The economic development measured in GDP per head shows also weak performance and a level far below the Austrian average. GDP per head in the NUTS-3 region Unterkärnten is about 71% of the Austrian value (in 2013) with an increase of GDP per head of 3.2% from 2011-2013 (Carinthia 1.8% and Austria 4.6%)¹⁴. Compared to the neighbouring NUTS-3 regions Oberkärnten (67% of the Austrian GDP per head average) and West- und Südsteiermark (68% of the Austrian average) Unterkärnten shows a slightly better development (which is one of the factors leading to the low score of features attributing Inner Peripheries characteristics for the complete area in the delineation process). Although the first impression of the general economic development is not very convincing, the regional development is more favourable with regard to unemployment showing a general rate of unemployment of 5.6% for the case study compared to 7.9% in Carinthia and 6.9% in Austria (2013) (Table Ib). Youth unemployment is also better off (9.6%), particularly compared to Carinthia (11.4%). Compared to the general economic development of the Land of Carinthia a genuinely positive assessment of the economic situation in the region of Wolfsberg prevails. Having an over-average share of employees in the manufacturing sector (see Annex 2), almost half of the employees work in the manufacturing branches of fabricated metal products (except machinery and equipment) and of mechanical engineering¹⁰, both areas with an over-average income level. Experts often

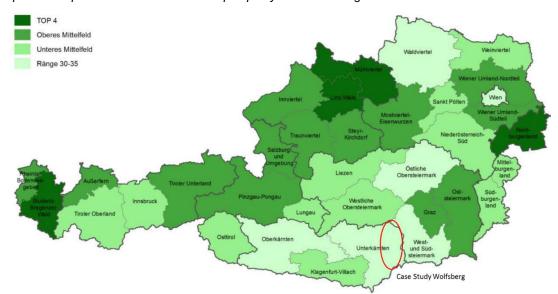
mentioned the good position of the region with regards to the construction branch, metal industry and other industries (e.g. the cellulose company Mondi is located in the region with its production site in Frantschach since 2004, being based on a former production site of a regional packaging manufacturer since 1894¹⁶). They perceive Wolfsberg as prosperous valley compared to other Carinthian regions (in the last years), particularly with regard to the development of jobs and average income (as described in the regional part of the "Kleine Zeitung" from the 4th of April 2017). Many interview partners also stressed this positive development trend over recent years, including for instance the following assessment: "There is a good (economic) development in the past few years, with high wages compared to other regions in Carinthia, but it will be difficult to maintain this standard in the next years, because there are considerable problems in setting up new businesses and the inter-communal cooperation in relation to economy is missing" (expert 14). With regard to tourism there seemed to be a less positive view on the regional achievements and neighbouring regions are mentioned as far more successful in making their regional amenities visible to and attractive for tourists.

Despite this largely positive assessment of most of the experts on the regional economy the study preparing the development strategy of Lavanttal¹¹ lists the lack of job offers as a main weakness of the region: It repeats many of the factors that lead to peripheralization and threatening future economic development, like concentration on one sector, few additional job opportunities in divergent economic branches, few employment opportunities for people with higher qualification, and at the same time decreasing number of job offers for people without basic qualification (closure of two important manufacturing businesses; i.e. the enterprises Gallus and Lebeck, as explained by the regional labour market office (expert 6).

This valuation and critical views have found their way into the Local Development Strategy of Unterkärnten which is the main source for tracing the discourse on development options in the area, although it is equipped only with minor financial resources. Main weaknesses with regard to economic development are seen in the concentration of Research and Development (R&D) in the agglomeration of Klagenfurt, disadvantages in the labour market for women, in particular through a high share of unutilized human resources potential, but also still traditional views on women labour integration. In addition, there is a lack in places of apprenticeships and internships significantly visible for women. In consequence the general lack of skilled workers cannot be closed which through a deteriorating spiraling-down process adds to negative effects, like: low purchasing power, low variance and variability of enterprises and branch structure in regional economy, and location deficits due to limited and decreasing levels of infrastructure availability in various fields, including transport of goods, but also more modern technology as broadband internet accessibility, and social infrastructures.

With the linkage of several prosperity indicators the profile of the labour markets at NUTS-3 level for regions in Austria have been analysed by the Austrian employment service¹⁴. To achieve a composite indicator of economic prosperity six individual indicators were merged in

order to allow a straightforward assessment of implications on regional prosperity for the Austrian NUTS-3 regions (according to place of residence). The following indicators were included in this calculation: Share of people over 65 years (2015), average disposable net income (2012-2014), share of part time employment (2012-2014), unemployment rate (2013-2015), average number of days with sickness benefit (2013-2015) per employed person (2011-2013), and the share of non-employed people between 25-64 years. According to this analysis the NUTS-3 region Unterkärnten is one of the regions with the lowest ranking (ranking between 30-35) belonging to the group of the regions with least positive overall indicators (see Map 2.2). The neighbouring NUTS-3 regions Oberkärnten and the area Styrian West- und Südsteiermark are also within this lowest ranking region group. The neighbourhood of regions with unfavourable conditions explains at least partly the fact that the case study is not covered by many delineation calculations for inner periphery calculations which are based on the comparison to neighbouring regions.



Map 2.2: Composite indicator of economic prosperity for NUTS 3-regions in Austria¹⁴

In the interviews with the regional experts also a range of additional problems of the region in comparison to other levels in Austria were addressed:

• Brain drain: agglomerations in the neighbourhood (agglomeration of Graz and Klagenfurt) offer (better) educational (applied universities and universities) and job opportunities. No innovation hubs with regard to ICTs and digitalization, and rather reluctant position towards spending money for that purpose (see local journal reference; and IP 6). Few accompanying education opportunities for adults, and the need for an applied university e.g. in the area of metal processing is supported by many interviewees but no action in this direction is taken. As one expert states: "Pupils and students leave the region to get higher education - and they probably won't come back" (expert 7) which leads to a lack of skilled workers in the mid-term.

- Lack of qualified apprentices: "Education and training in schools doesn't match with needs of regional economy. I see a particularly high competition between businesses in local and neighbouring regions in a highly specialised sector" (expert 4). And as the director of the high-school explains, "almost all pupils (of the region) attend high school, even if they are not qualified for higher education, this leads (in many cases) to early school leaving and demotivated young people. Moreover, exactly these young people would be urgently needed for apprenticeship places. Right now, there are mostly young people with special needs who undertake an apprenticeship. Thus the educational system and individual behavior don't match with (traditional) economic needs of the region" (expert 7). Addressing this 'mismatch' of education and enterprise needs is a common thread through many interviews.
- Regional strategic planning is missing: Many address the issue of the lack of cooperation between municipalities ("widespread internal competition" mentioned by IP 5), and "small willingness to cooperate, low skills to cooperate", or even more strongly pointing to the fact that the "idea of cooperation is missing"and "regional thinking is not an issue" for many local and regional actors (expert 10). This strategic perspective and positive development is seen and appreciated for the agglomeration of Graz which is often mentioned as a 'model' because of better cooperation, better strategic planning, and knowledge development and exchange.
- The valuation of the situation and development of the public transportation is two-fold. At one hand, it is experienced as "practically not existent" and on the other hand, the high-speed railway under construction is seen as particular hope for the region in linking to areas outside the region. As mentioned above, also he large infrastructure is discussed according to potential effects, but more importantly at the internal situation of the region, significant cutbacks in local supply and heavy reliance on private transportation adds to the problematique of the sparsely populated area.
- Tourism sector is appreciated as an important economic opportunity, but also with little success in implementing new activities and thus described as "underdeveloped". Some argue that the region could be presented more widely as the region of "Lavanttal as unrevealed and undiscovered region for tourists" (expert 9). However, so far Lavanttal is not perceived as significant touristic destination also not in official Cartinthian promotion material. Some of the weaknesses are attributed to its location between Klagenfurt and Graz (experienced as a touristic inner periphery) which makes it difficult to develop an appropriate touristic profile (according to interviewees).
- In employment integration traditional role models prevail to a large extent, with all the negative consequences for women (no job offer for qualified women, few job offers in traditional female segments; problems to stay in a male dominated jobs; comeback to employment, and personal aspects like unattractive behaviour, e.g. rough tone in general communication). With economic crisis jobs for women are more often affected

by cut-down and women's labour force is largely exposed as a reserve to which one can turn whenever shortages in labour supply increase (expert 6).

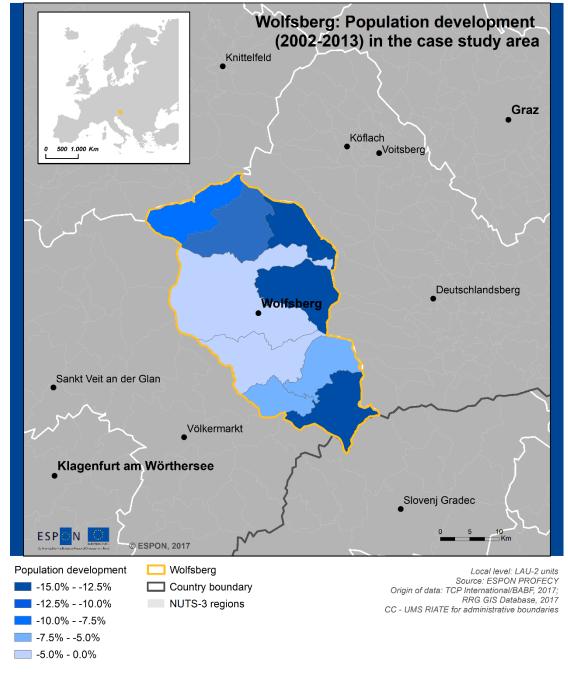
With regard to the provision of SGI a series of aspects are highlighted in the interviews, underscoring the problems for at least a portion of the population of the case study:

- With regard to the analysis of the central location systems in Lavanttal the following assessment is provided: "The overall provision with SGIs is good because of large municipalities. Since restructuring of municipalities in the 1970ies (mainly implying amalgamation of smaller units into bigger municipalities) many small municipalities have been put together into few large municipalities. And plans are that there is one primary school per municipalities (which leaves smaller villages in the mountains without primary schools)" (expert 10). With regard to inter-communal accessibility a significant problem is seen in the lack of public transportation. This weak accesibility pattern adds to weak provision with food shops at the local level, increasing precarious supply for old age people in parts of the region.
- Another expert extends his view on the crucial role of primary schools arguing that "primary schools in small villages are decreasing and this is particularly a problem because primary schools are crucial for communication and village life. The secondary level schools' education (until high school graduation) is good. Yet there is a need for facilities for lifelong learning at work places (e.g. particularly for "difficult to reach" apprentices)" (expert 7).
- With regard to daily supply facilities the concentration on supermarket (big retailers) in the vicinity of the centers or along the main traffic routes has changed the economic structures, the landscape appearance in those areas and behavior patterns of all the population groups. These changes in behavior are progressing at a slow pace and thus advance unconsciously, but have enormous effects on spatial structures. Also, cultural offers and events are concerned which is often not realized or acknowledged as an important development by local people and experts as well. E.g. disappearance of the last cinema in the case study area is neglected and cultural offer is appreciated as sufficient and interesting for local population (expert 7).

2.3 Internal structure and disparities inside case study region

The case study is due to its topographical structure and its settlement development an area which is shaped by large internal differences that could already be highlighted through figures of population development at municipal level. Map 2.3 shows the differences at that scale and underline that in the northern and southern part the municipalities expose a particular strong population decline. This picture of a retreat of the population at the edges of the case study

would become even more apparent if we presented the demographic changes at grid level^b as population loss is highest for the remote parts of the municipalities that extend over a large area (e.g. the main city Wolfsberg which includes areas up to the highest peak at the border of the case study area).

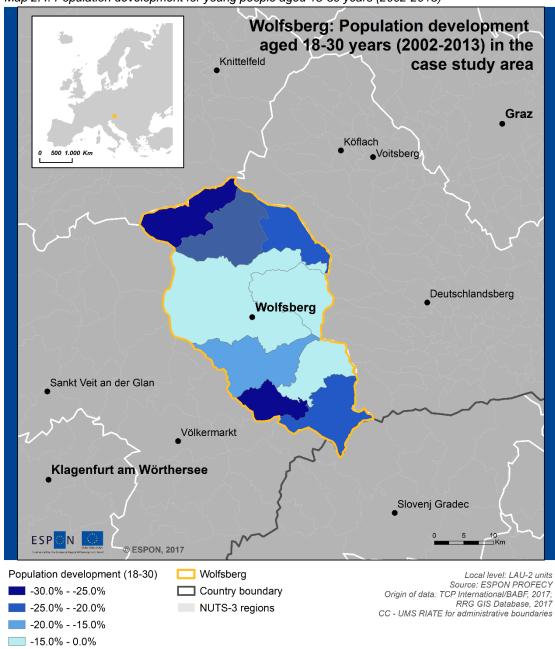


Map 2.3: Population development 2002-2013 in municipalities of the case study area

For the young population similar findings for population change are even more clearly expressed. Two places (the municipality of Reichenfels in the North and St. Paul in the South)

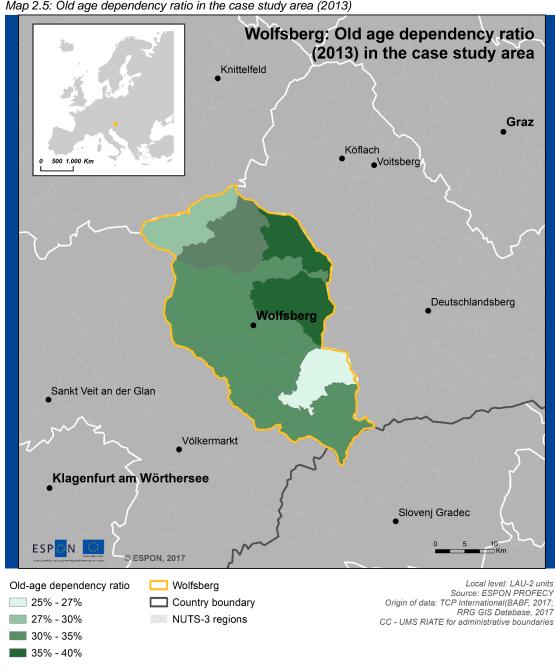
^b Unfortunately, the adequate data for comparative analysis was not made available in due time for the report.

have lost more than a quarter of its young population (aged 18-30) in the last decade. On the contrary, the population decline of the young age group for the central area was not as negative (with the municipality of Wolfsberg losing just 11% of this age group in the same period). As shown previously, the population decline in the youngest part of this group (mainly for those aged 15-20) is particularly high for the female population.



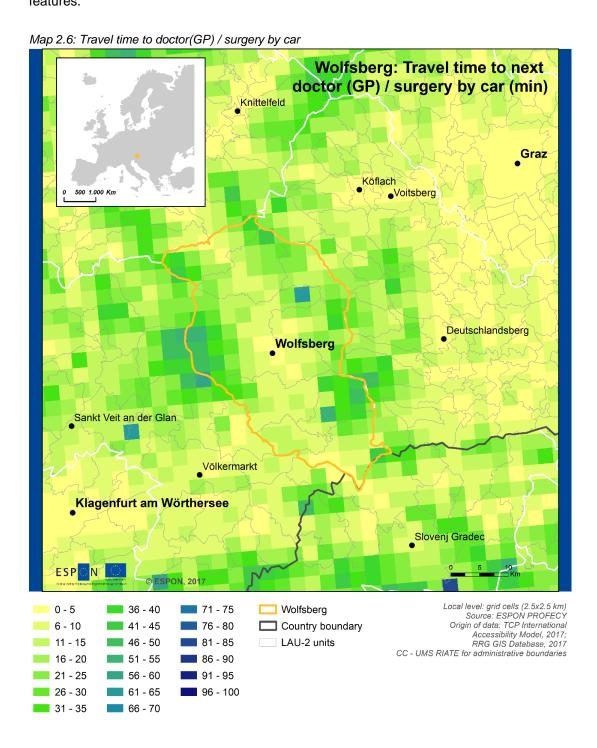
Map 2.4: Population development for young people aged 18-30 years (2002-2013)

The very high out-migration of young people leads to a gradual change in the total age structure of the region. Internally, this trend is particularly strong in the municipalities on the slopes of the eastern mountains (Koralm), i.e. Preitenegg (attaining almost 40% in 2013) and Frantschach-St. Gertraud (with 37.5%). While the first is a typical small municipality in the mountains, the second is dependent on its big enterprise and industry development. As potential for extension for these enterprises is very limited (see also media analysis) a large share of young people from this municipality is pushed to migrate and hence the share of old population increases. In contrast, the situation in St. Georgen is driven by a very active local policy where the mayor aims at raising attractiveness and settling young population. That municipality has the lowest old dependency ratio of the case study with just 26%.

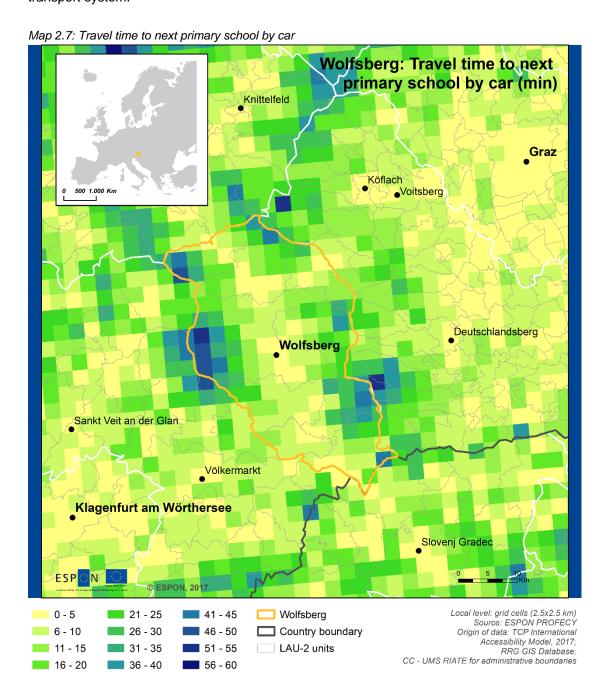


Map 2.5: Old age dependency ratio in the case study area (2013)

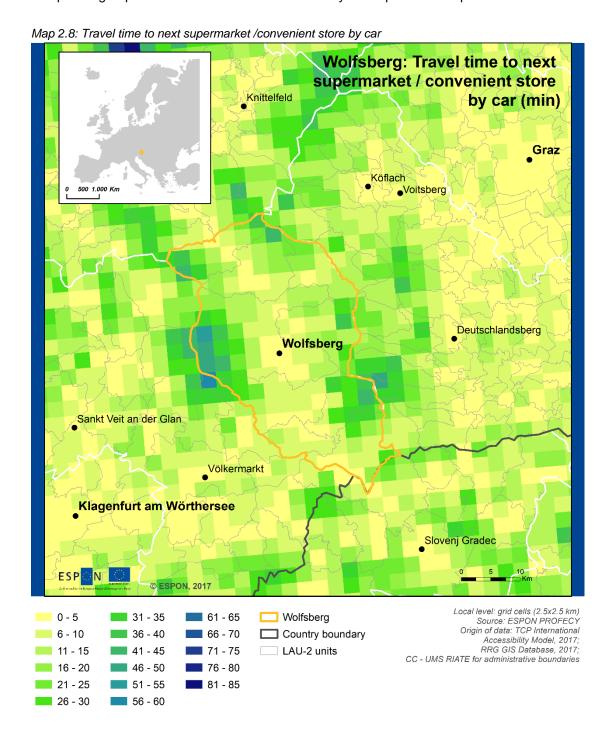
ESPON 2020 27 The large internal disparities of population settlement and development translate also into the various aspects of accessibility. In the following three maps the most divergent indicators of SGIs are presented in order to grasp the main "problem" areas of accessibility. Starting with accessibility of health services Map 2.6 provides an image of the low travel times to doctors (GP or surgery) for the population in the broad valley floor that makes up the greatest share odf the case study area's population. It can also be observed that the remote parts of the area (in the East and West along the mountain ranges) are least accessible and show travel times of up to approximately one hour. Interestingly, these remote areas are located mainly in parts of the municipality Wolfsberg and St. Georgen, two municipalities that show on average good features.



Also, the next Map 2.7, presenting the accessibility of primary schools, shows similar results. In addition to the two remote places mentioned for health care, the most remote areas in the northern municipality of Reichenfels also are in the class of areas with weak accessibility. In interpreting the accessibility of schools it has to be taken into account that pupils and students are, in general, not using private cars to access school locations and accessibility in public transport is much worse. In general, school accessibility is secured in Austria though dedicated "school buses" that provide under specific circumstances also the option for transport of other groups of the population. However, regulations and differentiations are very strict and lead to a fragmented supply that is in most cases limited to school accessibility at peak school hours. More or less, the spatial pattern of car accessibility will be valid also for that (public) school transport system.



Again, for the accessibility of supermarkets and convenient stores the picture is very similar. As these facilities are located along the main traffic routes, and generally at highly accessible places, the travel time is probably even a little bit lower (than for the previously presented SGIs). Interview partners reported no problem with accessibility of supermarkets, but highlighted that for old age groups the disappearance of local retailers and small food stores for daily needs becomes a significant problem. They are increasingly dependent on support by other people (since many of them are not able to use independently private cars any more). Actual problems for specific groups are therefore somewhat hidden by this "optimistic" map.



The supermarkets are mainly aligned along the "main road" running through the case study (besides the highway) and in close vicinity to the central municipalities. The location in the "suburbs" of the small city of Wolfsberg and near to other municipalities (like St. Andrä) add to the traffic volume as most shopping routes cannot be achieved without a car (or transport facilities). This is an issue for local transport volume and congestion of main crossings and streets near these places.

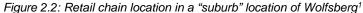




Figure 2.3: Typical type and size of retail chain1



In contrast to these newly established retail centers in many small villages previously existing food stores and small groceries have closed and terminated the local supply. The two following pictures taken in the field work in May 2017 document some of the examples. They highlight

the fact that once the central area has been left, hardly any supply is available. This extends also to a low coverage of pubs and taverns. Many of those are closed and the remaining oriented at the short period of summer tourism.

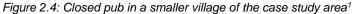




Figure 2.5: Closed shops, with no succesor in small village¹



2.4 The case study as a subject of local, regional and state coping strategies

As the area is a typical mountain region of the South-Eastern Alps in Austria it has been addressed in the respective development plans and strategies on mountain development. However, most of those plans and programmes were not specific for individual regions or areas, but made availabel a set of horizontal policy instruments. From the 1970s on spatial

development policy in Austria was shaped by coordinated efforts between different administrative levels and sectors to reduce disparities arising from international position and location (between East and West) and later on tried to accommodate changes arising from the opening of the Eastern border which had a significant effect on changing large scale spatial patterns in Austria. The case study Wolfsberg in the South of Austria is placed somewhere in between and was more affected from the various exchange opportunities and collaboration across the border to the former area of Yugoslavia and then since 1991 Slovenia. These national strategies were summarized in National Development Concepts which were elaborated every 10 years since 1981¹⁷. The last one aimed at increasing active discourse of spatial development issues and exchange of expertise and knowledge between different levels and actors ina pro-active manner¹⁸. With regard to the case study area it suggested a new partnership between rural and urban areas, and enabled the organisation of thematic working groups that address specific spatial development issues by including actors from the local to the national level. More recently activities also screened the options of applying a more explicit "policy framework for smart specialisation in Austria" ¹⁹.

The mountain areas have been affected by the regional development policy elaborated by the Federal Chancellery in making use and supporting the establishment of the "endogenous regional development". Though the programme was endowed with small financial resources it led to significant methodological changes in working and understanding regional development and support of mountain and rural regions. To some extent its participatory and innovation oriented approach might be seen as a precursor programme to the later LEADER Programme. Activities for mountain areas were not confined to one economic sector, but looked for a cross-sectoral collaboration and integrative approaches, and placed landscape development and environmental performance of these regions at the centre of its concept²⁰. The implementation raised international interest²¹ contributing to a discourse on amenity valuation in rural areas. However, the policy implementation in mountain regions and the coherence of policies were not an explicit task and programme in further policy implementation in Austria²².

At the level of the province (Land Carinthia) spatial strategies for the development of the province are defined in the strategic document "STRALE!K", implying a "radiating" effect of the programme activities on the Land Carinthia (K stands for the German name of the region, i.e. Kärnten). In its strategic orientation it aims at a balanced development of the economic areas, securing the quality of living space and providing equal chances for different spatial areas within the country²³. In the case study it explicitly addresses the new opportunities that will arise from the high-speed railway for locations near its station in the area (St. Andrä and Wolfsberg). On the basis of that strategy document the recent elaboration on STRALE 2025 aims at enhancing the perspective towards the role of social capital and raising effectiveness in implementation of the policy²⁴. This document is kind of a summarizing work that seeks to contribute to increased participation at different levels, and a step in the preparation of diverse spatial programmes.

The reflection of the national and regional programmes or approaches in the case study region became particularly intensive about 10 years ago when the association for the regional economy (Verein Lavanttaler Wirtschaft, VLW) engaged in a process to enlarge the perspectives beyond a mere consideration of economic needs and started a discourse on future options for the region that would address all aspects of the economic and living space. It showed that "cooperation and the design of communication processes and interlinkages are specific patterns of a strategy that would incorporate the crucial elements for regional progress. The main ideas for action fields in the region exposed aspects that ought to become a recurrent topic in later discussions and strategy building processes. Focus was on⁸ (i) cooperation and networks as basis for a regional knowledge system, the "Lavanttal-factory"; (ii) courageous action to solve the problems of inter-municipality planning; (iii) Focus on a long-term backup for the labour force potential; and (iv) aiming at a high level of regional supply in energy consumption and focus on securing natural resources of the region.

The most relevant strategy process for the case study area in recent years is available from the preparation for the LEADER programme. In preparing the programme document a specific strategy, labelled "smart region Lavanttal" was elaborated11. This document summarizes main options and thematic areas for programme action for the particular region of the case study, in contrast to the LEADER programme itself which has a different (larger) definition of its application area, including the neighbouring district Völkermarkt and parts of the district Klagenfurt Land (the area of 'Rosental'). This document concludes from the analysis of regional strengths and weaknesses that the following eight thematic areas should be enhanced: (1) an area of equal opportunities for all ages ("all generations"); (2) innovative and vivid municipalities in the area; (3) an area of recreation; (4) enabling the "dual economic" development of the area, implying competitiveness of large enterprises and support for SME development; (5) an area of education, in all social spheres; (6) an integrated innovative management of the transport system; (7) make use of different functional zones according to the environmental limits; (8) professional regional management support. These assignments were developed witht the participation of the local population and also included a ranking of the main challenges and most needed priority action areas. As such the document contributed to the elaboration of the Local Development Strategy of the LEADER programme.

The Local Development Strategy (LDS) elaborated through the LAG Unterkärnten actually took up the first message of the preparatory document, i.e. working towards a programme that is useful for all "generations". Labelling the LDS "The Region of Generations"²⁵ it implies that a balanced perspective on implementing projects that are supporting the various population age groups and contribute to chances for all life stages in all parts of the region is the central programme objective. It sets out a programme with three priority lines²⁴, i.e. increasing the value added of economy (for the sectors of: industry, agriculture and forestry, tourism, and energy provision), natural resources and cultural heritage (separated for action on cultural actions and nature and environment) and common well-being (including community and urban development, transport and accessibility, education and integration, and societal development

and provision with SGIs). The strategy is therefore open to applications in various activity fields and seeks to develop the various "capitals" of local population, including social capital.

The interview partners did not pay as much attention to this progrmame and other support mechanisms as they also highlighted the complex cause-effect relationship and long-term needs to impact local and regional structures. As to the current debate (reflected in the expert interviews) the investment package and the labour market measures are more present than the LEADER programme strategy (albeit its cross-sectoral approach and trans-regional opportunities). The analysis of the interview partner arguments on the usefulness, missing aspects and future need of policy implementation showed that there is evidence for several positive examples. Detail of information and familiarity with project implementation is decisive for details provided in the interviews. Some were very explicit on the positive effects of educational projects through the LEADER programme and the ESF (expert 1 and expert 2), others mentioned several touristic projects or the positive experience with the Territorial Employment Pact, TEP (expert 6). There is a consensus expressed that collaboration between different funds is needed if effective processes should be realized. In strategic terms, interview partners highlight that coherence of action and coordination is missing and the stratregic higher documents (at provincial level) primarily target on urban development aspects and neglect challenges of rural regions. Where there are promising objectives and instruments in the programmes the implementation processes seem often hardly successful (e.g for adapted forest use programmes, expert 6) or as one expert stated "impmentation of any strategy was hardly effective over the last 40 years in this area" (expert 5). Moreover, deficiencies are seen for strategic tourism development (expert 9), the lack of a regional "brand" that supports marketing of the "value of the region" (expert 4), cultural events and development being seen as an "out-sider" (expert 9) and social projects are, despite rhetoric, weakly developed (expert 12). Many experts were very critical on the relevance of funds which can partly be attributed to limited familiarity with the wide array of funding schemes and options, partly also with increasing regulation requirements. Demands for simplification were not as often mentioned as in similar other discussions (but particulalry by expert 5), but by some the usefulness of support concepts was inherently questioned (expert 8) and also observers declared that, given the trends in reduction of Austrian EFRD funding, future role of EU programming will further decrease (expert 15).

There is a common thread in the interviews that the development of a comprehensive regional strategy is not at hand and action at this level might be very useful to enhance the cooperative spirit of involved actors. It was highlighted that for this spatial level no "regional council" exists and municipalities are strongly carrying out their individual strategies which include competition between municipalities (expert 4). The LEADER Local Action Group (for a different spatial definition) therefore assumes almost a "substituting role" for such cooperation tasks (expert 1). It is argued that a "positive notion on the regional assets and opportunities is missing so that people can implement a specific target together" (expert 1). The lack of cooperation spirit is approved by many experts and even one observer asks for instruments to "force communities"

to cooperate" more strongly (expert 14). However, many realize a multitude of opportunities that have to be elaborated through quality development, marketing strategies and common strategy development, as one expert put it, "Wolfsberg should work on the big picture" (expert 12).

Recently at the conference for Cohesion Policy in Mountainous Areas in June 2017 Mr. Schabus, in charge of the EU-programme coordination in the Carinthia region in Austria, "emphasized the importance of having strategic thinking on how to improve cooperation at different levels to ensure good implementation of the Cohesion policy"²⁶. In the mountainous region of Carinthia cooperation within the EUSALP strategy has been developed (the Land Carinthia being one of the leaders of the action group 8 of EUSALP). In this regard cross-border cooperation is particularly important. The options to work with Slovenia are relevant for the case study area and with the implementation of the new CLLD tool or with the implementation of a EGTC (European Grouping of Territorial Cooperation) between Carinthia, Veneto and Friuli enalble increased cooperation. Cooperation is not just a cross-border issue, but also applies to cooperation between different funds within the region. The Land Carinthia is trying to facilitate the implementation of the different funds: ERDF, ESF and the rural development programmes, including the LEADER approach in a coherent way to achieve the objectives of the region.

With regard to the future cohesion policy, there is a need to increase access to CLLD tools (by 'simplification'). This means in particular to overcome the difficulties encountered in the implementation of the CLLD approach and making the added value of such tools visible for local actors. Raising attractivenens of tools seems very important since the potential and value of regional programme tools and local development support is hardly sensible for local interview partners. In particular, this related to trans-national cooperation potential, hardly addressed by the interview partners, but obviously a crucial aspect in the border area.

2.5 Future scenarios

Prospective analysis presented in this part of the report aimed at answering three main research questions:

- What are the externally and internally driven influences on the problem of inner peripheralisation of a specific locality?
- What are the key drivers for the future development chances or threats in the context of further peripheralisation processes in the area under investigation?
- What future scenarios can be drawn for each case study according to the estimated positive or negative impact and likeliness of possible uptrend, downtrend or sideways of key drivers in chosen localities suffering from inner peripheralisation?

In the PROFECY Project, a future scenario is defined as a description of a possible future path of development for the case study area. It is not intended to outline a full description of the future developments, but rather to highlight central elements of the possible future processes

and to draw attention to the key factors that will drive future developments. According to this definition, in the PROFECY Project, the description of future scenario should be considered as "explorative" and/or "descriptive" type as opposed to "normative" scenarios in literature. The main question asked when building explorative scenarios is "What would happen if" and the present is taken as their starting point.

Scenario building was based on the scenario questionnaire and the interviews carried out with experts and stakeholders listed in the Annex 8 to this report. Scenario questionnaire consisted of four elements: (1) dimensions of inner peripherialisation processes, (2) key factors in each dimension, (3) likeliness of particular trends for each key factor within the time range given (next 5 years) and (4) their strength of influence for the future development of the area. Experts were asked to fill out a questionnaire specifying, on the scale from 5 (strong negative impact) to 5 (strong positive impact) to 0 for no impact, for a set of factors and drivers of peripherialisation processes the likeliness (distribution of 100% among particular trends) of their impact in the chosen IP region with the indicated power on a possible uptrend, sideways and downtrend (Figure 2.6).

WEAK **STRONG** Key driver strength of influence 1 5 3 trends: increasing, direction of POSITIVE (chance) (+) decreasing, influence NEGATIVE (threat) (-) sideways distribution of 100% among 3 trends likeliness sideways trend downtrend uptrend trading lower highs higher highs lower lows higher lows

Figure 2.6: The structure of the scenario questionnaire specifying elements to be evaluated by experts

Opinions of all experts have been collected and presented in Table 2.1 and Table 2.2 reflecting the average assessments of the likeliness of a certain key factor to occur and its strength of influence on periperalisation of the area in the future. The arrows used in tables represent the most probable trend (or two trends – if the difference between their assessments is below 5%) of particular factors as evaluated by the experts.

Future scenarios for regional development of the case study area can be derived from existing planning documents which are based on strategy discussions with regional actors and stakeholders, from the inteviews with regional experts and several external analysts of regional

development and from the specific scenario tool that was applied in all interviews to gain insight into the perspectives of experts on future development of the region.

The discussion on the planning documents above reveals that future trends are an important topic in strategy documents at all levels, but place-specificity is visible just for development plans of the province Carinthia and the small-scale region of the case study area. The provincial level is moreover characterized by a general document that provides visions for the whole province and spatial orientation focus on central areas. As commented by local actors the strategies exposed there are hardly place-based and comprise few messages for the case study area, and rural areas of Carinthia in general. The two main documents of the provincial level are the strategic document "STRALE!K", implying a "radiating" effect of the programme activities on the Land Carinthia²², and the revision of that document in the strategy document STRALE 2025²³. While the first is focusing on quality of life aspects and provison of equal chances in general, the second seeks to enhance participation and aims at impacting on implementation effectiveness. With regard to the case study area the strongest implication in terms of future spatial development is seen in infrastructure development, by linking the area through the high-speed railway to trans-regional and trans-national areas. It is thus on the one hand, a concept at a higher level and less specific for the specific outcomes in the region, on the other hand, an inspiration to drive partipatory processes at all involved levels of spatial organisation and planning processes.

At the case study area level the development of various sectoral strategy approaches was carried out over the last decade. These initiatives were driven by economic interests and/or sector specific aspects and, as interview partners repeatedly complained, did not imply a comprehensive perspective for the region. Moreover, many experts deplored that implementation could hardly ever be realized for any of these strategies. Nevertheless the incentive provided by strategy documents like "Quo Vadis Lavanttal?" summarized in a volume entitled "Conceiving future development as a process" paved the way to a vision that encapsulates also the opportunities and acknowledges the wide scope of potential and nature based amenities of the region. The debate at that time (about 10 years ago) centred around the idea how to achieve a shift in development concepts, from a merely economic driven perspective towards an understanding that includes all dimensions of "sustainable development". A notion of the cultural roots and future potential was important and aimed at the design of economic and life quality progress for the whole area of Lavanttal.

With no funds and further support, the initiative ran into the risk of remaining a strategy document with almost little effect. The inclusion in the LEADER programme provided a more direct opportunity to apply a local development approach and foster place-specific innovative ideas and implementation. Even if the financial resources of that scheme are very limited its conceptual framework and participatory process stretched out to many actors and stakeholders and therefore are a good basis to recognize the current discussions on future developments. In preparing the LEADER document the regional authorities commissioned a study that was

called "smart region Lavanttal"¹¹. The Local Development Strategy (LDS) of the LEADER programme itself elaborated by the Local Action Group Unterkärnten²⁴ put the main concern of the demographic issue, arguing that future development (and success) of the region will depend on the ability to integrate all different age groups and to provide balanced living conditions for all age groups (labelling the LDS "The Region of Generations").

In the discussions with experts they confirmed this priority by intuitively placing highest priority on the issue of demographic development. This is underlined by the summary presentation of the results of the scenario tool in Table 2.1, presented below. In the region experts are conscious of local assets and they think that the following territorial capitals will be of particular importance for future development:

- A strong basis of regiona activities in industrial activities, in particular metal processing, wood processing and construction industry;
- A high level of entrepreneurial spirit, visible through a group of innovative individual project promoters;
- Both above aspects factors being facilitated by historical experiences, and thus revealing its high level of cultural heritage; and
- An increased estimation of landscape, natural resources and high-quality development in a sustainable manner as crucial asset for the future of regional development.

Since the positions and arguments of the interview partners also showed different aspects and attitudes the scenario tool included an element to provide a (simple) calculation of commonality/divergence of perspectives, and orientation of expert views. The main results of this exercise are summarized in Table 2.1 and Table 2.2 below.

The first table shows the average of all experts' assessments of the likeliness of a certain development to occur (in the next 5 years in %; experts had to divide 100% among the possible options for future development into the three options of an upward trend, a sideways trend, i.e. stable situation or continuation of existing trends, and a downtrend development): Though the assessments of experts obviously differed to some extent, answers were quite similar for several of these, revealing that understanding of process and perspectives reflect the regional discourse to a large extent. It seems that this is less inspired by a joint communication and internal regional network consensus, but a larger commonality in valuing social, economic and cultural processes at the various spatial scales. Valorisation is also supported by media (both from regional and national sources) and more general national discourse on socio-economic changes that are hardly reflected or discussed against evidence, divergent spatial differentiation and/or contradictory developments. The discourse in the case study area is also driven by male experts, and aspects of social development, needs of children and women are less apparent in these argumentations. It is important to emphasize that understanding of the various issues was at points different and resulted in very clear differences. Moreover, assessment of the present situation (the "initial status") is decisive for arguing about changes,

and divergences in viewing the present situation might be concealed by similar results in this presentation.

Nevertheless, what emerged very clearly form the expert interviews is high consciousness of demographic factors as those drivers that will be influential in the mid-term (outline of vision suggested: 5 years). It is expected by two thirds of the respondents that population numbers will further decline in the next five years (which corresponds very well with the long-term decrease of population over all the parts of the case study area). Together with out-migration that will drive forward the process of ageing of the regional society, this indicator got the highest approval rate (80%) to be relevant for the coming period. Similar consensual views are only visible for the increase of high-level education. Two more factors with an upward trend are seen for the development of the transport system and the number of NGOs. Again, both are supported by either present activities (investment for the high-speed railway connection is underway) and increase of participation, in general, implies an increase of NGOs. However, for both issues there were quite intensive discussions on how to understand and interpret the indicators' assumptions, i.e. transoport improvement has various faces and dimensions (e.g. large-scale, low-scale, internal differentiation, accessibility, social groups affected etc.) and NGO increase is not always seen as a positive development (higher levels of control, need for discussions, controversies, lack of implementation effectiveness etc.). All the other elements asked in the scenario tool showed highest values for the view that assumes continuation of the present situation. This includes aspects like labour market (number of jobs), level of disposable income, access to SGIs, development of public subsidies, cooperation of local authorities within the region, and access to information and policy networks. Particularly for the accessibility of SGIs there are however big differences and in detail there are concerns about decrease for specific SGIs and at the same time improvements for others. Assignment of one value for this group was therefore for many experts very difficult. This can be recognized also in the high variation of answers, being split in many positive and negative answers as well. For public subsidies we also face a situation that at the national level a decrease of regional support is widely expected which translates to the regional perspective.

Table 2.2 summarises the experts' assessment on how each of the single factors could influence peripheralization which was a highly demanding exercise for experts (as positive and negative signs have to be interpreted according to contents/value of the individual indicator). Negative numbers would mean a slowing down of or even a countermovement to peripheralization processes, while positive numbers imply increased peripheralization processes. There is just one element that is indicated as a strong driver for peripheralization through its downward trend, i.e. negative demographic development. Mirroring this indicator, increased ageing would also imply an intensification process of peripheralization. The concern for the demographic situation and changes is underlined by this perception.

Table 2.1: Results of scenario tool: Probability (next 5 years in %) – Average of all experts assessments

_	Uptrend	Sideways	Downtren d
Number of residents	8,0	25,0	67,0
Ageing	80,0	19,3	0,7
Number of NGOs	46,0	45,3	8,7
Share of well-educated people	61,7	23,7	14,7
Number of jobs	30,3	57,7	12,0
Individual income	25,3	51,7	23,0
Access to SGIs	28,3	47,3	24,3
Development of the transport system	43,3	36,3	20,3
Cooperation of local authorities within the region	40,0	49,3	10,7
National level subsidies	15,3	46,7	38,0
Access to information on policy supply at national/regional level	33,3	60,0	6,7
Access to policy networks/relations	25,3	65,3	9,3

For all the other issues, the diversity of views and the arguments towards peripheralization are not as strong. This might be due to the conceptual understanding of many experts of a very complex system (and the combined effect of many factors) that lead to peripheralization processes, or that impact on *changes* in the processes. There are just two factors which are thought of as contributing positively to reducing peripheralization, i.e. an increase in the educational quality of inhabitants, and the imminent improvement of the transport network system. All the more, it seems important to emphasize the arguments for securing accessibility of the high-speed railway station for *all parts* and population groups of the region. Interestingly, a stable development of jobs in the case study area is also assessed as positive, i.e. contributing to a slight decline of the peripheralization process. This indicates the eminent fears of a decline for available jobs in the region.

The remainder of the indicators show very low levels of impact on peripheralization, and only would benefit from positive developments of some of them which are however not acknowledged as being realistic options. As argued above this confirms the position that experts don't expect substantial impact on peripheralization from one single factor, and only slight implications by changes in one of them.

Table 2.2: Influence on peripheralisation [+5 bis -5] – Average of all experts' assessments

		Uptrend	Sideways	Downtren d
Number of residents		-2,8	-0,7	2,6
Ageing		3,5	0,3	-3,1
Number of NGOs		-0,1	-0,1	0,2
Share of well-educated people		-2,5	0,1	2,3
Number of jobs		-2,7	-0,7	2,7
Individual income		-1,3	0,2	2,7
Access to SGIs	1	-3,8	0,6	3,4
Development of the transport system		-1,9	0,2	1,9
Cooperation of local authorities within the region		-0,9	0,0	1,6
National level subsidies		-1,6	0,1	1,4
Access to information on policy supply at national/regional level		-1,5	0,0	1,1
Access to policy networks/relations		-2,3	0,1	1,9

The scenario tool thus confirms the high priority on demographic developments and the observation of already ongoing changes, in particular with regard to investment in infrastructure and improvement of accesibility at the large scale, and increase of educational level. Further aspects of concern which are rather neglected in official statements are a stronger focus on the integration of natural resources and their sustainable use and the need for a coherent regional strategy and enhanced cooperation. While these aspects are evident for local and regional actors, linkages to other regions and a strategic approach to analyse potential effects of increased trans-regional interaction and knowledge development are issued at some academic papers ('smart development approach') but hardly mentioned by local experts as guiding their future development concerns. There is some sensitivity about the issue with regard to the loss of high skills and the need to adjust quality development in order to present assets of the region to other areas.

3 Discussion

The case study has undergone significant changes in its regional position and linkage to other spaces. These were driven by important historic changes in the function of the (southern) borders and the linkages to other areas. Due its location in the mountains the region was for a long time accessible from the rest of Austria only by travelling over the mountain ranges that surround the region. Thus it was perceived as a remote and disadvantaged area. At the same time the availability of mineral resources and the emerging mining industry led to increased economic interest in developing industries in the regions. With the establishment of large-scale enterprises more than a century ago industrial development and employment gained importance and had a strong impact on sectoral changes. However, the accessibility of the region was for a long time very weak and only at the end of the 20th century with the construction of the highway linking Vienna with Northern Italy the region was much better integrated into the Central European spatial framework. With the opening of the high-speed railway connection in 2023 also public transport accessibility will be improved substantially. However, local experts are not sure of the effects and consequences for local population from those imminent changes in accessibility.

Given the large range of issues and questions of regional development, since long strategy development at different levels, including the case study area level, was important and many documents of those strategies exist. In many respects these strategic documents tended to provide casual programmes for various sectors, but there is no comprehensive strategy available for the whole region. With EU integration the elaboration of strategy documents even increased and relevant documents at provincial level (Land Carinthia) provide some general guidance, but hardly any detailed spatial allocations or place-specific actions. The Local Development schemes are somewhat more specific. They provide a framework for small-scaled projects that might respresent something like a demonstrative character for replication activities through other actors. This means that to some extent the potential and place-specific assets are acknowledged, yet a comprehensive assessment and strategic approach to nurture those options and to effectively improve the visibility of the region to other areas is still missing. Positive development in the region (as to jobs development and income level) is largely dependent on several large enterprises who acknowledge the particular development potential in the area.

Experts agree on the specific lack of strategy building for regional development, for spatial planning aspects and industry and crafts location development in the area. Since the big enterprises still fare quite well, problems occur through out-migration, particularly of young people and the consequent demographic changes, and loss of skills of those people. In particular, there is a need for inter-communal cooperation that would address the issues of industry development through a common strategy. But despite some attempts and talks to start such initiatives this could not be achieved so far because of municipal representatives who fear economic losses and lack solidarity approaches with neighbouring, not so well positioned

communities. The position of the municipality is therefore still more important than a regional strategic development. Such aspects will gain in importance when the high-speed railway connection will be achieved and benefits concentrate near (or remain limited to) the area around the sole train station in the region.

The analysis suggests a rather traditional view of "lonely fighters" who might dispose of many good ideas but that perspective fails to achieve more wide-spread effects due to limitation to one municipality. It seems that scepticism is also placed on public funds that have been used to support interests whenever appropriate. They are mainly seen as supporting ideas and action plans that would not be feasible without the additional financial guarantee provided by the fincanial support. However, administrative burden and complex regulations are realized as important obstacles to further intiatives and action, enabled through support programmes. On the other hand, one has to acknowledge that lots of measures and infrastructural investments and "background" measures are not attributed to public schemes and lack the appropriate accountability.

The concept of Inner Periphery is relevant for the case study at a more fine geographical level as the whole area is hardly defined as IP. By differentiating and analyzing indicators of accessibility, economic potential and aspects of interaction at a very low level, it becomes visible that the case study's impression is mainly informed by its centre, the municipalities in the main valley, respectively near the city of Wolfsberg. Settlements at the edge of the case study area and some municipalities in the North and South of the area show clearly features of IPs.

With regard to the **three interpretative models of PROFECY**²⁷ these aspects of internal differentiation are particularly important.

e Enclaves of low economic potential (Type 1 of interpretative model): this type is based on the same kind of measurement as those employed in analysis of "classical" periphery, measured by a gravity model and economic potential. IPs are distinguished from "external" peripheries by representing an enclave that is surrounded by less peripheral areas. For areas that are located within a larger area of weak economic performance it is hence due to this definition very difficult to show indicators of IP as also surrounding areas would have low levels of economic potential. Map 2.2 shows that the case study Wolfsberg is such a case, being located at the centre of a large area of comparable weak economic development in southern Austria between the NUTS-3 regions Oberkärnten and West- und Südsteiermark. However, the relative position of economic potential is usually compared in the case study to the two agglomerations Graz and Klagenfurt, and Wolfsberg is experienced as lying between them and obviously its population and economic sectors being attracted towards these two centres. It is therefore an important question at which spatial level enclaves are defined.

- Areas with poor acces to or provison of Services of General Interest (Type 2): Similarly to the first model this second type is driven by geographic distance. It is therefore no surprise that effects at the spatial scale in the case study area are very similar for SGI accessibility. In contrast to economic processes and effects, SGI provision is visible for the local population very clearly and responses on the availability of diverse SGI groups and facilities are informed by personal knowledge and experience. They thus show very drastically local differences and are also reliant on quality dimensions that are assessed by respondents (on account of their personal experiences). General discussions on service provision, quality dimensions of provision and alternative modes of provision might have an important impact on this issue itself and the consequences on economic and regional development. Moreover, diverse SGIs are of specific concern to different social groups and limitations in accessibility are felt differently by various groups. Older and young population groups might experience significant difficulties in accessing basic services, even if indicators for average provison of SGIs show a good coverage.
- Areas showing complex negative processes due to low levels of interaction (Type 3): This aspect is implicitely addressed in many interviews, but explicit targeting on such issues is weak, which indicates already the significance of the problem. Despite the focus on "smart development" (see the documents in endnotes 11, 10) interaction with trans-regional partners and locations is not a big issue. In the fear of negative effects from infrastructure connection it is referred to indirectly, implying that stronger (spatial) connectivity might lead to losses for the "weaker" places. Knowledge development and linkages are however an important issue in the current Local Development Strategy and aim at overcoming such weaknesses. In the region there are several aspects of low levels of interaction that can be attributed to internal and inter-related aspects. Internally, network structures are judged as lacking a more cross-sectoral and intermunicipality orientation (see discussion of strategy developments above). For the aspect of interlinking with other areas there is some awareness for the need to engage, but limited realization so far^{8,10}. Beyond national relationships, international linkages seem very important and particularly for this area, close to Slovenia and Italy, a core issue. Trans-national activites were however hardly an issue in expert interviews (and neither in strategic documents).

Views expressed are largely following a common narrative which is centred around core aspects of the need of good (physical) connectivity, learning and education to provide adequate skills for the local labour force and the threat of losing skilled workers to neighbouring stronger centres. The thrust of argumentation is hardly contested, but the occasional statements on lack of cultural development and social services as well as balanced approaches for integrating women into the labour market point to some aspect of quality of life that tend to be crucial for overall attractiveness of the region.

4 Conclusions

The case study area is at first sight an area that has improved recently its regional performance and due to the improved high ranking infrastructure has gained access to national (and international) economic centers. The inclusion into this larger spatial network comes not without barriers and challenges. It is not as straightforward as mainstream regional development theory would suggest and did not lead to one-dimensional trends with continuing growth.

Spatial accessibility therefore seems as one aspect of peripheralization processes, with the need to analyse various components and additional triggers in the socio-economic system providing the base for regional adaptation. The main **triggers** highlighted (by the experts interviewed and the documentation of the region analysed) are (1) the continuing demographical change (i.e. population decline for the whole case study area), (2) a strong tendency and pressure by economic forces towards a concentration of industry and trade, and all other economic activities, including particular services, (3) a high pressure for increased planning and control of spatial development programmes and support, and (4) an increased relevance of knowledge development and linkages, and networking in realizing action plans.

These are translated through a series of "drivers" of local and regional action or trans-regional influences that are articulated mainly through following aspects:

- A continuing perception of high dependence on other economic centers which is shown through high levels of commuting towards workplaces outside the region and outmigration, particularly of young people (and women) with the consequence of ageing of the remaining local society;
- The availability of a highly-qualified workforce with appropriate skills for the regional workplaces being threatened and limited improvement in knowledge development;
- The decline of some SGIs, particularly in remote parts of the region, through a continuous concentration process of service provision; and
- A critical position towards public support schemes, involving views questioning the "power of innovation" of support programmes and the effectiveness of policy programmes at all.

Though the overall economic development in the region showed reassuring signs of recovery in recent years these drivers resulted in a series of consequences for the region: The population decreased further and accentuated the relative position of the area, and at the same time economic activities are still centred around several big enterprises. This structure is estimated not as very sustainable due to strong dependency from few economic actors and a small scope of different branches. Attempts to enlarge economic activities to additional branches, including a higher intensity of tourism activities, are hardly effective. Moreover, for people in remote places the concentration of SGI provision increases dependency on private transport and personal efforts to access services.

There is a strong basis of "territorial capital" in the area with a long history of metal processing, wood industry ad construction activities which are sources for a comparably good position of the regional labour market. Moreover, a number of innovative individual project promoters generate feeling of hope also for future development which are however hardly integrated into a regional strategic framework. In addition to these economic forces, the region is based on a long tradition of a strong cultural heritage and increasingly focuses on its landscape and natural resources as crucial assets and amenities for future socio-economic development and quality of living space.

In terms of future development local and regional institutions need to make an effort to provide enhanced results in *regional* coordination. This means in particular a focus on the spatial dimension of regional development strategy and land use planning issues that cover the set of various actors and sectors in the area. Integrated *regional cooperation* is addressed as a main opportunity for the case study and a need to overcome the challenges which might increase despite the (physical) accessibility of the region. In this regard, the second future perspective, mentioned in the interviews, seems crucial: Raising the visibility of the region to external partners, and enhancing the valorisation of the regional amenities as a core development potential.

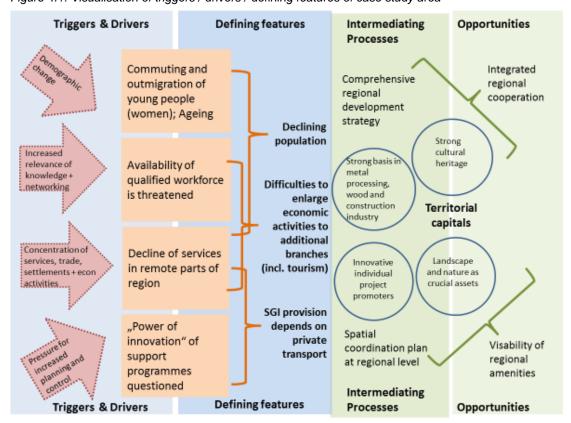


Figure 4.1: Visualisation of triggers / drivers / defining features of case study area

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Annex 1: Table Ia. Introductory data

1	Identification of case study area							
1.1	Administrative regions involved (e.g. for Germany: Länder &	Political						
	Regierungsbezirke)	district no 209						
1.2	Name and ID of the NUTS-3 areas that are (partly) covered by IP area	Unterkärnten						
		AT213						
1.3	Size of IP in km ² (and national average IP size)	974 sq km						
1.4	Classification of concerned NUTS-3 area according to urban-rural typology	Preliminary						
	as developed by DG AGRI and DG REGIO	rural, close to						
		a city						
1.5	Names of the regional centres within the IP	Wolfsberg,						
		St. Andrä						
2	Delineation outcomes							
2.1	IP according to Delineation 1 (Travel time to Regional Centres) y/n	n						
2.2	IP according to Delineation 2 (Economic potential interstitial areas) y/n n							
2.3	IP according to Delineation 3 (Areas of poor access to SGI) y/n r							
2.4	IP according to Delineation 4 (Depleting area index) y/n and % of area	y (old version)						
	coverage; brief qualitative description of the situation							
2.5	Type of IP according to PROFECY delineation-typology	2						

Annex 2: Table lb. Exploratory data

Table I	b. Explo	oratory data			
No.		Leaves	Wolfsberg District	Carinthia	Austria
3		Issues	DISTRICT	Carintnia	Austria
3.1	Populat km² (2	tion density per 013) 1)	55.2	58.3	100.8
3.2	Total (2013)		53,707	555,473	8.451,860
3.3	Populat develor 2013) i	oment (2002-	-4.9	-0.8	4.8
3.4		tion oment age 18- 002-2013) in %	-16.8	-7.5	6.1
3.5		ge dependency 2002) in % 1)	26.2	25.9	24.1
	Old ag	ge dependency 2013) in % 1)	31.9	31.7	28.1
3.6	Gender (2013)	Imbalance	97.8	94.3	95.3
3.7	Ethnic (2013)	composition in $\%$ ¹⁾	4.2	7.6	11.9
4					
4.1	GDP per capita in PPS (2014) ²⁾⁵⁾		-	29,700	35,300
4.2	Unemp (2013)	loyment rate	5.6	7.9	6.9
4.3	Youth rate (2)	unemployment 013) ³⁾	8.8	11.4	9.7
	NEET ii 2013) ⁴	ndicator (2006-	_	6.6	7.4
4.4	per s	of employees sector (2013) Iture, industry, s)			
		Primary	7.9	5.0	4.4
	2009	Secondary	35.8	26.3	23.7
		Tertiary	55.9	68.4	71.0
		Unknown	0.3	0.3	0.9
		Primary	8.0	4.8	3.4
	2013	Secondary	34.7	23.8	22.7
		Tertiary	57.0	71.1	73.1
		Unknown	0.3	0.3	0.8
		Primary	8.0	4.7	3.3
	2015	Secondary	33.8	23.5	22.0
		Tertiary	57.4	71.1	73.7
		Unknown	0.8	0.7	1.0

4.5	econom	etc.; please e in a few	n ht					
4.6	Share	of tertiary	у					
	educate (accord 2013) ³	ing to ISCED,		15.3		19.2		19.7
4.7	Forms received transfer		See A	nnex 3, Table 2				
4.8	Virtual Accessibility Based on the current (2017) estimated fixed and mobile broadband coverage of 30 Mbits/s and above relative to the entire land cover (including both mountain and		Mbit 20%; bro covera	padband age >30 s/s: ca. mobile padband age >30 s/s: ca. 80%	Mbits/s: ca mobile bro	age >30 a. 15%; badband ge >30	fixed broadband coverage >30 Mbits/s: ca. 25%; mobile broadband coverage >30 Mbits/s: ca 65%	
4.9	Virtual (local initiative virtual (please	(local government exter initiatives / support of virtual services) envisage (please describe in a Geor		overage ension is urrently ed in St. rgen im vanttal	Co exte envis around 1/	overage ension is saged in	Coverage externormal externormal contract contra	ension is around
Others	Employ (absolu (2009-2	te and in %)						
		Primary	2,169		13,637		185,730	
	2000	Secondary	9,801		71,633		996,697	
	2009	Tertiary	15,309		186,505		2.987,326	
		Unknown	88		918		37,490	
		Primary	2,197	1.3	13,146	-3.6	149,594	-19.5
	2015	Secondary	9,251	-5.6	66,396	-7.3	987,742	-0.9
	2013	Tertiary	15,733	2.8	200,609	7.6	3.316,105	11.0
		Unknown	218	147.7	1,856	102.2	43,293	15.5

Notes:

- 1) Population data as of beginning of year (since 2002)
- 2) Eurostat: http://ec.europa.eu/eurostat/documents/2995521/7192292/1-26022016-AP-EN.pdf/602b34e8-abba-439e-b555-4c3cb1dbbe6e
- 3) Statistics Austria: Employment statistics 2013
- 4) Chamber of Labour:
 - $https://media.arbeiterkammer.at/ooe/interessenpolitik/arbeitswelt/IV_ArbeitweltNEET-Bericht_JKU_2015.pdf$
- 5) ÖROK Atlas; Brutoregionalprodukt/EW, 3-Jahres-Mittel (2012-2014)
- 6) Breitbandatlas Österreich: https://breitbandatlas.info/

Annex 3: Table II. Policies and programmes

Types of policy/programme	Duration of participation (period of implementation)	Objectives related to the study area	Type of project implemente d in the study area	Financial expenditures in the study area
5. Regional/Cohesion policy				
5.1. Specific policy measure financed by the Operational Programme (ERDF, ESF)	IWB/EFRE 2014-2020 ESF 2014-2020	Regional competitivene ss Mobility, healthy ageing, inclusion, skill improvement,	Carinthia 2007-13: 67 Mio. (2014- 20: 57 Mio) Austria 2014- 2020: 536 Mio for Austria. (2007-13: 555 Mio); ESF 2007-13: 472 Mio. (442 Mio: 2014-20)	So far just 1 project in case study (about 400,000 Euro ERDF support)
5.2. Transnational/int erterritorial cooperation	INTERREG Austria- Slovenia (2014-2020) ALPINE SPACE 2014-2020 CENTRAL EUROPE 2014-2020 DANUBE Transnational 2014-2020 (following SOUTH-EAST EUROPE)	Trans-border cooperation 3 Trans-national programmes Innovation, transport, natural and cultural resources, and low carbon priority areas	Continuation of cooperation process since the 1990s; strengthening competitivene ss, environmental development, institutions; total funds 45 Mio. AS: 140 Mio. (117 Mio ERDF vs. 130 Mio in 2007-2013) CE: 246 Mio. ERDF DAN: Identical with area of Danube Macro regional strategy (202 Mio ERDF, and 20 Mio IPA)	Case study in center of cooperation area; (few partners in period 2007-2013; none so far in 2014-2020 implementation)
5.3. Other initiatives Rural Development prog	Macro Regional Strategies DANUBE (EUSDR) and EUSALP	Environment and climate objectives Themes: Innovation, mobility and environment	1996-2012: project investment 154 Mio. all over Austria.	
5.4. Specific policy measure financed by the RDP	ESI programme periods (2007-2013;	Rural development, with focus on public goods,	See wide ranging scope of Pillar 2 (total funds	11.4 Mio (2014)

	2014-2020),	including rural	EAFRD 3.938	
CAP, Pillar 1	and previous On-going	vitality Retain	bio.) Direct	8.7 Mio (2014)
CAI, I IIIdi I	On-going	agricultural	payments and	0.7 WIIO (2014)
		production	market	
5.5. Leader initiative		potential	support	
LAG "Unterkärnten"	2007 – 2013	"Enhancement	Several	29 projects in
(regional cooperation of		of attractive	projects in	the region of
3 sub-regions: Lavanttal,		space and	tourism, e.g.	Lavanttal:
Rosental and Südkärnten)		economic area, at the	tourism trails, quality prod.;	total costs 6.1 Mio (support
		cross-road of	cultural	2.7 Mio)
		three	activities, and	
		cultures"	economy (skills, youth,	
			regional	
			economy;	
			Exposition Europe)	
LAG "Regional-	2014 - 2020	"Live	Besides	5.3 Mio. Euro
kooperation		Diversity!"	tourism,	
Unterkärnten" (regional cooperation of 3 regions:		family- oriented and	mobility focus (incl. cycling)	
Lavanttal, Rosental and		generation	and economy	
Südkärnten)		supporting	("House of	
		strategy; open to new ideas /	Region", regional	
		participation.	products)	
5.6. Other initiatives			,	
*Verein Lavanttaler	Repeated	Economic	Not any more	No indication
Wirtschaft (2007): Masterplan Laventtaler	discussion and orientation	strategies for region	documented in web-sites	on support funds
Wirtschaft 2007-2013.	towards future	3		
Wolfsberg	perspective of			
*Verein Lavanttaler Wirtschaft (2010): Der	economy			
Lavanttaler Weg.				
Wolfsberg (Projekte der				
Lavanttaler Wirtschaft) 6. National/region	∣ al/local scheme	s (own funds)		
Process: "Quo vadis	2008	Regional	Several	No indication
Lavanttal?" a regional		development	singular	of required
development process initiated by regional		process, initiated by	events to build	support funds
entrepreneurs of the		regional	awareness in	
regional economic		enterpreneurs	a wider	
association "Verein Lavanttaler Wirtschaft		and association	audience and to collect	
(VLW)		VLW; aim:	relevant	
		flagship	topics for the	
		region for equally	future	
		economic		
		power and		
*Smart Dogion Lavanttal	2014-2020	quality of life. Positioning of	38 project	Implementatio
*Smart Region Lavanttal 2014 bis 2020	2014-2020	the region as	ideas	Implementatio n in the frame
		attractive	developed	of LEADER
		living area for	along eight	
		old and young "region of	strategic themes from	
		generation".	economic,	
		Slow down	environmal to	
		and reverse of negative	social developmentt	
	i .	nogative	acvelopinenti	I .

		population development		
*Climate and Energy model regions (Lavanttal), with participating municipalities: Frantschach-St. Gertraud, Preitenegg, St. Andrä, St. Paul im Lavanttal, Wolfsberg	Since 2012	Short- and medium-term activities for increasing energy efficiency and "regional" self-provision	Project themes: heating, e- mobility, solar energy, capacity building, monitoring, bio-economy.	Financed by climate and energy fund; implementatio n plan and support by manager for model region.
*Landesplanung Kärnten (2007): Regionales Entwicklungsleitbild Wolfsberg, Arbeitsprogramm 2007 bis 2013	2007 - 2013	Positioning of region as attractive living space, in between two agglomeration s.		
*National investment package for infrastructure in Austrian communities (2017)	2017-2018	Investment package for all municipalities of Austria	Infrastructure investment (sewage improvement; kindergarten; torrent prevention etc.)	About 1.0 Mio (2017)
Strategy for Employment and Qualification in the province Carinthia (2020+)	2014 - 2020	Focus: regional labour market; Territorial Employment Pact (TEP); linked to ESI- funds 2014- 2020 labour policy efforts for: reduction of unemploymen t, securing existing jobs, combatting poverty and out-migration and loss of high-qualified human capital.	First implementation report 2016: 64% of planned budget already used.	Cooperation between Labour Market Service (AMS) and provincial government, and social stakeholders, Until 2013 supported by ESF through TEP cofinancing, since 2014 not any more possible, but financed nationally (by AMs, province, EFS, own contributions etc.), for Carinthia 33 Mio Euro (for case study 4.1 Mio (2016) support.

Annex 4: Table III. Governance structures

Governance structures			ctors in the proces	
Types of policy/programme	Strategy design	Composition of the partnership involved in the project	Project implementation	Project financing and control
7. Regional/Cohesion policy	hardly any	mainly prepared at national level, with contriobutions from 9 provinces, and stakeholders	At national level (ÖROK) and support/guidance by provinces	In finding appropriate projects (through Regional Management clearing office)
7.1. Specific policy measure financed by the Operational Programme (ERDF, ESF)	Taken up by CS strategies	Social stakeholders, association of enterpreneurs, mayors and regional actors	Supported by provincial government (ERDF) and Labour Market Service (AMS)	Few relevant projects (EFRD); more widespread for ESF (skills development, unemployment)
7.2. Transnational/interterritorial cooperation	Only if personal interest	Only occassionally	Supported by national/provincial administration	Hardly relevant projects; depending on partnership
7.3. Other initiatives	as 8.2	as 8.2	National implementation; provincial support	Project ideas and partnership
8. Rural Development programmes (EARDF)	No role for concept	-	-	-
8.1. Specific policy measure financed by the RDP	Project application	Mostly individual, but some collective (e.g. cooperation)	Short to medium- term	Through application scheme for RDP (from regional to provincial to national)
8.2. Leader initiative	Specific LAG; with many active local actors	Regulated in LEADER provisions; aiming at balance	Time schedules important; long delays, decision process; local relevance; LDS reference	Mainly small- scale projects; increasing control mechanisms; access of information
8.3. Other initiatives	Undefined, but interest in sub- regional concepts	Dependent on focus: more economic action favoured; social dimension weaker	Repeated strategy developing processes (since more than 10 years), with limited impact	Hardly financial outcomes of strategies / overlapping activities
9. National/regional/local schemes (own funds)	Some local action (like Climate Fund)	Local stakeholders, need of clear strategy	Local and provincial/national level (shared)	Small funds; but available to all areas

Annex 5: Table IV. Socio-economic characteristic of administrative units of case study area (internal structure)

	Wolfsberg District	Bad Sankt Leonhard im Lavanttal	Frantschach-Sankt Gertraud	Lavamünd	Preitenegg	Reichenfels	Sankt Andrä	Sankt Georgen im Lavanttal	Sankt Paul im Lavanttal	Wolfsberg
Population density per km ² (2013)	55.2	39.9	26.8	32.6	14.2	21.4	89.9	27.9	72.5	89.7
Total population (2013)	33.2	0717	20.0	32.0			0717		72.0	3717
	53,707	4,462	2,711	3,061	968	1,870	10,205	2,021	3,431	24,978
Population development (2002-2013), in %										
Population	-4.9	-7.7	-13.0	-12.6	-14.2	-9.7	-4.8	-5.4	-5.8	-1.2
development age 18-30, (2002- 2013) in %	-16.8	-22.4	-12.7	-24.3	-23.3	-28.8	-19.1	-12.3	-28.8	-11.1
Old age dependency ratio (2002)										
	26.2	25.1	31.1	27.6	32.8	23.0	24.8	22.5	22.6	27.1
Old age dependency ratio (2013)										
Condor	31.9	33.3	37.5	32.6	39.5	28.0	30.3	26.3	32.2	32.1
Gender Imbalance (2013)										
F.1	97.8	97.6	98.5	100.3	110.0	102.8	101.4	96.6	98.7	95.3
Ethnic composition (2013) in %										
	4.2	3.4	7.4	2.8	1.8	2.5	2.9	1.9	3.7	5.3
GDP per capita in PPS (2014) only NUTS 3	28,300									
Unemployment	20,300									
rate (2014)										
	5.8	4.2	7.0	6.1	3.9	2.7	5.6	4.6	6.1	6.4

Youth unemployment rate (2013)											
		9.6									
Share of employee		s per sect	tor (200	9, 2013	, 2015)	in %					
2009	Primary	7.9		·			·	•			·
	Secondary	35.8									
	Tertiary	55.9									
	Unknown	0.3									
	Primary	8.0									
2013	Secondary	3.,7									
	Tertiary	57.0									
	Unknown	0.3									
2015	Primary	8.0									
	Secondary	33.8									
	Tertiary	57.4									
	Unknown	0.8									
Share of tertiary educated people (according to ISCED, 2014)		15.7	13.7	12.0	12.1	11.5	14.7	14.6	11.9	16.1	17.9

Annex 6: Table V. Content analysis of coping strategies documents

Relevant initiatives from table II and III, which:

- had or are having major impact in the study area (as perceived by local actors);
- among those carried out in the last 10 years;
- possible one of them should be carried out (or is carrying out) in the most recent years

Document 1	
Title	Local Development Strategy (LDS) Unterkärnten; (document title "Smart region Lavanttal 2014-2020")
Information and status of the document:	LEADER programme for case study region, together with 2 neighbouring areas (together NUTS 3 region), selection of LAG in June 2015 (Kick-off on 24 June 2015)
Type of the document (plan/strategy/)	Strategy document for period 2015-2020
Governance level/levels (local/regional/)	Local/sub-regional level, implemented at case study level
Synthesis/general foundings of the document – in context of peripherality of case study region or its part	The document builds on the previous strategies for the sub-region and is intended to provide the background for the application of EU2020 strategy in the case study. Focus is on SME development, mobility and social development. Maion objective is to reverse the population decline by strengthening the locl economy, enhancing balanced tourism and enable attractive and qualitative spatial development for all generations. It is essential to provide this through participative processes and balanced territorial application and projects throughout the case study, in particular taking into account of weak accessibility and development at the remote parts of the area.

Document 2	
Title	Rural Development Programme (RDP) Austria 2014-2020
Information and status of the document	Approved by EC (12/12/2014) as a national programme document specifying the main priorities and rules for application
Type of the document (plan/strategy/)	National programming document with priorities for application of various instruments; mainly following experience of previous programming periods and continuing country-specific application (with amendments)
Governance level/levels (local/regional/)	Draft of programme, and responsibility with Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW), but with stekholder dialogue etc. as prescribed trhough EC regulations; however, limiting the role of local/sub-regional actors to informative and place-based queries
Synthesis/general foundings of the document – in context of peripherality of case study region or its part	Main focus of the programme is, as was the case since the first application of rural policy for Austria in 1995, on agri-environemntal

measures. This are grouped in the national Agri-environmental Programme (called ÖPUL) which has one of the highest participation rates in the EU. It also amounts to more than 50% of funds of the big RDP programme of Austria, with funds for organic farming being now provided separately, i.e. in addition to AEM. In response to a shift towards climate measures the labelleing of the measures include the climate aspect, now "Agri-Environemntal and Climate Measures" (AECM). Beyond that set of instruments, Austria is applying very largely the scheme of the former "Less-Favoured Areas" support, now entitled Areas of Natural Constraints, with a specific focus on mountain farming support. Evidence of regional application shows that both measures are particularly widely apllied in the case study area, with 43.4% on ÖPUL-measures (5.0 Mio in 2014) and 48.8% for ANC support (5.7 Mio in 2014). In particular, the mountain farming support is very high in the area and exceeds the national level, but also comparison to similar regions. It should be noticed that these payments are due to horizontal measures that are not specifically elaborated for the region, but have a significant effect and impact on land management and agricultural performance in the region.

Annex 7: Table VI. Content analysis of newspaper archives – image / stigmatization

		Number of articles
Size of the article	Short (less than 1 page)	15
	Medium(1-2 pages)	45
	Long (more than 2 pages)	16
Author of the article	Journalist	51
	Publicist/expert	19
	Local authority	6
Author's attitude	Positive	31
	Neutral	36
	Negative	9
Context	Positive	17
	Neutral	13
	Negative	46

Note: Negative or positive image of the case study area according to brief screening of nation-wide newspaper archives; based on newspapers query with keywords of the rcase study area (various names) and terms of 'periphery', 'decline', 'crisis', 'problems', 'underdevelopment', lagging' for last 5 years.

Source: regional (Kleine Zeitung, regional edition; Lovntal; mein bezirk) and national (Die Presse; Salzburger Nachrichten, der Standard) newspaper archives (2012-2017)

Annex 8: List of experts

1.	Expert with experience of local development planning in study area
2.	Expert with experience of regional development planning
3.	Local policy maker
4.	Representative of association of private entrepreneurs in the area
5.	Regional economic stakeholder
6.	Representative of regional employment service
7.	Leader of education unit
8.	Local policy maker
9.	Representative of NGO
10.	Strategic planner
11.	Local policy maker
12.	Regional journalist
13.	Regional economic stakeholder
14.	Expert responsible for specific regional strategy (climate change)
15.	Strategic regional planner

References

- ¹ Photo by I. Machold (2017)
- ² Schürmann, C. (2017a) Delineation 4 Depleting Areas (Results), TN 20.4, ESPON Profecy, last update: 22/06/2017. Oldenburg (Germany).
- ³ Schürmann, C. (2017b) Delineation 3 Combining Results. Options 1-4, ESPON Profecy, last update: 14/07/2017. Oldenburg (Germany).
- ⁴ TeIR (2017) Regional Development and Spatial Planning Information System. www.teir.hu
- ⁵ Statistics Austria (2017) Volkszählungen, Registerzählungen, Abgestimmte Erwerbsstatistik. Available at:
- https://www.statistik.at/web_de/statistiken/menschen_und_gesellschaft/bevoelkerung/volkszaehlungen_registerzaehlungen_abgestimmte_erwerbsstatistik/index.html (accessed 27 June 2017).
- ⁶ Machold, I., Dax, T. und Strahl, W. (2013) *Potenziale entfalten, Migration und Integration in ländlichen Regionen Österreichs*, Forschungsbericht 68, Bundesanstalt für Bergbauernfragen, Wien, 168pp. Available at: http://www.berggebiete.at/cm3/de/download/finish/16-forschungsberichte/510-fb68.html (accessed 14 June 2017).
- ⁷ Dax, T., Fidlschuster, L., Fischer, M., Hiess, H., Oedl-Wieser, T. and Pfefferkorn, W. (2016) Regionen mit Bevölkerungsrückgang, Experten-Impulspapier zu regional- und raumordnungspolitischen Entwicklungs- und Anpassungsstrategien, Analyse und strategische Orientierungen, Endbericht, Wien: Bundeskanzleramt, 96pp. Available at: http://www.zukunftsraumland.at/index.php?inc=download&id=1172 (accessed 18 July 2016).
- ⁸ Statistics Austria (2017) Abgestimmte Erwerbsstatistik Pendlerzeitreihe ab 2009. Available at: http://statcube.at/statistik.at/ext/statcube/jsf/tableView/tableView.xhtml (accessed 23 June 2017).
- ⁹ Groß, H.P., Strohmeier, G., and Ukowitz, M. (eds.) (2009) Zukunftsgestaltung als Prozess. Kulturell nachhaltige Wirtschafts- und Lebensraumentwicklung am Beispiel des Kärntner Lavanttales. Oekom Verlag: München.
- ¹⁰ Österreichisches Institut für Raumplanung ÖIR (1996) Regionalbericht 1996. Südösterreich, im Auftrag des Bundeskanzleramts, Wien.
- ¹¹ Mossböck, J., Steiner, M. and Apschner, C. (2016) Smart development in rural regions: an analysis of two Austrian case study regions. Case study report, TASTE-project, ERA-Net RURAGRI, Graz.
- Haberfellner, C. (2014) Smart Region Lavanttal 2014 bis 2020, Rahmenprogramm. Regionalmanagement Lavanttal. Innsbruck.
- ¹³ Wiest, K. and Leibert, T: (2013) Final Report, Main report and Scientific Report, ESPON 2013 project "Selective Migration and Unbalanced Sex Ratio in Rural Regions" (SEMIGRA), ESPON and Leibniz Institute for Regional Geography.
- ¹⁴ Dax, T. (2017) Demographischer Wandel und geschlechtsspezifische Ausprägungen, ÖREK-Partnerschaft: Strategien für Regionen mit Bevölkerungsrückgang, Workshop 3. Bundesanstalt für Bergbauernfragen, 19 pp.
- ¹⁵ ÖIR Projekthaus (2015) Graphisches Informationssystem. Bezirksprofile 2015, im Auftrag des Arbeitsmarktservice. p.6. Available at: http://www.arbeitsmarktprofile.at/208/index.html (accessed 5 July 2017).
- Mondi (2017) Mondi Frantschach GmbH. Available at:: http://www.mondijobs.at/de/desktopdefault.aspx/tabid-1661/ (accessed 17 July 2017).
- ¹⁷ ÖROK Österreichische Raumordnungskonferenz (1981) Österreichisches Raumordnungskonzept. Series No. 28, ÖROK, Wien.
- ¹⁸ ÖROK Österreichische Raumordnungskonferenz (2011) Österreichisches Raumentwicklungskonzept ÖREK 2011. Series No. 185, ÖROK, Wien.
- ¹⁹ Gruber, M. and Handler, R. (2016) *Policy Framework for Smart Specialisation in Austria*. Series No. 199, Austrian Conference on Spatial Planning (ÖROK), Wien.
- ²⁰ Dax, T. (2001) Endogenous Development in Austria's Mountain Regions, From a Source of Irritation to a Mainstream Movement, in: *Mountain Research and Development*, 21(3), 231-235.
- ²¹ Organisation for Economic Co-operation and Development (OECD) (1998) Rural Amenity in Austria, A Case Study of Cultural Landscape, Group of the Council on Rural Development, C/RUR(98)4, Paris,115p.

- ²² Dax, T. (2004) The impact of EU policies on mountain development in Austria, paper at the Regional Studies Association International Conference "Europe at the Margins: EU Regional Policy, Peripherality and Rurality", 15 16 April 2004, Angers, France.
- ²³ Österreichisches Institut für Raumplanung ÖIR (2009) "Räumliche Strategie zur Landesentwicklung Kärntens STRALE!K", Raumordnung in Kärnten Band 31, im Auftrag der Abt. 20-Landesplanung, Klagenfurt.
- ²⁴ Land Kärnten (2015) Strategische Landesentwicklung Kärnten STRALE 2025, Kurzfassung. Klagenfurt.
- ²⁵ Plaimer, P., Reiner, V. and Schönherr, I. (2015) Die Region der Generationen, Lokale Entwicklungsstrategie der LAG Regionalkooperation Unterkärnten 2014-2020.
- ²⁶ Euromontana (2017) Cohesion Policy in Mountain Areas: How to increase the contribution from mountains and benefits for mountain territories? Proceedings of the Conference organized by DG Regio and Euromontana, 7 June, Brussels, p. 10.
- ²⁷ Noguera, J. et al. (2017) PROFECY Inner Peripheries: national territories facing challenes of access to basic services of general interest, interim report, p. 54ff.



ESPON 2020 - More information

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