ESPON

PURR
Potentials of Rural Regions

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This report presents the draft final results of a Targeted Analysis conducted within the framework of the ESPON 2013 Programme, partly financed by the European Regional Development Fund.

The partnership behind the ESPON Programme consists of the EU Commission and the Member States of the EU27, plus Iceland, Liechtenstein, Norway and Switzerland. Each partner is represented in the ESPON Monitoring Committee.

This report does not necessarily reflect the opinion of the members of the Monitoring Committee.

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This basic report exists only in an electronic version.

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List of abbreviations

BBR	Federal Office for Building and Regional Planning, Germany
CAP	Common Agricultural Policy of the European Union
CC	County Council
CEEC	Central and East European Countries
CORINE	Coordination of information on the environment
CSP	Central Statistical Bureau of Latvia. *Latvijas centrālās statistikas pārvalde*.
CURS	Center for Urban and Regional Sociology, Romania
DEMIFER	ESPON project "Demographic and Migratory Flows Affecting European Regions and Cities"
DG Agri	Directorate-General for Agriculture and Rural Development of the European Union
DG Regio	Directorate-General for Regional Policy of the European Union
DFR	Draft Final Report
EDORA	ESPON project "European Development Opportunities in Rural Areas"
FR	Final Report
ESDP	European Spatial Development Perspective
ESPON CU	ESPON Coordination Unit
ESPON 1.3.2	ESPON Project "Territorial Trends in the Management of Natural Heritage"
ESPON 2.3.2.	ESPON Project "Governance of Territorial and Urban Policies from EU to Local Level"
EU	European Union
Eurostat REGIO	Eurostat statistics on regions and cities
FOCI	ESPON Project "Future Orientation for Cities"
GDP	Gross Domestic Product
GVA	Gross Added Value
ICTs	Information Communication Technologies
HDI	Human Development Index
HPI	Happy Planet Index
IMF	International Monetary Fund
INTERCO	ESPON Project "Indicators of Territorial Cohesion"
IOM	International Organization for Migration
IR	Interim Report (referring to the PURR re-submitted IR)

IRPUD	Institute of Spatial Planning, Dortmund University
LSBU	London South Bank University
Natura2000	Ecological network of protected areas in the territory of the European Union.
MEGA	Metropolitan European Growth Area
NGOs	Non Governmental Organisations
NIBR	Norwegian Institute for Urban and Regional Research
Nordregio	Nordic Centre for Spatial Development
NSI	National Statistical Institute
NUTS	Nomenclature of Territorial Units for Statistics.
PPP	Public-Private Partnerships
PPP	Purchasing power parity
PPS	Purchasing Power Standard
PURR	Potential of Rural Regions.
R&D	Research and Development
ReRisk	ESPON project "Regions at Risk of Energy Poverty"
SMEs	Small and Medium Enterprises
SWOT	Analysis of Strengths, Weaknesses, Threats and Opportunities
TeDi	ESPON Project "Territorial Diversity in Europe"
TPG	Transnational Project Group (example)
UK	United Kingdom
VUC	Vidzeme University College
VRAA	State Regional Development Agency in Latvia. *Latvijas Valsts reģionālās attīstības aģentūra*.
VZD	State Land Service of Latvia. *Latvijas Valsts zemes dienests.*
WGI	World Governance Indicators developed by World Bank

Foreword by the TPG

PURR (Potentials of Rural Regions) is a Priority 2 Targeted Analysis commissioned by ESPON. Five stakeholder regions took the initiative in ESPON and became contributors to PURR. Notodden (Norway) was the lead stakeholder. In addition, three stakeholders from the UK (Dumfries and Galloway, North Yorkshire, and the Cambrian Mountains) and one from Latvia (Amata and Vidzeme) participated.

Three institutes constitute the TPG. The LP is NIBR (Norway), while VUC (Latvia) and LSBU (the UK) are project partners and have developed the project together. Each of the institutes has worked with the stakeholder regions in their country. The concepts applied have been developed by the institutes together, but each of them has had the main responsibility for theories and "the Template" (LSBU), the methodology (NIBR) and the use of ESPON and other "external" information (VUC). Lowie Steenwegen has contributed to the regional workshops, both by aiding with developing the guidelines for these meetings and by participating at them.

The analysis is based on the original Tender from ESPON, where the stakeholder driven project was presented in some detail. By being quite detailed, ESPON left very little room for interpretation by the applicants. This was also emphasised by the TPG in the application for the project. In the Inception Report and the Interim Report, the TPG based its analysis very much on inputs from the stakeholders, who were asked to contribute in providing qualitative and quantitative information, as well as to provide feed-backs in the methodology development. Focus in the Interim Report was therefore the stakeholder regions, and the proposed methodology was highly inductive or bottom up (BU). ESPON was not satisfied with this, and asked the TPG to re-submit the Interim Report (the re-submitted report is abbreviated IR) focusing on a methodology that more clearly combines ESPON data, typologies and other results with the BU methodology already proposed. The proposed methodology of the IR then more clearly became a combination of top down (TD) and BU methodologies. The TPG has not yet received any comments from ESPON to the IR and must therefore assume that the IR to a higher degree meets ESPON's requirements.

The delay due to the re-submission of the Interim Report contributed to a delay in the project completion compared to the original plan. The DFR is more similar to the IR than it would have been, if we compare it to the original Interim Report. Therefore, some of the information from the IR will be repeated below. In addition, there are a few points, especially regarding the use of parts of the guidelines (the "Template") for analysis on the stakeholder level, which require further analysis towards the FR and will be addressed there.

The TPG wishes to thank everybody who has participated in the project, and in commenting the concepts, the analysis and the different documents that have sprung out of the project. First and foremost there has been extensive contact with representatives from the *stakeholder regions*. Although there were some difficulties to start with, the TPG thinks that everything worked out fine in the end. Without Lowie Steenwegen's participation, the workshops' efficiency would have been considerably lower. Finally, ESPON and the ESPON CU have contributed with very useful comments, especially to the original Interim Report.

In this sense, the DFR is the result of contributions from many people. Hopefully, the result is in the vicinity of what the stakeholders and ESPON wished it to be, and at the same time useful for future analysis in other regions. The TPG is, however, responsible for the DFR. Any shortcomings therefore rest on them.

Table of contents

A. Executive summary

PURR (Potentials of Rural Regions) is a Priority 2, Targeted Analysis. This means that the project is commissioned by ESPON, and that it is based on stakeholder demand. In the PURR case, five stakeholder regions in the UK, Latvia and Norway participate in the project and are, together with ESPON, responsible for developing the project specification. The TPG interpreted the project specification in its application to ESPON and won the bid for the project. Together, the project specification, the application and the subsequent Inception and Interim Reports (and comments from the ESPON CU), form the framework for this DFR.

The overall subject of the project is the assessment of territorial potentials in rural regions, or rural potentials. On the one hand, the stakeholder regions are of course interested in the project contributing in the assessment of *their* rural potentials, in applying the assessment in their regional development strategies and plans, and in developing a set of policy measures that can be used for supporting these strategies and plans. This is probably why they found the subject of rural potentials interesting in the first place. ESPON, as a representative of the whole of Europe, is on the other hand probably just as interested in the project's contributions for developing a more general *methodology* that can be applied when assessing the territorial potentials of all (rural) regions. They are also interested in the question of how existing ESPON data, typologies and research projects can be used as a part of the methodology for assessing rural potentials.

In other words, there are two perspectives or directions that have been followed during the project. One is the *general perspective*, where we have tried to develop a methodology for assessing territorial potentials that is applicable in all (types of rural) regions in Europe. The other is the *stakeholder perspective*, where we have tried to assess the rural potentials of the stakeholder regions. These two perspectives have been important throughout the project, and the final result has been dependent upon feedbacks between the two perspectives. In our view, assessments of rural potentials cannot be made without inputs from local actors (stakeholders). They know their region and are able to provide information that is not accessible elsewhere, but is crucial for assessing the potentials. At the same time, local actors are also the ones that have to make the strategies and plans within which the rural potential assessment are to be applied. On the other hand, these assessments cannot be made without a methodological framework or a general perspective at hand.

PURR is not primarily about generating new data, maps and typologies for the ESPON database. In this sense, PURR deviates significantly from the ESPON priority 1 projects. Instead, information (data, indicators, maps and typologies) from existing

ESPON projects have been applied, together with info from other sources (including national and regional statistical information, and "soft" information from the stakeholders), to form the basis for this priority 2 project. The findings of PURR, therefore, first illustrate how information from ESPON priority 1 projects can contribute to analysing selected European regions. Second, they illustrate that information from selected priority 1 projects has been important in developing the methodology. This means that the contributions from PURR to the ESPON database are more how to apply existing ESPON results in case studies and in developing methodologies, than new statistical information. An important result from PURR is also that the stakeholder perspective (and "soft" information) as well as ESPON data (and other "hard" information) both are important in assessing territorial potentials of (rural) regions.

A1. Analysis, Key Messages and Findings

Regional development is influenced by many factors. Globalisation, international development, policy trends and so on are examples of such (exogenous) factors. Regional assets, and regional actors' adaption to these conditions, are of course also very important (endogenous) determinants behind regional development. Regions therefore develop differently, according to how they are influenced by exogenous factors (which again depends on how they compare to other regions structurally and in other ways) and to how they themselves can utilise their resources endogenously. In section B and C, we have discussed the shift in the view (paradigm) on regional development, where regional assets and responses (endogenous factors) have become increasingly important factors in regional development, where earlier both assets (at least in the form of capital) and policy responses were more important. This shift from a Top Down (TD) to a Bottom Up (BU) view on what determines regional development can also be seen as a part of the neo-liberalist and individualistic paradigm we are in today. This does not mean that the concept of competitiveness (between regions) and laissez-faire is the only guideline. There are still interventions, but in a different way. Today, interventions are more directed towards promoting endogenous development.

Endogenous development also means that regions will develop differently, since their assets and actors differ. In general, rural regions will face more challenges than urban ones. Therefore, the question of how to promote regional development in rural areas (based on their assets and actors, and not on exogenous factors) is very important. This, again, is of course a question of utilising existing resources in rural areas in a way that secures that the region develops positively. The concept of *rural potential* is used for describing a desirable path of regional development in a rural region. The rural potential depends on which features the region possesses, and how these features can be utilised.

The concept of *territorial capital* suggests that all regions are unique and refers to the specific characteristics or talents of a region, including both tangible and intangible factors. This concept has increasingly been promoted, both within recent EU policies and within the academic discourse, as a means of strengthening regional competitiveness in regions where the market fails in contributing to the area's potential. Therefore, the concept has become particularly attractive to rural regions, especially in geographically peripheral locations that by definition tend to have more limited potentials and therefore face greater development challenges.

Territorial capital is a complex concept that is difficult to identify and to measure, due to the intangible and qualitative nature of some of its elements. TD quantitative methods and data are therefore unlikely to be able to identify territorial capital with accuracy. Recent research suggests that intangible assets have become the key to enabling each rural region to fulfil its potential. These assets are frequently hidden from external observers and "they can only be captured on a region to region basis by some form of qualitative auditing" (Copus 2010: 58). The PURR project contributes to the development of an auditing methodology to assist with the identification of intangible assets.

Despite this however, there remains a strong emphasis on such quantitative data when seeking to identify an area's territorial capital and inform policy decisions due to the ease with which such data can be obtained and analysed. There has been much discussion in the context of ESPON and other knowledge arenas about the need to find a means to identify the intangible assets of territorial capital and this will involve accessing the more qualitative and tacit types of rural knowledge often possessed by regional and local stakeholders.

Proposed methodology

The concept of how to combine existing (macro) information with information from stakeholders with the aim of revealing a region's territorial potential has been a baseline concept for PURR. One might argue that the question of *how to do this* is at the core of the methodology proposed by the project. A four-step methodology, which tries to answer this question, was therefore developed (see section B2 or C3) within PURR:

- *Step 1 Benchmarking*: The main feature here is a two-stage Magnifying Glass Method, which aims at using existing information to benchmark the region in a European and national (and regional) perspective using data and typologies mainly from EDORA and national sources. In chapter C4, the European benchmarking has been done. The Magnifying Glass method is explained in chapter C3.

- *Step 2 The Regional Context and Stakeholder Perspective*: The purpose of this step is to gather supplementary information from the stakeholder regions. We have proposed a four-stage procedure to gather this information. This involves informal discussions (stage 1), a more formalised work-shop with guidelines (stage 2), a template for discussing the results of the benchmarking process with the stakeholders, which is supplemented with a questionnaire (stage 3), and a SWOT analysis (stage 4). The template (stage 3) is elaborated further in section C2.
- *Step 3 Assessing the Territorial Potential*: The purpose of this step is to apply the information from the previous steps to discuss different regional development perspectives, and to discuss which of them best represents the region's territorial potential.
- *Step 4 Policy Options and Future Development*: The purpose of this step is to discuss what actions to take to reach the territorial potential, within the general framework of which options that exist. This step might include a discussion of *systematic scenarios*, which we will look into as a part of the Draft Final Report.

In other words, the proposed methodology combines a Top Down (TD) approach based on typologies of rural regions and national/regional data with a Bottom Up (BU) approach based on stakeholder inputs. The stakeholders have been very important contributors in developing the methodology. The methodology is developed to be "guidelines" for the process of assessing the territorial potentials of rural regions. We do not believe that a "black box" methodology, where inputs to the box automatically generate outputs in the form of territorial potentials and policy options, exist.

The four steps can also be seen as a the correct order (or timeline) in which to conduct an analysis based on the methodology. However, the steps overlap to a certain extent. However, the first two steps represent mainly the collection of information, while the two last steps represent mainly the analytical phase. The stakeholders are important actors in all four steps of the methodology. We would like to point especially at Step 3 and 4 of the methodology, which is thought to be based on dialogue with the stakeholders, since we do not believe that the methodology can be used as a "black box". The methodology secures that relevant information is gathered and ready to use in the assessment, by the stakeholders.

Case Studies in the Five Stakeholder Regions

The proposed methodology rests on scientific evidence implying that the *stakeholder perspective* is very important when it comes to identifying the intangible assets of territorial capital. Identifying this is crucial when it comes to identifying the

development potentials of a region. This implies that the stakeholders have been very important sources of information for the individual case studies. At the same time, the dialogue between the stakeholders and the TPG has been very important for developing the four-step methodology in general, but especially when it comes to the contents of each of the four steps. Although the case studies primarily represent studies of each of the five regions, they also represent a first test of the proposed methodology. The methodology itself relies on the dialogue between the experts (the TPG) and the stakeholders. In this sense, the methodology is dynamic and intensive, rather than static and extensive. Without the dialogue, it would have been impossible to arrive at reliable conclusions about territorial potentials. We would like to repeat that the conclusions (especially step 3, about potentials) also are based on dialogue, and that the methodology meant to generate processes rather than providing one (and only one) "black box" based answer. We will not go into the details of the individual case studies here (see section C5). Instead, we discuss the main conclusions from the five studies together.

The workshops generated a considerable amount of qualitative data and the fact that the workshops were organised according to the same structure means that commonalities and differences can be discussed. It became apparent that there is some diversity in terms of the specific emphasis between the different regions. To a certain degree the emphasis is influenced by the roles and agendas of the people that participated in the workshops, but also reflects the diversity of the regions. The diversity of the PURR regions is confirmed by the diversity of the rural typologies that illustrate the differences in terms of accessibility, economic performance, demographics and a variety of other characteristics. Such diversity is useful in the sense that one of the aims of PURR is to develop a methodology (section B2/C3) that can be applied to a variety of different regions. Applying the methodology to the PURR regions has been a useful learning process.

The TPG found that the territorial capital of the five stakeholder regions is highly diverse. The emphasis in Notodden and Dumfries and Galloway appears to be on the role that *the towns can play in driving regional development*. There was considerable discussion with the regional stakeholders in Dumfries and Galloway about the differences between such regional development strategies that focus on towns as motors of development compared to rural development strategies that focus more specifically on rural issues such as upland farming. The stakeholders in Notodden (and Tinn) emphasised the fact that both the past and the future for the town and wider region are intrinsically linked to the industrial heritage.

Stakeholders in all of the case study regions are understandably concerned about the impact of the economic situation, though the situation in Latvia seems to be considerably more serious than in the other regions. The situation is likely to

exacerbate the current challenging economic and demographic situation. In case of Vidzeme decline in population will have considerable effects in rural areas. One of such effects will be the unemployment risk in the education sector, in which currently considerable amount of people are employed.

Another impact of challenging economic and demographic situation appears to be that *stakeholders are focusing much more on short-term survival rather than long-term strategic planning*. The nature of the problems in Vidzeme contrasts with the challenges in North Yorkshire where stakeholders are concerned about their ability to be able to make their rural issues and challenges more visible. There is also considerable uncertainty in relation to the rapidly evolving governance landscape in England, though there is a clear desire to be proactive in capitalising on the opportunities offered by the new structures. The key task in the Cambrian Mountains appears to be building on the momentum of the ongoing Cambrian Mountains Initiative and to help strengthen the identity of the area as a brand.

In Latvia and the UK, the *cuts (and proposed cuts) in public spending* limit both development (employment, unemployment, population) and the local public sector's ability to be a driving force in regional development. Stakeholders in Notodden, on the other hand, are satisfied with the provision of local public services and are not to the same extent worried about future public spending. However, de-population might inflict local public sector income and the provision of public services also here, but this is not linked specifically to the general economic situation. This difference of course reflects the countries' different economic and political situations, which again have impacts on regional and local authorities' fiscal situation. It is interesting, in this sense, to notice that the Stakeholders in Latvia propose income tax cuts as a means for achieving more competitiveness and production in the region.

More generally, though, *the governance structures seem to be in focus* in all Stakeholder regions, but in different ways. The Governance structure is changing dramatically in England, and the extent to which this represents a re-centralisation or de-centralisation of power and the type of opportunities that the new governance landscape offers to local authorities is still unclear. Stakeholders in Scotland and Wales appear to feel that the devolved governments have increased their proximity to the levers of power, though significant challenges remain, with strengthening identity being a key issue in each region. In Latvia, there is a centralised system of governance, which, together with declining public financing limits local public sector's ability to contribute in developing the region. In Norway, the local public sector is an active participant in local economic development, through both formal and informal networks. The municipality of Notodden also has (limited) financial capabilities aimed at private sector development and, of course, is a very important provider of public services directed towards the population.

Although endogenous economic development, or what the regional actor can do themselves, are in focus in our analysis, *exogenous conditions have also been discussed among the Stakeholders*. Their preoccupation with exogenous conditions correlates in a sense with the governance structure, where the Latvian Stakeholders seem to focus more on these than the others. However, certain Stakeholders in the Norwegian and UK regions also emphasised the importance of finding a balance between capitalising on endogenous assets and attracting and utilising exogenous resources.

Economic structures vary between the different Stakeholder regions, as does the focus on future development potential. All regions, on the other hand, have their economic base, which is also viewed an important part of their territorial potential. More specialisation of production, trying to capitalise from the regions' competitive advantages, is considered one direction to choose for the future, as is the interest for instance in developing tourism further. Stakeholders in all regions have discussed agriculture's role in rural development, but the importance of agriculture varies and its future potential in terms of employment remains limited in all regions. Infrastructure development is also regarded an important factor in developing the territorial potential. In addition to improving infrastructure, additional strategies for improving business competitiveness, such as promoting rural business partnerships, public-private partnerships and clusters, were seen as important opportunities for development in Vidzeme. Need for cooperation and coordination between business, education and public sector was also emphasised. It seems like economic recession has induced more active search for available options.

A Brief Assessment of the Process of Stakeholder Participation

In the TPG's view, the four steps of the methodology combine different needs in a coherent way. The methodology adapts research, typologies and data from previous ESPON projects, while it at the same time allows information from stakeholder to be an important part of the analysis. The analysis shows that ESPON data and research based on the European level (NUTS 2 or 3) are not sufficient information for the needs of small regions. However, this information provides an important starting point for the analysis, while it at the same time illuminates the individual stakeholder region in a European perspective. More detailed information is necessary however, both to isolate the stakeholder region from the rest of its NUTS region, and to get more detailed information about structures within the stakeholder region. In addition, the qualitative assessments made by the stakeholders also contribute to increasing the usefulness of the methodology.

The TPG has also had feed-backs from the stakeholder representatives and their expectations connected to being a part of PURR. These feed-backs vary very much among the different regions. Unfortunately, the project had an unlucky start, as

several years passed by from the stakeholder regions expressed their interest in the project and it was actually started. Because many stakeholder representatives had left their previous work, some of the regions didn't know that the project existed. Therefore, it took many months for the TPG to be assigned to contact persons in some regions. Because of the delay, some stakeholder regions in the UK expressed that the project's theme was out-dated when the project started. The financial and economic crisis, followed by major cut-backs in public spending after the new UK Government was in place, are important factors to explain the UK stakeholders' views.

Some of the stakeholder representatives also expressed the view that they themselves knew best what their challenges and potentials are, not some external researchers/consultants, and therefore were not interested in the project to start with. This view led to some difficulties, but these were overcome, and the project has now more or less landed.

Most of the stakeholder representatives therefore have certain expectations regarding PURR. These range from relatively moderate (some representatives would like to see how the question of territorial potentials was discussed – and solved – in other rural regions) to relatively large (some wanted us to tell them how to solve their problems). This included to propose policy options to them and to tell them how to organise the provision of important services in times of population decline and reduced public income. In addition, some felt that the benchmarking of their region in a European perspective was important. Other representatives underlined the importance of benchmarking the region in a national (or regional) perspective as well. Finally, the representatives looked forward to receiving a "menu" (methodology) on how to assess territorial potentials. This is presented in chapter C2 (the Template) and C3 (the Methodology).

A2. Options for Policy Development

There are several ways to discuss the options for policy development connected to PURR. We could look at the broader and international policies, or we could look at the options available to the individual region. There are no general answers to the question if a policy intervention works or not, and the answers to this question are a matter of debate both among politicians and in the scientific community. It will not be addressed broadly here.

Cohesion and Competitiveness

The balance (or imbalance) between the general EU policies of competitiveness and cohesion is of course an important factor, and a pre-requisite for the analysis of PURR. In this sense, PURR focuses on how potentially weaker regions (rural regions) can utilise their assets in a better way in order to become stronger. If the weaker

regions are able to assess their assets, to utilise them, and to reach their territorial potentials, they will also become more competitive. This will, given that the rural regions are lagging, influence cohesion in the EU in a positive way.

However, PURR does not generate any general evidence to support this. The stakeholder regions of PURR were, at least to start with, interested in what their territorial potentials might be. This also means that they have accepted their role in developing their regions. As such, these regions are inhabited by actors that are interested in generating regional development. There are, in other words, certain strengths in these regions already. We do not know to what extent the concept of rural potentials can be applied to all regions, including the weakest of the weak. This question is very interesting in itself. Do such regions exist? Are regions which lack assets and territorial capital able to utilise their potentials? We do not answer these questions. These questions are linked to the more general question of whether it is possible to find policies that at the same time promotes both cohesion and competitiveness of regions, or if policies have to be either directed towards the one or the other.

Regional Policy Adaptations

If we look at the regional level, one might read out of PURR that *individual policies* will be significant when it comes to harnessing regions' territorial potentials. There is an array of policy options, which are limited by fantasy, and by the system of governance and the fiscal opportunities available. By individual policies, we mean policies that are tailor made for each region, based on the assessments of their territorial potentials. Here, we also focus on policies required for realising the potentials, not on other policy measures.

First and foremost, the assessment of territorial potentials has to be made. When the potentials are assessed, they are not yet realised. Realisation of these potentials requires that the regional assets are utilised *together* in the way necessary. Policy interventions should be directed at realising these potentials, or at making the assets work together in the way necessary. Given the goal (territorial potential), one has to create a strategy or plan on how to achieve this goal, proposing the best use of policy measures available. This also involves looking into the question of whether the "tool box" (the set of policy options) is sufficient for the goal to be reached. Then, one has to implement the best measures. For a policy measure to work, it has to be directed as directly as possible towards the problem. If all these steps are followed, the region's potential should be possible to reach.

Much of the problem is to make the regional assets work together (see section C2) towards the potential. When the assets are there, but they are not used in the best way, non-fiscal measurements could be sufficient. Among the most important examples of such measurements is to establish networks among regional actors

representing different forms of assets, and to guide this network towards accepting that the best strategy for the region as a whole is to work towards the region's potential. If all actors benefit from cooperating, the establishment of the network becomes a guide for getting out of the prisoner's dilemma.

Fiscal measurements are the fiscal means available to the regional public sector. If they exist, they should be used for supporting individual actors and/or networks working towards achieving the territorial potentials. They could take the form of physical or social infrastructure support, support to new enterprises, support for innovation, or other forms. Some regional authorities have such measures available, while others do not. Such measures might be very important for reaching the potential, and if measures do not exist, it might be necessary to discuss if it is possible to finance them locally, for instance in the form of Public-Private Partnerships (PPPs).

Combinations

Not many regions, however, exist in "limbo". They are parts of a system (or tiers) of governance, and there are often fiscal measures available that can be used by regions but which are financed outside the region. The EU, and/or national authorities often offer such measures. The Leader programme is one example (the EU), while regional support directed at businesses, networks and local municipal development funds is one from Norway. There is competition among actors to get these measures. We think that regions that have made an assessment of their potentials, including a strategy/plan towards achieving it, will benefit when it comes to competing for such measures.

Conclusions

There are many different ways to reach territorial potentials. The use of fiscal or non-fiscal policy measures is probably necessary. To select the best package of policy measures, the package has to be tailor made for each region. The regions differ, their assets and actor differ, and therefore their potentials differ. Therefore, a universal set of policy measures is not sufficient. In the worst case, such a set might lead to regions going in the wrong direction, since the policy measures themselves represent incentives. If a universal set of measures to reach rural potentials is developed, it should be designed in a way that allows regions to use it in the way necessary for them.

A3. Need for Further Analysis and Research

PURR is of course a project that, to some extents, rests on its own. A methodology for assessing territorial potentials has been developed, and case studies in five stakeholder regions have been produced. There are, however, especially two points

we would like to point at when it comes to further analysis and research. In addition, there are certain "missing" items in the DFR, which will be finalised toward the FR.

The Adaption of the Methodology

The methodology that was developed has only been adapted to the five stakeholder regions. These regions are different, as we have commented upon, but at the same time they possess certain similarities. The similarities are connected to the fact that all these regions were among the initiators of PURR, and that all of them are rural regions in one respect or other. The differences, on the other hand, are connected to structural conditions, systems of governance, size, location, nationality and so on.

Test the Methodology on More Rural Regions

In order to *test the methodology* further, we think it would be nice to apply it to more regions. The methodology was developed for rural regions. Therefore, we think that testing the methodology on more rural regions would be a good first step. This becomes even more important when we remember that the methodology was developed by the TPG *together* with the stakeholders. Given this testing, changes to the methodology should be discussed. The aim of PURR is that the methodology is general, in the sense that it is useful in any rural region.

Our hypothesis is, on the other hand, that the methodology in fact is general. Therefore, we think that testing will confirm that, and that the testing could lead to the methodology being applied elsewhere.

Other Types of Regions

The methodology was developed for *rural regions*. This means that it is meant to work best in regions that are not urban. However, we think that the methodology is more general than that. At least when we look at the range of urban-rural typologies developed by ESPON and others, the methodology could also be applicable to regions that are "less" rural than the five stakeholder regions, and perhaps even in large, metropolitan regions. The main problem is perhaps the size and complexity of urban regions, where the territorial potentials might be harder to assess and identify, and where there might be several reciprocal types of potentials. Therefore, it might be harder to achieve consensus about what the territorial potential is, and even about what factors that are important to pursue to achieve the potential.

Who Can Use the Methodology?

The methodology has been developed for use by stakeholders. We think that the initiative to assess territorial potentials has to come from them. In addition, the methodology requires that stakeholders provide the analysis with information in all four steps of the process, especially in step 2 to 4. This also includes contributions in assessing the territorial potentials, including in some cases making priorities between different regional development perspectives. In a sense, the stakeholders are in the

core of the methodology. This implies that it is difficult to assess the potentials of a given region using only information that is available in (all sorts of) databases. Outsiders will therefore not be able to assess the territorial potential without the aid of regional stakeholders. This is a central part of the methodology, and we more generally do not think that desktop analysis of territorial potentials is possible. Any methodology claiming that this is possible is in our view inadequate.

Given that there is a stakeholder initiative, who should be responsible for carrying out the analysis? Should an external expert do it? The PURR methodology has been developed by experts. These experts have also been responsible for the analysis (but in strong cooperation with the stakeholders). We do think it is possible for stakeholders to assess their regional potentials without the aid of experts. The roles of the expert (given the methodology) will mainly be to guide the stakeholders through the four steps of the methodology, to provide external information (from ESPON among others) and to represent a neutral party in the discussions. The expert will normally also function as the secretary for the stakeholders in the assessment process, and she represents experience from similar processes elsewhere. An important part of the expert's role is also to secure that the stakeholders agree upon what information they can consider objective, as opposed to subjective views that will be a part of the discussion between the regional stakeholders. If the stakeholders think that the aid of an expert is not required, it is possible for them to use the methodology with its accompanying guidelines to assess the regional potentials themselves. However, this has not been tested in PURR. Planning processes are, on the other hand, not new. Experience from these shows that either using or not using experts in similar processes might be successful (or not be successful). The result of the process depends on many other factors.

Developing the Methodology Further

The methodology developed in PURR has only been tested in PURR. Although it rests on experience from similar processes (from among others planning and foresight analysis) and on scientific knowledge, it is not perfect. First and foremost, since it has only been used on the five stakeholder regions, it is probably also a bit premature. Therefore, using the methodology in other regions might result in the need for reviewing the methodology.

The dissemination of the project implies presenting to both the user and the scientific community. There might be parts of the proposed methodology that need further development due to missing properties. Although we think that the methodology should rest on stakeholder participation, and that it should not be a "black box" but rather contribute to self-reflection among the stakeholders, there might be opposing views to this. Even among the PURR stakeholders, the hope for a "black box" was

present. The TPG thinks that the "black box" is not a fruitful direction to pursue, but the views on this might differ.

Missing in DFR

There are a couple of points still missing in the DFR. We have discussed with the stakeholders how future scenarios might be added to the case studies. In section C4 (but also in section C2), some ESPON scenarios are discussed, but not for the stakeholder regions as such. If there is time, we will add some more thoughts on the scenarios to the case studies, where we discuss how they would influence the stakeholder regions. We have not promised to develop detailed scenarios for the stakeholder regions, however.

Finally, there is still one missing link regarding details how to use the template in step 3 and 4 of the methodology (see the end of section C2). This will be developed further and in more detail in the FR.

B. Main Report

PURR (Potentials of Rural Regions) is a priority 2, Targeted Analysis. The project is based on stakeholder demand, implying that the needs of the stakeholder are important for the contents of the project. It is a project that to a greater extent adapts existing information from ESPON priority 1 projects and from the ESPON database than it provides new information (data, indicators, maps and typologies) on the European level. In this sense, information from ESPON, together with other statistical information and (softer) information gathered from the stakeholders, has been used for assessing the territorial potentials of the five stakeholder regions. The five stakeholder region assessments have also been important for developing a methodology that can be applied when assessing territorial potentials in (rural) regions (so called "rural potentials"). In other words, the main results from PURR can be divided into two categories:

1. The assessment of rural potentials in five stakeholder regions, and
2. The development of an innovative methodology for assessing territorial potentials of (rural) regions.

Section B of this DFR is built around these two perspectives and categories of results. Therefore, the section does not follow strictly the outline proposed by ESPON in the DFR template. Instead, we have tried to envisage the work that has been done in the project, starting off with a discussion of concepts and definitions (chapter 1), followed by the proposed methodology (chapter 2) and the case study results (chapter 3). These chapters illustrate the main findings of PURR. Then, we turn to policy options (chapter 4) and future work (chapter 5). All in all, these five chapters represent a short version of the results of PURR. In Section A of this report, an even shorter version is presented, while Section C (and the Annexes in Section D) represents the work in more detail.

B1. Concepts and Definitions

Five stakeholder regions contributed in developing PURR. They have participated in the project, and the TPG has produced case studies for each of these regions (see chapter 3). Stakeholder representatives have also contributed directly to the project in several ways, both with information and with different practical matters. The stakeholder regions are Notodden (Norway, LP), Dumfries and Galloway, North Yorkshire, and the Cambrian Mountains (the UK), and Amata (Latvia).

In this section of the report, we discuss some of the most important concepts applied in PURR. These are discussed in more detail in section C of the report.

Regional and rural development

Regional (territorial) **development** might be defined as the development within a region (or a territory) over time. The term "development" has been debated by scholars for years and has no unified definition. "Development" might include a set of indicators, or a single indicator. An indicator which often has been used, is the Value Added or Gross Domestic Product (GDP) of a region. This might also be interpreted as the region's income level, and the GDP growth rate can then be the interpreted as income change over time. Since GDP, or GDP growth, measures income, it is of course an important indicator of (regional) development.

On the other hand, development can be interpreted in many ways. This is reflected for instance by different ESPON projects, which adapt sets of indicators for comparing European regions and for constructing regional typologies. If regional development is complex, then the measurement of development should not rely on one indicator alone. The measurement should involve a set of indicators, for instance like the ones applied in the EDORA project. This is reflected in our methodology (see chapter 2) as well as in the case studies (see chapter 3).

The term **region** (territory) is also a blur concept, of which there is no common definition. On the one hand, it has been applied for very small spatial units (like a municipality or even smaller), while it on the other hand often is used for a large number of countries or even for whole continents (South East Asia and Africa are often referred to as *regions*. In PURR, we have therefore chosen a pragmatic approach to the term, where a region (territory) is a sub-national, spatial unit. The region (territory) then becomes a part of a hierarchy, which starts on the local level, continues on the regional (territorial) level (of which there might be several tiers, for instance NUTS 3, 2 and 1) and continues to the national and supra-national levels. Please note that we have not restricted the term region (territory) to administrative units. A region, according to our definition, might therefore cross administrative borders.

The term **rural** development can be defined similarly to regional development. The simplest way is to define rural development as being equal to regional development in a rural region (territory). How to understand the term **rural** then becomes the next question. Rural typologies, which have been developed by the OECD, by the EU, by ESPON, by national governments and even by regional governments, can be adapted. All these typologies are, in one way or another, based on the urban-rural dichotomy. Based on this dichotomy, rural can simply be defined as non-urban. However, the urban-rural typologies are normally much more refined in the sense that they are divided into different classes of urbanity (or rurality).

The five PURR stakeholder regions have been categorised using several typologies (see chapter 3 for an overview and section C for details). This categorisation is a part

of the *benchmarking* stage (stage 1) of the methodology (see chapter 2), and as such an important part of the analysis. However, all the five stakeholders regions were pre-included in the project, irrespective of their urban-rural placement according to any set of typologies. Since they as such are pre-defined as rural, their development potentials have to be discussed within the PURR framework, although their degree of rurality might be low, or although their development potentials might be in developing the most urban parts of the region (see chapter 3 for details on each stakeholder region's urban-rural placement).

From a Modernisation to a New Rural Paradigm

The emergence of a new rural paradigm based on endogenous potential to replace the previous modernisation paradigm that was dominant in rural development until the rise of neo-liberal ideologies in the 1980s and 1990s is well documented (Woods 2011). The modernisation paradigm was based on the modernisation of agriculture, the rural economy (usually in the form of economic diversification), infrastructure and social structures. As it became increasingly apparent that the modernisation approach was not only failing to achieve the desired results but in fact had a variety of negative consequences (over-production, environmental degradation, social inequality....), the increased emphasis on neo-liberalism determined that state led initiatives fell out of favour on ideological grounds as well as financial and resource grounds as governments sought to promote market solutions and reduce public spending.

The shift to a new rural paradigm involved a move away from focusing on inward investment to a focus on endogenous development. The characteristics of this new approach included focusing on the development of resources found within a rural region, a shift from a top-down to a bottom-up approach and a move away from a sector based approach to the approach based on the territorial capital or specific characteristics of an area, as promoted by Barca. This new rural paradigm has become dominant in Europe and this is reflected in the increased emphasis on the Leader Programme. More recently Ray (2006) has written of the need for endogenous potential to look outwards as well as inwards in order to not only harness local resources and actors but to sell these to external consumers and policy makers, what Ray referred to as neo-endogenous potential.

Despite the increased emphasis on the endogenous development paradigm in Europe, a number of critiques have emerged that are of relevance to rural regions in Europe. Woods (2011) summarises the main criticisms of endogenous potential as being:

- Limited capacity to tackle fundamental structural disadvantage in relation to locational, infrastructural, economic and human resources deficits;

- Uneven capacity of local communities to engage in endogenous development and bottom up initiatives due to uneven distribution of social capital;
- A tendency for endogenous development to exclude certain sectors of the community.

Rural potential

Rural **potential** has to be defined in the light of the New Rural Paradigm. The concept takes the concept of rural development a bit further, by inserting something *normative* or *positive* into it. Where *rural development* can be viewed merely as an observation of how an indicator (a set of indicators) changes over time in a rural region, *rural potential* ranges one (or more) line of development before others. The potential of a region is, in this sense, what (maximum) development level the region might achieve. Of course, a region's ability to reach this potential highly depends on the actions of the actors within the region, the system of governance, the networks, their innovative capabilities, access to (different) capitals and so on. In a sense, the PURR methodology is about discussing which factors influence rural development, about discussing rural development outcomes, about discussing rural potentials, and about discussing strategies and policies that can be applied to reach these potentials, the key question being how the stakeholders can utilise their assets in a way that maximises the outcome to reach the territorial potential of the rural region. At the heart of a region's potential lies, of course, what makes the region genuine or original, or what contributes to generating the region's competitive or absolute advantages. The concern about revealing rural (as opposed to urban) potentials in PURR acknowledges the fact that in general rural regions seem to lag behind urban regions in development and thus have to be more preoccupied with utilising the regions' accessible resources to survive in a competitive world.

The realisation of rural potentials is therefore likely to depend on the effective harnessing of an appropriate mixture of endogenous and exogenous factors as a means of strengthening rural viability and capacity. The specific territorial capital (see section C for details) of a region will determine the appropriate balance whereby rural spaces interconnect both with complex wider networks (economic, political, governance, financial.....) as well as localised capacity and resources.

B2. Methodology for Assessing Rural Potentials

One important objective for PURR is to develop a methodology that can be applied for assessing rural potentials also in other than the five PURR regions. A methodology can be interpreted as a systematic way of approaching a problem, in our case the problem of assessing the territorial potentials of rural regions. In this sense, the methodology has to be *general* and *applicable* to different (rural) regions. When we applied for the project, we anticipated that the methodology could probably

be applicable when analysing the potentials of rural *and* urban regions, and we also signalised that our ambition was to develop an easy-to-use methodology that could be used by non-experts and experts alike. In this sense, we wanted to develop a very general methodology that can be applied directly by stakeholders in all types of regions, when they want to assess their territorial potential.

The methodology that was developed in PURR possesses these properties, at least to a certain extent. There is, in the TPG's view, in principle no problem with adapting the methodology to all types of regions (urban and rural). However, the methodology was developed for rural regions, which are more transparent and have simpler structural properties than urban regions. Therefore, the access to the (qualitative) information needed to apply the methodology is probably more difficult in urban regions, and more work has to be put into both the process of gathering (qualitative) information and the process of analysing the information.

We have developed guidelines (a "menu" or a "navigation chart") that in our view contribute to making the methodology relatively easy to use. In this sense, non-experts should be able to gather the quantitative and qualitative data necessary, as well as to use this data to assess the territorial potential of the region. However, there might be several reasons why the stakeholders should hire experts to apply the methodology. One reason is that they are experts, and as such they should be experienced in doing such analysis and able to add information based on their previous experience with such processes. Another reason, which might be just as important, is that a hired expert is neutral in the sense that he should not have any personal interest in the results of the project. The question of assessing potentials might generate conflicts between different interests in the region, and the expert could be a neutral "judge" if this happens.

This discussion illustrates that there are no simple (one-dimensional) answers when it comes to the question of applying the methodology. If we look at the question of the ambitions for the methodology in the sense of what types of results we want it to generate, the complexity becomes even more evident. In our view, the methodology cannot be seen as a "black box", in which one puts ones inputs, and out of which one clear and indisputable result appear. Instead, it has to be viewed as a system which recommends certain inputs and types of analysis that can be applied for assessing the territorial potentials of a (rural) region. The methodology then becomes one (of potentially many) systematic way of assessing rural potentials.

The discussion in chapter B1 is very important for understanding the choices that were made when developing the methodology for assessing rural potentials. One of the premises for the priority 2 projects in ESPON, including PURR, was that ESPON 2006 was criticised for not taking the local and regional needs into consideration within priority 1 projects, including the development of European databases. In this

sense, the contents of the priority 1 projects were considered out of touch with reality. The concept of stakeholder driven priority 2 projects was developed as a reply to this criticism, and was considered by ESPON as a way of getting more in touch with reality and local/regional needs. At the same time, ESPON would like to know how priority 1 projects, including data and typologies on the European level, could be utilised in priority 2 projects. Based on our experience, and on existing literature, we think that *local/regional, qualitative information* (as opposed to European, quantitative information) is very important, and that rural potentials cannot be assessed without the access to such information. This was an important prerequisite when the TPG applied for PURR, and was also underlined in the Inception Report and the IR. This implies that the cooperation with the regional stakeholders had to be very important both for assessing the potentials in the five stakeholder regions and for developing the methodology. The resulting methodology therefore became a function of quantitative and qualitative information, which was gathered from informants (the stakeholders) as well as from databases, previous projects, theories, policy preferences (white papers) and other sources. In other words, the proposed methodology combines Top-Down (TD) and Bottom-Up (BU) information into one system of analysis. The proposed methodology has been divided into four steps:

1. Benchmarking the Stakeholder Region in a European Perspective
2. The Regional Context and Stakeholder Perspective
3. Assessing the Region's Territorial Potential
4. Policy Options and Future Development

The four steps are elaborated further below. In our view, the methodology based on these four steps is relevant and coherent for assessing territorial potentials in rural regions. As mentioned previously, the methodology has rather to be considered a way of sorting information from different sources (step 1 and 2) that can be used at assessing territorial potentials, rather than a black box providing concrete answers both regarding potentials (step 3) and how to reach them (step 4). The rationale behind this is that we do not think such a methodology exists. Instead, the proposed methodology can be used for planning purposes as well as for more strategic analysis. The final step (step 3) towards assessing the potentials, including weighting different sources of information together and even making some priorities, has to be done by stakeholder representatives. In this sense, the methodology contributes to a process of grounded self-reflection among stakeholders aiming at assessing the territorial potential of a (rural) region.

Step 1: Benchmarking the Region in a European Perspective

As a part of the route towards assessing a region's territorial potential, it is important to compare the region to other regions ("benchmarking"). This comparison will contribute to giving a first overview of the region's "score" compared to other regions, which also will give some of the input necessary for categorising the region (attach the region to a typology). The benchmarking of the region will not, however, represent sufficient information to assess the region's potentials (see steps 2 and 3).

There are many ways to benchmark the region. *The European Perspective* is important for many reasons. Among these are that there is a common market and that there are common (regional) policies within (most of) Europe. This is also reflected by ESPON, who has gathered substantial amounts of quantitative information that can be used for benchmarking regions. This information is easily accessible from databases, which also contains tools (including maps) for comparing and presenting the information.

On the other hand, the stakeholder representatives of PURR have stressed the importance of not restricting the benchmarking to the European perspective. The *national* and even the *sub-national* perspectives are for them just as important. There are a number of reasons for this. The most important are that they experience that they have "unique" systems of governance, and that the concept of "Europe" for them seems to be distant compared to the nation and/or region they belong to. This might be interpreted as if they feel closer to home than to Europe, and it might be that this feeling is more common to representatives of rural regions located in the outskirts of Europe than to representatives from the most central parts of Europe. However, since we are focused on the five stakeholder regions of PURR, we have proposed that the national and sub-national perspective should be included in the benchmarking process.

We have applied a system of benchmarking that we have called the "Magnifying Glass Method" (see below), which is based on quantitative information and typologies on both the European and the national/sub-national level.

Spatial Levels of Stakeholder Regions

Within PURR, the Stakeholder Regions, and therefore also their spatial levels, are pre-defined. There are five of them, which are very different indeed (as we will see below). One important task of PURR is to develop a methodology that can be applied when analysing the territorial potentials of other (rural) regions in the future. If we assume that representatives from the regions themselves (rather than outsiders) are the ones applying this methodology in the future, we might use the word stakeholders for them as well. A practical definition of a stakeholder region could then be a region that is interested in applying the PURR methodology in its analysis

of its territorial potentials. This is a very broad definition, not restricting any type of region from applying the methodology. It is up to the region itself.

ESPON data and typologies are generally based on NUTS 2 and NUTS 3, which represent fairly aggregated territorial units. At the same time, NUTS 2 and 3 normally coincide with national, administrative units or are aggregates of such. If all (potential) stakeholder regions were NUTS 2 or 3, ESPON data and typologies could relatively easily be adapted directly for benchmarking purposes, and the question would be to which extent the ESPON database had (all) the relevant information. However, NUTS 2 and 3 are not always the most relevant territorial units when it comes to regional development issues. Lower administrative levels, or other, non-administrative spatial units (for instance "planning regions"), might be more functional and therefore also more relevant for planning and development purposes. Among the five PURR stakeholders, the stakeholder regions are very different. They are not on similar spatial levels, nor are all of them administrative units within their national system of governance. As ESPON data and typologies are not available for relevant territorial units, we could not benchmark the PURR regions using only ESPON data and typologies.

Relevant Data, Indicators and Typologies

Many variables influence rural development. These variables can be divided into two main categories: external and internal (or endogenous and exogenous) factors. The internal (endogenous) factors are factors that can be influenced by the stakeholder region and are discussed more in detail in step 2 below. External (exogenous) factors might be defined as factors that are determined outside the stakeholder region's control. They range from natural given factors (like location and the climate) via structural factors (i.e. demographic and industrial structure, hierarchy of centres etc.) to factors that are determined fully outside the region (world market prices on commodities, national policies, European policies).

Variables were selected from several thematic areas such as demography, economy, energy, climate change, transport infrastructure, knowledge society and innovation. Key developments in each of these thematic areas have been examined in ESPON scenario building projects, such as ESPON 2002 Project 3.2 "Spatial Scenarios and Orientations in relation to the ESDP and Cohesion Policy" and ESPON 2013 Project 2013.2.6 "Spatial Perspectives at Nuts-3 Level" (SPAN) In addition, several thematic areas that are relevant for rural areas, were selected from EDORA project. While taking into consideration demography (structural factor) and climate change (external factor), EDORA also examines such thematic areas as rural employment, rural business development, rural-urban interactions, access to services of general interest, role of cultural heritage in rural development, institutional capacity, farms structural change and the role of agriculture in rural development. These thematic

areas reflect endogenous character on rural development and are therefore important for determining rural potential.

To provide description of territories in the context of existing research in Step 1, data from ESPON 2006 and 2013 projects were used. Data about area types and accessibility, natural heritage and environments, demography, climate and natural hazards, cultural heritage, energy, the role of agriculture and governance were used to provide general description of PURR areas in Step 1. To take into account the diversification of rural economy, interaction with urban areas, and their economic performance, PURR areas were examined by more nuanced structural typology elaborated in EDORA project. EDORA data was used to describe and compare PURR regions with each other and also with other regions in respective countries.

EDORA typology distinguishes between four types of non-urban regions: (1) agrarian economies, (2) consumption countryside, (3) diversified (with important secondary sector), (4) diversified (with important market services sector). In agrarian economies agriculture is still significant. Agrarian economies are those where % employed in primary sector, % of GVA from primary sector, and Agricultural Work Unit as share of total employment exceed the EU27 mean for non-urban regions. Consumption countryside is defined by eight indicators relating to tourism capacity and intensity, access to natural areas, and small scale and diversified agriculture.

The remaining rural regions are denominated as diversified and divided into two groups – (a) regions in which secondary economic sector activities were important to market services GVA. These are diversified regions with strong secondary sector and (b) regions where market services have become dominant. These are diversified regions with strong private services sector.

After dividing regions according to their structural types and their urban-rural typology EDORA project also measured their performance by composite regional performance indicator which was derived from the following variables: (a) net migration, (b) GDP per capita, (c) average annual change in GDP, (d) average annual change in total employment, (e) and unemployment rate. The analysis of performance of rural areas shows that depleting areas usually face demographic ageing, low economic activity rates, low human capital and structural problems. Depleting areas are usually found in remote rural areas and have a strong trend of rural-urban migration. Accumulating areas, on the other hand, show counter urbanisation trends. They have family dominated demographic structure, diversified rural economy, higher human capital, higher economic activity and lower unemployment (EDORA Final report, 2010: 10).

In cases where comparable European level data was missing, data on national and regional level was taken into account, but since different countries use different

typologies and ways of collecting statistics, comparisons across typologies in national and European level are not always meaningful. The nature and diversity of the themes and the availability of statistics mean that it is more appropriate to use quantitative indicators in some cases whereas in others qualitative data is more appropriate.

The Magnifying Glass Method

To overcome the problem of missing ESPON data, the Magnifying Glass Method for benchmarking regions was developed in cooperation between the PURR stakeholder regions (especially the Lead Stakeholder, Notodden) and the TPG. This method helps us to apply ESPON data and typologies to the regions even if data and typologies are not available directly from ESPON projects and databases. This involves a two-stage process:

- *The first stage* is to locate each stakeholder region within its corresponding NUTS 2 and NUTS 3 unit. In some cases, a stakeholder region might be a part of more than one NUTS 2 and/or NUTS 3 unit. Data and typologies are extracted from ESPON projects and databases using the information relating to the corresponding NUTS units. The extracted information (data and typologies) is then compared to the European level. In the case of Notodden municipality, Telemark is the relevant NUTS 3 unit, while South-East Norway is the relevant NUTS 2 unit.
- The stakeholder region will normally be smaller than a NUTS unit. NUTS 2 and NUTS 3 data and typologies will therefore normally contain too much information to benchmark the stakeholder region itself. The second stage of the magnifying glass process is therefore to collect information that only covers the stakeholder region. National or regional statistical offices (where they exist) should be the first sources to gather information from. If relevant information does not exist there, other sources of existing data (existing surveys, reports, consultancy analyses and other sources of information) should be applied. Local authorities or other agencies might also be able to provide relevant information. If all potential sources of secondary (or existing) information have been emptied, and not all relevant data have been found, one has to look into the possibility of creating primary information (collecting information directly). There are several ways of collecting information directly. They are normally expensive (for instance collecting the relevant information for an indicator by asking all relevant actors) or uncertain (like surveys and/or using experts), and the relevance and importance of the missing information has to be assessed in this perspective. This is discussed more below.

We apply data, indicators and typologies from European sources in stage one. Stage two focuses on data which can be used to construct similar indicators and typologies on the stakeholder region level, and thus can be used to benchmark the stakeholder region in a European perspective. We would, however, also like to point out that if they exist, national or regional typologies might be very relevant for a stakeholder region. Therefore, and depending on an assessment of the relevance of national and regional typologies, we think that benchmarking a stakeholder region in a national (regional) context in many cases could provide a necessary supplement to the European benchmarking.

The magnifying glass method involves looking more closely into the stakeholder region than European data allows us to. It is therefore difficult to limit the magnifying glass method clearly to Step 1 of the general methodology, as Step 2 is a continuum of Step 1.

Step 2: The Regional Context and Stakeholder Perspective

The benchmarking process, as it is outlined in Step 1, is not sufficient to assess a stakeholder region's territorial potential. As stated in all previous PURR documents, stakeholder participation is a very important part of the assessment. This was also an important prerequisite in ESPON's Tender for the project. Stakeholder participation has also been essential when developing the methodology, as well as for assessing the territorial potentials of the five stakeholder regions in chapter 3, based on the methodology developed in Step 1 through Step 4.

There are many reasons for involving the stakeholders in the process of harnessing the regions territorial potential (see also section C2). The first and foremost is of course that the New Rural Paradigm leaves much of the responsibility for regional development to the regions (or rather: to actors within the regions) themselves. Therefore, they have to do the work. In our view, the information provided from European databases like Eurostat and ESPON is useful in Step 1 of the process (the benchmarking), but it does not apply to each stakeholder region specifically. European data and typologies are found on the level of pre-defined territorial units (NUTS). This problem has hopefully been overcome in stage two of the Magnifying Glass Method. Still, the challenge remains to find the relevant information for the stakeholder region. When we apply data and typologies on the regional level, we move from benchmarking the region (which is necessary) to analysing the region. Analysing regional development and potential therefore requires region-specific information.

- First, data and indicators from Step 1 are not necessarily *detailed enough* to address the challenges and/or the potentials of the stakeholder region. Therefore, more relevant and detailed information has to be gathered from the stakeholders directly. This includes more detailed structural statistics (or

alternative information) as well as an overview of the "territorial capital" (natural resource capital, human capital, financial capital etc.), including traditions and history.

- Second, there might be *on-going processes in the region* that are not publicly known (networks, initiatives and so on). These processes have to be brought into light.
- Third, there might be *strong (individual) actors* (businesses, people, organisations or politicians) that influence the region's potentials. This might be viewed under the headline "human capital", but at the same time reflects something more.
- Fourth, there might be specific *governance factors* including factors connected to planning that are important in the stakeholder region.
- Fifth, there might be other factors specific to the region that at the same time are important to regional development and potential.

To access this information, we have proposed a four-stage procedure:

1. Discussions with relevant stakeholders throughout the time the project is running. This includes a discussion of what they expect the outcomes of the project will be. In PURR, the stakeholders wanted quite different things (see chapter 3), which implies that the methodology should be flexible regarding anticipations and thus contents.
2. A workshop where representatives from the TPG and the relevant stakeholders discuss questions regarding conditions for development, potential (negative or positive) development opportunities, territorial potential and the road (including measures) towards reaching the territorial potential. Guidelines for this workshop have been developed.
3. A template of questions based on the benchmarking process. The purposes of using the template are to get the stakeholders to relate their view of the region to the results of the benchmarking process and to stimulate a process of grounded self reflection among stakeholders.
4. A SWOT analysis, where the stakeholder representatives on a "free" basis are asked to define the regions strengths, weaknesses, opportunities and threats.

This four-stage procedure is designed to secure that the stakeholders contribute freely with their own inputs to the analysis as well as relate their own views to the benchmarking done in Step 1. In this sense, Step 2 is the part of the methodology where mainly "soft" information, but also "hard" information supplementary to the

benchmarking, is gathered from the stakeholders. Step 2 is necessary to be able to continue the analysis in Step 3 and Step 4.

Stakeholder participation necessarily implies that the analysis is focused towards themes that the stakeholders find relevant and interesting. This means that the information base might differ significantly between stakeholder regions, both thematically and within each theme. This represents, in our view, mainly a positive side of the proposed methodology by taking each region's individual properties into account. In this sense, Step 2 of the methodology has to be seen as a way of systematising relevant information for a region and making it ready for analysis in Step 3 and 4.

Step 3: Assessing the Region's Territorial Potential

The information gathered in Step 1 and 2 gives us what we need to assess the region's territorial potential. In order to determine this, one has to look into a set of development perspectives for the region. As previously stated, the territorial potential represents the highest ranking development perspective for the region. The first question becomes how to rank different development perspectives.

Within Step 1 and 2, we proposed to use a set of qualitative and quantitative indicators and typologies to benchmark the region (compare it to other regions) and to reveal the region's distinctive features. Of course, the territorial potential depends upon how the indicators and distinctive features are weighted together in the analysis. Do we give priority to demographic development, to economic growth or to the number of jobs? Or is there a correlation between these variables? Which economic sector is important today, and what are the future prospects of this sector? What policy instruments do we have (see also Stage 4)? These are examples of some of the questions which are necessary to answer when the territorial potentials of regions are analysed. Typically, a region's distinctive features might relate to its capitals (human, resource, nature, history, financial capital), its structures (demographic, industrial structure), its accessibility (internally, inter regionally or internationally), the system of governance etc (see section C2). In section C2, we also argue that the neo liberal paradigm a.o. implies that (the actors of) the regions themselves are responsible for regional development within their region (Bottom Up perspective), as opposed to a Top Down perspective where regional development becomes more of a national or supra-national responsibility. The neo-liberal paradigm in this sense also implies that the region's competitiveness is important when assessing it territorial potential. Generally, the competitiveness of a region increases with competitive advantages. In rural regions, these advantages might be limited, at least when compared to more urban or central regions. A region's territorial potentials have to be derived at the cross section between the gathered information, the development perspectives and the competitive advantages of the

region. We particularly refer to the four-stage procedure proposed in Step 2 of the methodology on how to gather relevant information from the stakeholders to supplement the information gathered in Step 1. The stakeholders are here implicitly asked to reveal what they think is the regional potential of their region. The expert's job is partly to interpret this information into potentials, by also taking the benchmarking information into consideration.

At the core of the development of the PURR methodology is that the methodology can be adapted by regional stakeholders. Above, we have stated that due to the differences between (potential) stakeholder regions, the methodology for assessing territorial potentials cannot take the shape of a "black box", in which inputs are fed and the results in the form of territorial potentials come out. Instead, we want the methodology to be a systematic gathering of information, both qualitative and quantitative, which is then used to assess the territorial potential of a stakeholder region. In section B3, we have given a brief overview of how the system was applied to the PURR stakeholder regions and of the resulting potentials.

Step 4: Policy Options and Future Development

The final step of the methodology is to discuss the relationship between a region's territorial potential and its future development. This involves discussing the probability of reaching its potential without local action, which is a sort of laissez-faire view on development, or to what extent local action in the form of some sort of intervention is necessary.

Probably, some sort of local action will be needed. A range of actions can be taken. These actions can also be named policy options. The important thing is to choose the right policy options for the region in question. If the policy action involves public spending, the local (regional) authorities have to find the "right" way of spending money. Another question is whether the local authorities have money to spend, or if national or EU measures can be applied in a way that fits the region's territorial goals. This, of course, depends on the access to means, the system of governance and what type of policy measure one wishes to use. Other policy measures can be for instance to use land use planning as a part of the development process, to establish networks between different actors and so on. The main question is of course how to utilise the region's resources better as a part of a strategy towards reaching the territorial potential. Again, such strategies per definition have to be made individually in each region, depending on Step 3 and on the possibilities for policy actions that exist in the region in question. In section B3, we have discussed this for the five stakeholder regions in PURR.

B3. Case Studies in the Five PURR Regions

In this section, we present the main findings from PURR's five case studies. The case studies are presented in more detail in section C5. There are five PURR regions, representing five countries:

- Notodden, NO (Lead Stakeholder),
- Amata (Vidzeme), LV
- Cambrian Mountains, GB (Wales)
- Dumfries and Galloway, GB (Scotland)
- North Yorkshire, GB (England)

The five regions do not represent the same NUTS level, nor do all of them represent an administrative unit within its country's system of governance. Although the regions, as we shall see, are quite different when it comes to size, structures (regional, demographic, economic structure), accessibility and system of governance, the starting point for PURR is that they are all stakeholder regions. Since PURR is focused on *rural* potentials, this implies that all five regions are rural within the framework of PURR. The methodology (see section B2) was applied to all of the five regions, although they differ significantly, with a certain amount of success. This indicates, in our view, that the methodology does have certain general abilities and might be applied to the analysis of territorial potentials in other regions. However, we think that the generality of the abilities probably need further testing before we can conclude about them, especially when it comes to the use of the methodology in non-rural regions (section B5).

In the PURR project, the five regions are called *stakeholder regions*. By using this concept, we only refer to the regions as being parts of project. Regions represent territories that are inhabited by actors and are, however, not necessarily actors themselves. When we use the concept *stakeholders* without adding *region*, we think of actors or subjects within the region. The stakeholders in this sense become regional representatives, who are crucial for supplying the information necessary when harnessing territorial potentials.

Benchmarking of the regions in a European perspective is presented in detail in section C4, which is one of the bases for the case studies. In section C5, the cases studies are presented. Instead of repeating the results for each region in some detail here, we refer to section C5. Here, we would like to focus on the use of the methodology and on the differences between the regions.

The proposed methodology rests on scientific evidence implying that the *stakeholder perspective* is very important when it comes to identifying the intangible assets of territorial capital. Identifying this is crucial when it comes to identifying the development potentials of a region. This implies that the stakeholders have been

very important sources of information for the individual case studies. At the same time, the dialogue between the stakeholders and the TPG has been very important for developing the four-step methodology in general, but especially when it comes to the contents of each of the four steps. Although the case studies primarily represent studies of each of the five regions, they also represent a first test of the proposed methodology. The methodology itself relies on the dialogue between the experts (the TPG) and the stakeholders. In this sense, the methodology is dynamic and intensive, rather than static and extensive. Without the dialogue, it would have been impossible to arrive at reliable conclusions about territorial potentials. We would like to repeat that the conclusions (especially step 3, about potentials) also are based on dialogue, and that the methodology meant to generate processes rather than providing one (and only one) "black box" based answer. We will not go into the details of the individual case studies here (see section C5). Instead, we discuss the main conclusions from the five studies together.

The workshops generated a considerable amount of qualitative data and the fact that the workshops were organised according to the same structure means that commonalities and differences can be discussed. It became apparent that there is some diversity in terms of the specific emphasis between the different regions. To a certain degree the emphasis is influenced by the roles and agendas of the people that participated in the workshops, but also reflects the diversity of the regions. The diversity of the PURR regions is confirmed by the diversity of the rural typologies that illustrate the differences in terms of accessibility, economic performance, demographics and a variety of other characteristics. Such diversity is useful in the sense that one of the aims of PURR is to develop a methodology (section B2/C3) that can be applied to a variety of different regions. Applying the methodology to the PURR regions has been a useful learning process.

The TPG found that the territorial capital of the five stakeholder regions is highly diverse. The emphasis in Notodden and Dumfries and Galloway appears to be on the role that *the towns can play in driving regional development*. There was considerable discussion with the regional stakeholders in Dumfries and Galloway about the differences between such regional development strategies that focus on towns as motors of development compared to rural development strategies that focus more specifically on rural issues such as upland farming. The stakeholders in Notodden (and Tinn) emphasised the fact that both the past and the future for the town and wider region are intrinsically linked to the industrial heritage.

Stakeholders in all of the case study regions are understandably concerned about the impact of the economic situation, though the situation in Latvia seems to be considerably more serious than in the other regions. The situation is likely to exacerbate the current challenging economic and demographic situation. In case of

Vidzeme decline in population will have considerable effects in rural areas. One of such effects will be the unemployment risk in the education sector, in which currently considerable amount of people are employed.

Another impact of challenging economic and demographic situation appears to be that *stakeholders are focusing much more on short-term survival rather than long-term strategic planning*. The nature of the problems in Vidzeme contrasts with the challenges in North Yorkshire where stakeholders are concerned about their ability to be able to make their rural issues and challenges more visible. There is also considerable uncertainty in relation to the rapidly evolving governance landscape in England, though there is a clear desire to be proactive in capitalising on the opportunities offered by the new structures. The key task in the Cambrian Mountains appears to be building on the momentum of the ongoing Cambrian Mountains Initiative and to help strengthen the identity of the area as a brand.

In Latvia and the UK, the *cuts (and proposed cuts) in public spending* limit both development (employment, unemployment, population) and the local public sector's ability to be a driving force in regional development. Stakeholders in Notodden, on the other hand, are satisfied with the provision of local public services and are not to the same extent worried about future public spending. However, de-population might inflict local public sector income and the provision of public services also here, but this is not linked specifically to the general economic situation. This difference of course reflects the countries' different economic and political situations, which again have impacts on regional and local authorities' fiscal situation. It is interesting, in this sense, to notice that the Stakeholders in Latvia propose income tax cuts as a means for achieving more competitiveness and production in the region.

More generally, though, *the governance structures seem to be in focus* in all Stakeholder regions, but in different ways. The Governance structure is changing dramatically in England, and the extent to which this represents a re-centralisation or de-centralisation of power and the type of opportunities that the new governance landscape offers to local authorities is still unclear. Stakeholders in Scotland and Wales appear to feel that the devolved governments have increased their proximity to the levers of power, though significant challenges remain, with strengthening identity being a key issue in each region. In Latvia, there is a centralised system of governance, which, together with declining public financing limits local public sector's ability to contribute in developing the region. In Norway, the local public sector is an active participant in local economic development, through both formal and informal networks. The municipality of Notodden also has (limited) financial capabilities aimed at private sector development and, of course, is a very important provider of public services directed towards the population.

Although endogenous economic development, or what the regional actor can do themselves, are in focus in our analysis, *exogenous conditions have also been discussed among the Stakeholders*. Their preoccupation with exogenous conditions correlates in a sense with the governance structure, where the Latvian Stakeholders seem to focus more on these than the others. However, certain Stakeholders in the Norwegian and UK regions also emphasised the importance of finding a balance between capitalising on endogenous assets and attracting and utilising exogenous resources.

Economic structures vary between the different Stakeholder regions, as does the focus on future development potential. All regions, on the other hand, have their economic base, which is also viewed an important part of their territorial potential. More specialisation of production, trying to capitalise from the regions' competitive advantages, is considered one direction to choose for the future, as is the interest for instance in developing tourism further. Stakeholders in all regions have discussed agriculture's role in rural development, but the importance of agriculture varies and its future potential in terms of employment remains limited in all regions. Infrastructure development is also regarded an important factor in developing the territorial potential. In addition to improving infrastructure, additional strategies for improving business competitiveness, such as promoting rural business partnerships, public-private partnerships and clusters, were seen as important opportunities for development in Vidzeme. Need for cooperation and coordination between business, education and public sector was also emphasised. It seems like economic recession has induced more active search for available options.

B4. Policy Options

There are several ways to discuss the options for policy development connected to PURR. We could look at the broader and international policies, or we could look at the options available to the individual region. The question if a policy intervention works, does not have a general answer and is a matter of debate both among politicians and in the scientific community. It will not be addressed broadly here.

Cohesion and Competitiveness

The balance (or imbalance) between the general EU policies of competitiveness and cohesion is of course an important factor, and a pre-requisite for the analysis of PURR. In this sense, PURR focuses on how potentially weaker regions (rural regions) can utilise their assets in a better way in order to become stronger. If the weaker regions are able to assess their assets, to utilise them, and to reach their territorial potentials, they will also become more competitive. This will, given that the rural regions are lagging, influence cohesion in the EU in a positive way.

However, PURR does not generate any general evidence to support this. The stakeholder regions of PURR were, at least to start with, interested in what their territorial potentials might be. This also means that they have accepted their role in developing their regions. As such, these regions are inhabited by actors that are interested in generating regional development. There are, in other words, certain strengths in these regions already. We do not know to what extent the concept of rural potentials can be applied to all regions, including the weakest of the weak. This question is very interesting in itself. Do such regions exist? Are regions which lack assets and territorial capital able to utilise their potentials? We do not answer these questions. These questions are linked to the more general question of whether it is possible to find policies that at the same time promotes both cohesion and competitiveness of regions, or if policies have to be either directed towards the one or the other.

Regional Policy Adaptations

If we look at the regional level, one might read out of PURR that *individual policies* will be significant when it comes to harnessing regions' territorial potentials. There is an array of policy options, which are limited by fantasy, and by the system of governance and the fiscal opportunities available. By individual policies, we mean policies that are tailor made for each region, based on the assessments of their territorial potentials. Here, we also focus on policies required for realising the potentials, not on other policy measures.

First and foremost, the assessment of territorial potentials has to be made. When the potentials are assessed, they are not yet realised. Realisation of these potentials requires that the regional assets are utilised *together* in the way necessary. Policy interventions should be directed at realising these potentials, or at making the assets work together in the way necessary. Given the goal (territorial potential), one has to create a strategy or plan on how to achieve this goal, proposing the best use of policy measures available. This also involves looking into the question of whether the "tool box" (the set of policy options) is sufficient for the goal to be reached. Then, one has to implement the best measures. For a policy measure to work, it has to be directed as directly as possible towards the problem. If all these steps are followed, the region's potential should be possible to reach.

Much of the problem is to make the regional assets work together (see section C2) towards the potential. When the assets are there, but they are not used in the best way, non-fiscal measurements could be sufficient. Among the most important examples of such measurements is to establish networks among regional actors representing different forms of assets, and to guide this network towards accepting that the best strategy for the region as a whole is to work towards the region's

potential. If all actors benefit from cooperating, the establishment of the network becomes a guide for getting out of the prisoner's dilemma.

Fiscal measurements are the fiscal means available to the regional public sector. If they exist, they should be used for supporting individual actors and/or networks working towards achieving the territorial potentials. They could take the form of physical or social infrastructure support, support to new enterprises, support for innovation, or other forms. Some regional authorities have such measures available, while others do not. Such measures might be very important for reaching the potential, and if measures do not exist, it might be necessary to discuss if it is possible to finance them locally, for instance in the form of Public-Private Partnerships (PPPs).

Combinations

Not many regions, however, exist in "limbo". They are parts of a system (or tiers) of governance, and there are often fiscal measures available that can be used by regions but which are financed outside the region. The EU, and/or national authorities often offer such measures. The Leader programme is one example (the EU), while regional support directed at businesses, networks and local municipal development funds is one from Norway. There is competition among actors to get these measures. We think that regions that have made an assessment of their potentials, including a strategy/plan towards achieving it, will benefit when it comes to competing for such measures.

Conclusions

There are many different ways to reach territorial potentials. The use of fiscal or non-fiscal policy measures is probably necessary. To select the best package of policy measures, the package has to be tailor made for each region. The regions differ, their assets and actor differ, and therefore their potentials differ. Therefore, a universal set of policy measures is not sufficient. In the worst case, such a set might lead to regions going in the wrong direction, since the policy measures themselves represent incentives. If a universal set of measures to reach rural potentials is developed, it should be designed in a way that allows regions to use it in the way necessary for them.

B5. Future Analytical Work and Research

PURR is of course a project that, to some extents, rests on its own. The empirical results from the project cannot be generalised, since there are only five stakeholder regions which have participated in the analysis. One important finding is that these regions are diverse, as one might assume. Since there were only five of them, the diversity among non-PURR regions is probably even greater. To increase its validity, the methodology for assessing territorial potentials needs further testing. There are

especially two points we would like to point at when it comes to further analysis and research. In addition, there are certain "missing" items in the DFR, which will be finalised toward the FR.

The Adaption of the Methodology

The methodology that was developed has only been adapted to the five stakeholder regions. These regions are different, as we have commented upon, but at the same time they possess certain similarities. The similarities are connected to the fact that all these regions were among the initiators of PURR, and that all of them are rural regions in one respect or other. The differences, on the other hand, are connected to structural conditions, systems of governance, size, location, nationality and so on.

Test the Methodology on More Rural Regions

In order to *test the methodology* further, we think it would be nice to apply it to more regions. The methodology was developed for rural regions. Therefore, we think that testing the methodology on more rural regions would be a good first step. This becomes even more important when we remember that the methodology was developed by the TPG *together* with the stakeholders. Given this testing, changes to the methodology should be discussed. The aim of PURR is that the methodology is general, in the sense that it is useful in any rural region.

Our hypothesis is, on the other hand, that the methodology in fact is general. Therefore, we think that testing will confirm that, and that the testing could lead to the methodology being applied elsewhere.

Other Types of Regions

The methodology was developed for *rural regions*. This means that it is meant to work best in regions that are not urban. However, we think that the methodology is more general than that. At least when we look at the range of urban-rural typologies developed by ESPON and others, the methodology could also be applicable to regions that are "less" rural than the five stakeholder regions, and perhaps even in large, metropolitan regions. The main problem is perhaps the size and complexity of urban regions, where the territorial potentials might be harder to assess and identify, and where there might be several reciprocal types of potentials. Therefore, it might be harder to achieve consensus about what the territorial potential is, and even about what factors that are important to pursue to achieve the potential.

Who Can Use the Methodology?

The methodology has been developed for use by stakeholders. We think that the initiative to assess territorial potentials has to come from them. In addition, the methodology requires that stakeholders provide the analysis with information in all four steps of the process, especially in step 2 to 4. This also includes contributions in assessing the territorial potentials, including in some cases making priorities between

different regional development perspectives. In a sense, the stakeholders are in the core of the methodology. This implies that it is difficult to assess the potentials of a given region using only information that is available in (all sorts of) databases. Outsiders will therefore not be able to assess the territorial potential without the aid of regional stakeholders. This is a central part of the methodology, and we more generally do not think that desktop analysis of territorial potentials is possible. Any methodology claiming that this is possible is in our view inadequate.

Given that there is a stakeholder initiative, who should be responsible for carrying out the analysis? Should an external expert do it? The PURR methodology has been developed by experts. These experts have also been responsible for the analysis (but in strong cooperation with the stakeholders). We do think it is possible for stakeholders to assess their regional potentials without the aid of experts. The roles of the expert (given the methodology) will mainly be to guide the stakeholders through the four steps of the methodology, to provide external information (from ESPON among others) and to represent a neutral party in the discussions. The expert will normally also function as the secretary for the stakeholders in the assessment process, and she represents experience from similar processes elsewhere. An important part of the expert's role is also to secure that the stakeholders agree upon what information they can consider objective, as opposed to subjective views that will be a part of the discussion between the regional stakeholders. If the stakeholders think that the aid of an expert is not required, it is possible for them to use the methodology with its accompanying guidelines to assess the regional potentials themselves. However, this has not been tested in PURR. Planning processes are, on the other hand, not new. Experience from these shows that either using or not using experts in similar processes might be successful (or not be successful). The result of the process depends on many other factors.

The Use of Information from ESPON

There were several reasons why PURR was initiated as a project. We have already mentioned the stakeholders' requirement for analysing their potentials and the more general need for developing a methodology to do so. Priority 2 targeted analyses are also demanded because it connects the actors' needs with the production of data, indicators and analysis that ESPON is responsible for on the European level. The question is to what extent the production of European level analyses meets local and regional actors' need for information. One of the reasons that the priority 2 projects were initiated was that many (potential) users criticised ESPON for doing analysis and producing data that do not meet this need.

In PURR, the experience is that the information accessible from ESPON databases and projects at the same time was very relevant and not so relevant. Information from ESPON regarding typologies and indicators, but to a large extent also the

analytical projects, has been used extensively in PURR. First and foremost, this information was used in Step 1 (Benchmarking), but also as parts of the scientific evidence in the other steps of the methodology. Indicators and typologies, especially those developed by the EDORA project, were very helpful. However, the resulting typologies might be too broad, and the list of indicators too general, for detailed studies of potentials. Identifying potentials is, among other things, about identifying what is special (competitive advantages). And the competitive advantages often rest with the details. An example might illustrate this point. If a rural region's forestry sector is very competitive, and we only have information on the size of the primary sector as a whole, then we have to have more detailed information to reveal this. In our view, this is one important problem with using (only) ESPON data for analysing the region's potentials within the forestry sector.

In addition, the data and indicators could not be applied to the case study regions directly because they were not NUTS 3 regions (or higher). More regional information was therefore necessary also to be able to apply the typologies to the PURR regions directly. In addition, one could discuss the "quality" or "applicability" of these typologies to small regions, but that is another question.

We do not think that these factors mean that the information from ESPON is irrelevant for projects within small regions. On the contrary, the information was very useful within PURR. But it was not enough for our purposes. Our view is, however, that there is, and should be, a division of labour between the large, macro oriented projects (priority 1 ESPON projects) and the projects analysing smaller regions. They are supplements to each other, and the PURR project does not imply that changes should be made to the indicators and regional levels used by ESPON priority 1 projects. All information necessary for detailed analyses cannot be collected on the European scale. It would be very costly and never be sufficient. Combining European scale information with local/regional information is therefore probably the best way to go also in the future.

Developing the Methodology Further

The methodology developed in PURR has only been tested in PURR. Although it rests on experience from similar processes (from among others planning and foresight analysis) and on scientific knowledge, it is not perfect. First and foremost, since it has only been used on the five stakeholder regions, it is probably also a bit premature. Therefore, using the methodology in other regions might result in the need for reviewing the methodology.

The dissemination of the project implies presenting the results and methodology to both the user and the scientific community. There might be parts of the proposed methodology that need further development due to missing properties. Although we think that the methodology should rest on stakeholder participation, and that it

should not be a "black box" but rather contribute to self-reflection among the stakeholders, there might be opposing views to this. Even among the PURR stakeholders, the hope for a "black box" was present. The TPG thinks that the "black box" is not a fruitful direction to pursue, but the views on this might differ.

Missing in DFR

There are a couple of points still missing in the DFR. We have discussed with the stakeholders how future scenarios might be added to the case studies. In section C4 (but also in section C2), some ESPON scenarios are discussed, but not for the stakeholder regions as such. If there is time, we will add some more thoughts on the scenarios to the case studies, where we discuss how they would influence the stakeholder regions. We have not promised to develop detailed scenarios for the stakeholder regions, however.

Finally, there is still one missing link regarding details how to use the template in step 3 and 4 of the methodology (see the end of section C2). This will be developed further and in more detail in the FR.

C. Scientific Report

The Scientific Report consists of all parts of the PURR project. After a brief introduction, we continue by discussing the framework for the analysis (Concepts and Theories in chapter C2, the Methodology derived in chapter C3 and the use of ESPON data in chapter C4). Please note that C3 at the same time is a result, as developing a methodology is an important aim for the project. In C5 and C6 we present the individual case studies and sum them up, respectively. C7 concludes the Scientific Report.

C1. Introduction

PURR is a priority 2, targeted analysis financed by ESPON. The stakeholder demand origins from five stakeholder regions; Notodden (NO), Cambrian Mountains (UK), Dumfries and Galloway (UK), North Yorkshire (UK), and Amata (LV). The aim of the project is to analyse the Potentials of Rural Regions (PURR).

The analysis is based on the original Tender from ESPON, where the stakeholder driven project was presented in some detail. By being quite detailed, ESPON left very little room for interpretation by the applicants. This was also emphasised by the TPG in the application for the project. In the Inception Report and the Interim Report, the TPG based its analysis very much on inputs from the stakeholders, who were asked to contribute in providing qualitative and quantitative information, as well as to provide feed-backs in the methodology development. Focus in the Interim Report was therefore the stakeholder regions, and the proposed methodology was highly inductive or bottom up (BU). ESPON was not satisfied with this, and asked the TPG to re-submit the Interim Report (the re-submitted report is abbreviated IR) focusing on a methodology that more clearly combines ESPON data, typologies and other results with the BU methodology already proposed. The proposed methodology of the IR then more clearly became a combination of top down (TD) and BU methodologies. The TPG has not yet received any comments from ESPON to the IR and must therefore assume that the IR to a higher degree meets ESPON's requirements.

The following Scientific Report is based on the IR. As signalised in the IR, the re-submission implies that there are more similarities between the IR and the DFR than there would have been, had we used the original Interim Report. The DFR was also delayed by a month, compared to the original time schedule. There are still a couple of questions open, which will be addressed by the TPG in the Final Report from the project. These questions are summed up in section C7.

C2. Concepts and Theories

Theory and concepts have little value unless they can be applied for practical purposes and one of the key challenges for the ESPON 2013 Programme has been to strengthen the link between research and practice in order to ensure that the outputs of the ESPON Programme are of significant benefit to practitioners. There is a strong emphasis in the Targeted Analysis Projects on putting the operational use of the results into practice. In the context of PURR this has involved the development of a methodology to provide insights into the potential of different types of rural regions and the analysis of the five PURR stakeholder regions as case studies. It remains important however, that any such methodology is underpinned by a coherent and robust theoretical and conceptual basis. There are numerous concepts that have the potential to underpin discussions about regional potential in rural regions in Europe and the conceptual and theoretical context has evolved significantly in recent years as new concepts, theories and paradigms have emerged and become dominant. Such concepts tend to get increasingly challenged with the passage of time as they are discussed and debated amongst diverse knowledge communities before being revised, transformed or destroyed. The purpose of this section is to identify some of the academic theories and concepts that underpin the discussion of regional potential in rural areas in Europe today.

Relevant concepts and implications for the identification of the potential of rural regions

Processes of rural change

The concept of **rurality** has evolved over time and rural areas in Europe are now highly diverse and heterogeneous. The nature and diversity of rural areas means that rurality is a contested and ambiguous term that means different things to different people despite having received increasing attention in academic and policy terms and despite the extensive and useful insights provided by projects such as EDORA. Rurality generally refers to the condition of being rural and there have been numerous functions and meanings attributed to rurality in different contexts over the years. Historically rurality has been associated with diverse and often contrasting characteristics including a harsh and difficult lifestyle or a simple and happy agricultural lifestyle in close association with nature. The association between agriculture and rural areas has been particularly strong and though it has been challenged in recent years by the emergence of a new rural paradigm (OECD 2006), it remains powerful in policy discourse.

Academic and policy discourse has seen the concept of rurality becoming increasingly detached from the physical space of rural areas that it traditionally referred to so that it has evolved into a much more complex and fluid concept reflecting the dynamics and complexity of the multitude of diverse rural areas in Europe today. The

EDORA Project provided substantial insights into the complexities of rural areas in Europe and explored many of the processes impacting on such areas. PURR has made considerable use of the knowledge resources generated in the EDORA arena due to the focus of both on development opportunities for rural areas in Europe.

Based on an extensive review of the rural development literature, three overarching meta-narratives were identified in the context of the EDORA project. Such narratives are a useful means of conceptualising and organising the complex drivers of change in rural areas. The *Agri-Centric* meta-narrative focuses on maximising agricultural competitiveness via diversification, remuneration for rural amenities, creating quality products, shortening supply chains and increasing regional appellation. The *Urban-Rural* meta-narrative draws together various story lines linked to the causes of disparities between accessible and remote/sparsely populated rural regions. This meta-narrative focuses on migration, rural-urban relationships, access to services of general interest (SGI), the role of information and communication technologies in facilitating new activities, and agglomeration (or its absence). The *Global Competition* meta-narrative emphasises "implications of increasing connexity and global trade liberalisation, in terms of the spatial segmentation of labour markets, and the associated structural change of rural areas." The opportunities for rural areas in the globalisation meta-narrative depend upon aspects including the "knowledge economy" the role of creative class, an emphasis on quality, place marketing and niche markets (ESPON, 2010:45). Each meta-narrative is associated with opportunities and challenges that form an essential factor in the determination of the potential of rural regions. A more detailed examination of these meta-narratives lead to the identification of nine specific themes which were examined in the EDORA project, and were adopted as a framework to explore processes of rural change also in the PURR project.

The nine themes used as a framework to explore processes of rural change are identified below and each briefly discussed:

- Demography
- Rural employment
- Rural business development
- Rural-urban interactions
- Access to services of general interest
- Role of cultural heritage in rural development
- Institutional capacity
- climate change

- Farm structural change and the role of agriculture in rural development

Nine working papers were produced in the context of EDORA that reviewed the current state of the art and literature in relation to each specific theme. A brief summary of some of the key points identified based on these working papers is given below.

Demographic trends (EDORA 2009a) and structures are a complex driver of change in rural areas and sufficient critical mass of population is a pre-condition for regional development at all territorial scales. Many sparsely populated and geographically peripheral rural regions are depopulating due to out-migration and low fertility rates, whereas other rural regions which are often closer to larger urban centres are experiencing counter urbanization processes and a consequent increase in population. The nature of demographic change has significant implications for many diverse policy areas including housing, health care and education among others.

The nature and impact of these demographic dynamics depends on a complex variety of factors. A lopsided age structure with an ageing population hampers development and can become self-reinforcing over time. Population development (size and structure) depends to a degree on natural population change but also increasingly on external migratory movements. It is anticipated that rural areas in the vicinity of large metropolitan areas will continue to grow while remote and sparsely populated rural areas will experience ongoing population decline though there will be significant differences in the migration and settlement patterns between different age groups. Policy measures to reverse the depopulation of remote rural areas are unlikely to be financially sustainable and therefore there will be dilemmas and difficult choices will have to be made.

Rural employment (EDORA 2009b) trends in rural areas are determined by a complex combination of factors such as farm diversification, a shift away from primary sector activities and emergence of the New Rural Economy[1], a blurring of the distinction between rural and urban markets (known as regional enlargement) and changing labour market segmentation. Certain economic activities appear to be moving to more accessible parts of the countryside as a result of processes of counter urbanization. At the same time labour markets in less accessible rural areas will potentially continue to decline. Though the extent of the geographical patterns of these processes are not as clear, it is clear that economic changes contribute to the emergence of social groups lacking education and training qualifications making it difficult for these groups to participate in the labour market.

[1] New Rural Economy refers to the increasing importance of non-agricultural secondary and tertiary economic activities and employment

Rural business development (EDORA 2009c) trends are driven by production push and pull factors and by consumption trends. Some farmers are pushed out of agricultural production activities, but some remain in farming, including alternative farming, or seek alternative employment opportunities for themselves. Some niche markets exist in areas such as tourism and recreation and these offer opportunities for some rural areas, depending on their characteristics. Rural business development tends to be influenced by the operation of local business networks, the ability to innovate and the operation of local/regional clusters. Rural businesses operate according to the same economic principles as urban businesses, but they operate in a very distinct environment that in turn generates specific drivers, opportunities and constraints.

Rural – urban interactions (EDORA 2009d) remain a focus. The physical and functional boundaries between urban and rural areas are becoming more blurred and the interdependencies between such areas more complex. The traditional interactions in many regions between rural and urban areas, whereby urban areas provided a focus for the sale and provision of goods and services for an extensive rural hinterland, have changed dramatically and in some cases become redundant. This evolution has left a vacuum in many areas and the re-establishment of mutually beneficial interactions between rural and urban areas at different territorial scales has emerged as one of the key challenges for regional development policies and strategies and this is clearly reflected by the strong emphasis on such interactions in the European Spatial Development Perspective (EC 1999). The emphasis on rural – urban interactions and integrated development between rural and urban areas was retained in the Territorial Agenda of the European Union (DE Presidency 2007), which was the follow up document to the ESDP, and in the recently adopted TA2020 (Hungarian Presidency 2011). The complexities of the interactions in contemporary European regions was emphasised in the context of the EDORA Project (EDORA 2009d) where numerous types of rural – urban linkages were identified (economic linkages, travel to work patterns, service access and provision, business and social networks, amenity, leisure and recreation, governance, partnerships and civic society, migration and lifestyles and physical infrastructure and resources). The relative balance and nature of these interactions helps to determine the amount of capital injected into an area, the degree to which capital is generated and retained in local areas and the extent to which these interactions have a positive or negative impact on rural areas.

Services of general interest (SGI) (EDORA 2009e) refer to services that are in principle available to everyone though the precise definition varies from country to country across Europe. Such services used to be referred to as public services though the distinction between public and private services has become increasingly

blurred in recent years. SGIs include all services considered to be in the general interest of society and therefore subject to public-service obligations. As such, services in relation to transport, post, telecommunications, banking, broadcasting, energy, water, waste, childcare, education, health, elderly care, security, recreation / culture and library / leisure can all be considered as SGIs. There is a general perception that accessibility to such services is decreasing in many areas and the accessibility and quality of such services, particularly in rural areas, has been debated in numerous academic and policy arenas. In some regions such services have the potential to become key drivers of economic development and some regions may even specialise in service provision. There appear to be a number of geographical contradictions and challenges in relation to the provision of SGIs. Pressure to centralise services on cost grounds contrasts with rhetoric of sustainable spatial planning that says that the geography of service provision should be more localised. There is also a question of the extent to which access to and quality of these services varies between rural and urban areas? Though the characteristics of these services differ, a few common trends can be observed. Firstly, there has been a trend to privatise formerly public services. Secondly, both private and public services are becoming cost-sensitive due to competition, price-conscious consumers and less public subsidies. In addition, reducing or centralising services is becoming increasingly common due to more restrained public budgets. There is a danger that in areas where these trends combine with economic and demographic decline, a vicious circle may be set in motion, making regions less and less attractive for businesses and households.

Cultural heritage (EDORA 2009f), comprising both tangible (monuments; protected landscapes and sites, museums and galleries, events) and intangible (specific practices, representations, expressions, knowledge, skills as well as cultural diversity and cultural capital) aspects, provides an important potential for rural development. Whereas urban culture is primarily portrayed as contemporary and dynamic through discourses of multi-culturalism and creativity, rural culture is often constructed in images of the past representing tradition and indigenousness. Processes in relation to the decline of agriculture, land abandonment and urban sprawl are reducing the association between people and place in many rural regions, reflecting the increasing complexity of the concept of rurality discussed above.

Paradoxically, the geographical peripherality which has contributed significantly to the relative underperformance of some rural regions in the past has protected constituent elements of cultural heritage which might be valuable in determining future development trajectories. Historical traditions offer significant opportunities for commodification, marketing and branding in exportable production and for revenue generated by visitor experiences as part of integrated rural tourism

development. Rural regions with natural parks or built heritage attractions and areas with authentic cultural practices have potential to attract visitors, especially if they are accessible to large urban centres.

The challenge for future rural development trajectories is to add value to the stock of cultural capital and this depends on cultural capacity and cultural mobilisation. Cultural capital consists of the cultural resources of the region and the EDORA project hypothesised that the greater the density of tangible and intangible cultural capital in a rural area, the higher the potential impact on rural development. Cultural capital needs to be transformed into goods that have market and non-market values as drivers of development. The EDORA project hypothesised that the mobilisation of such goods, be they common goods such as cultural landscapes or private goods such as locally denominated food products, will boost the identity and image of a rural region and in doing so, help drive the rural economy. However, one of the key challenges in relation to cultural heritage is that reliable, meaningful and comparable statistics are notoriously difficult to find.

The EDORA project took a fairly broad interpretation of **institutional capacity** (EDORA 2009g). The concept of governance has risen to prominence and the concept of multi-level governance is now widely promoted as a means of managing development at different spatial scales (vertical dimension) and between different sectors (horizontal dimension). This process of re-scaling has resulted in an ongoing shift of rural policy away from sector specific policy to more integrated and place based policy. Effective governance in rural areas implies increased integration between diverse knowledge communities and arenas and the creation and operation of local level partnerships by stakeholders with the capacity to think and act strategically as well as the power and influence to solve complex problems using integrated cross-sectoral and multi-level approaches. Rural development remains partly centrally driven in terms of budget resources and strategic planning, but also has a new institutional setting combined with local and regional capacities. The ability to act within relevant arenas will depend to a large degree on the institutional capacity to activate and organise different knowledge communities through innovative inputs and incentives. Robust and effective multi-agent cross-scalar governance arrangements or knowledge channels will be required in order to transform the knowledge generated in these arenas into effective policy and action.

In general institutional capacity can be identified as the collection of social resources that enable coordination and collective strategic agency and accommodation of interests from different levels of governance. It refers to the type of organisational arrangements discussed in the context of the territorial knowledge channels framework discussed later in this chapter (Adams et al 2011). In addition, the procedural repertoires that a rural territory can draw upon, as well as the formal and

informal relationships that provide their context and the embedded system of values that underpin them are also crucial (EDORA, 2009g). Though the future of EU policy and funding post 2013 remains unclear, a move away from redistributive policies appears likely and bottom up community focused initiatives such as Leader have made it possible to perceive the development of rural areas from a new perspective. As with cultural heritage, institutional capacity is another area for which it is notoriously difficult to identify meaningful quantitative data that capture the complexity of the diverse processes involved.

Climate change (EDORA 2009h) is currently seen as one of the most significant challenges of our time and it is likely to have a significant impact on rural areas. Local impacts of climate change are likely to be extremely diverse and as a result climate change will generate diverse drivers, opportunities and constraints in different areas. Some agricultural areas will be able to introduce new crops, increase productivity, and cultivate larger areas of land. Others will face water shortages, desertification and reduction of arable lands. Extreme weather, strong winds, floods, and extreme heat are also likely to generate negative impacts in some areas. The challenge is exacerbated due to the inexperience of local governments at developing integrated and coordinated responses to the challenges of climate change. Climate change potentially offers a number of challenges but also opportunities for regions. Strategies focusing on the adaptation and mitigation of climate change may offer potential for rural development in terms of a new green economy or the provision of ecosystem goods and services.

The final EDORA theme explored is **farm structural change and the role of agriculture in rural development** (EDORA 2009i). Agriculture is an important determinant of differentiation between rural regions remaining profitable in some rural areas whereas in others reduced profit margins have led farmers to seek alternative opportunities to diversify. Where alternatives are scarce, out-migration of people is typical. Small scale producers tend to be attached to shorter locally embedded supply chains, often competing for a limited market. However, they often fall short of food quality standards and cannot meet supply volume requirements set by supermarket retailers. At the same time small scale producers can also compete better with well-branded high quality products. Though declining in many parts of Europe, agriculture remains important for a variety of reasons in relation to food production, landscape and habitat management, employment, social cohesion and identity.

A detailed review of rural development policy literature undertaken in the context of EDORA and supplemented in the context of PURR reveals that there are numerous generalisations, stereotypes and what Hodges (2004) referred to as stylised fallacies about rural areas. The emergence and enduring influence of the rural idyll as one of

the most powerful discourses in relation to rurality is an illustration of this phenomenon. The rural idyll characterises rural areas as peaceful and harmonious and in contrast with the perceived chaos and immorality of urban areas. The concept of the rural idyll however, is usually imposed on rural areas from the outside, often by urban residents whose images of rural areas are often in sharp contrast with reality. Woods (2011) argued that such images are often shaped primarily by nostalgia and the media (including film, TV series, poetry and literature) rather than real life experience. The endurance of what can be referred to as the myth of the rural idyll has the potential to influence spatial development in rural areas in a variety of ways. Many rural areas in close proximity to urban centres are likely to experience processes of counter-urbanisation as urban residents seek to move out of the city to live in attractive rural areas and commute into work each day. In addition the rural idyll has potential to be used as a marketing tool by many rural areas seeking to encourage urban residents to visit for tourism, leisure and recreation. At the same time however, the rural idyll also has the potential to influence the thinking of policy makers or to be used by policy makers with an agenda to divert resources away from rural areas to address problems in urban areas.

The EDORA Project examined each of the nine themes identified above in the context of the three meta-narratives (agri-centric, urban-rural and global competition). Each of the meta-narratives has a range of both opportunities and challenges associated with it which impact on all rural areas in the ESPON space. The implication is that these are primarily driven by exogenous global pressures and that the increased diversity of rural areas in Europe is therefore best explained by differences in local capacity and environments. The EDORA methodology acknowledged that the meta-narratives were generalisations of reality and were not intended to provide an exhaustive illustration of ways in which individual regions experienced change or to describe the situation in a specific region. The value of the meta-narratives and broad statistical generalisations were to outline broad socio-economic patterns that can inform rural policy and allow regions to position themselves within their broader European context.

The broad statistical data have been encapsulated in a variety of rural typologies that were used in EDORA to provide insights into different dimensions of rural change and diversity. The typologies explored the rurality / accessibility dimension, the economic restructuring dimension and performance dimension. The **urban – rural typology** is a modified form of the well known OECD classification and classified regions into the following categories:

1. Predominantly Urban (PU)

21. Intermediate Accessible (IA).

22. Intermediate Remote (IR).

31. Predominantly Rural Accessible (PRA).

32. Predominantly Rural Remote (PRA).

The **Structural Typology** for non-urban regions distinguished between:

1. Agrarian economies.

2. Consumption countryside.

3. Diversified (with important Secondary Sector).

4. Diversified (with important Market Services Sector).

The **Performance typology** for non-urban regions distinguished between four types of "non-urban" region:

1. Accumulating

2. Above Average

3. Below Average

4. Depleting

The EDORA typologies provide a somewhat static but nevertheless useful classification that provides insights into some of the characteristics of NUTS III regions in Europe and allows regions to view themselves within their European context. However, the limitations of such generalisations also need to be acknowledged:

"These are very simple, broad-brush generalisations, which, of course, cannot "do justice" to the wealth of local variation in rural areas across the ESPON space, or to the infinite number of possible combinations of drivers, opportunities and constraints" (ESPON 2010:48).

The inability of the top down methodology to provide comprehensive insights into local micro-scale characteristics reflects on the one hand the heterogeneity of the rural regions in Europe and on the other hand the diverse ways in which the boundaries of NUTS III region are drawn in different member states. An exploration of twelve exemplar NUTS III regions in EDORA was necessary in order to gain insights into micro-scale patterns of rural differentiation. The amount and quality of quantitative information and data varies between countries and between regions. The most important aspect is that each region is described in a way that allows an assessment of their specific territorial potential rather than seeking to describe regions using identical types of quantitative data. Therefore, qualitative data can and must supplement and / or replace quantitative data in certain cases.These limitations

clearly demonstrate the need for a bottom up approach to access the local rural knowledges that will supplement the European perspective with the necessary details at the micro-level:

"…these propositions point towards neo-endogenous approaches, in which a "bottom up" process of regional programme design is fully supported and guided by available (hard/standardised/comparable) information, expert advice, and the kind of strategic perspective which is best assembled at a central level". (ESPON 2010:58).

The evidence discussed above suggests that a neo-endogenous approach is required to the elaboration of the PURR methodology to identify the potential of rural regions and this will be discussed in more detail in the next section.

An assets based approach

New paradigms for regional development and for rural development have emerged in recent years. The new regional development paradigm has been promoted by organisations such as the European Commission, the OECD and the World Bank and most recently in influential documents including the Barca Report (Barca 2009), the Territorial Agenda 2020 (Hungarian Presidency 2011), the Green Paper on Territorial Cohesion (CEC 2007), the Fifth Report on Economic, Social and Territorial Cohesion (CEC 2010) and the World Development Report (World Bank 2009). The new regional development paradigm shares some key characteristics with the new rural paradigm, including an increased focus on the territorial dimension of policy and a move away from relying on external exogenous resources towards an increased reliance on identifying and harnessing endogenous assets and potential. The main aim of the new rural paradigm was to stimulate new ways of thinking about rural areas and rural development and two of the key messages were:

"agriculture is no longer the backbone of rural economies" and "rural is not synonymous with decline" (OECD 2006: 22).

Both statements challenge the type of well established generalisations and stereotypes about rural areas that were discussed earlier in this chapter. The new rural paradigm based on endogenous potential has replaced the previous modernisation paradigm that was dominant in rural development until the rise of neo-liberal ideologies in the 1980s and 1990s. The modernisation paradigm promoted the modernisation of agriculture, the rural economy (usually in the form of economic diversification), infrastructure and rural society and social structures. Agricultural over production, environmental degradation and social inequality were among the negative consequences of the modernisation approach which relied heavily on EU and state subsidies. The rise of neo-liberal ideology throughout Europe in the context of scarce local resources represented an ideological move away from subsidy based approaches as the public sector increasingly sought means of reducing

public spending. Many rural regions that were perceived to be lagging and lacking in the necessary assets to stimulate development had traditionally sought to attract exogenous resources based on inward investment. However, such approaches had limited success and even where such capital was initially attracted to a rural region it often proved to be highly mobile so that the investment often left the rural region as rapidly as it had arrived. The characteristics of the new rural paradigm include focusing on the development of resources found within a region, a shift from a top-down to a bottom-up approach and a move away from a sector based approach to an approach based on the territorial capital or specific regional assets. The new approach has been translated into EU policy terms in the form of programmes such as Leader. A comparison of some of the key characteristics of the old approach and the new rural paradigm is provided in the table below which reveals that two of the key characteristics of the new approach are the place based rather than sector based approach and the emphasis on investments rather than subsidies. The strong emphasis on the territorial dimension and the focus on vertical (between territorial levels) and horizontal (between sectors) co-ordination implies that the new rural paradigm is in close practical and conceptual proximity to the territorial cohesion objective as outlined in the Green Paper on Territorial Cohesion (EC 2007) and Fifth Report on Economic, Social and Territorial Cohesion (EC 2010).

Figure 1: New rural paradigm

	Traditional approach	New paradigm
Objectives	Equalisation of farms income and farm competitiveness	Competitiveness of rural areas, valorisation of local assets, exploitation of unused resources
Key target sector	Agriculture	Diverse sectors of rural economies (tourism, manufacturing, ICT industries etc)
Main tools	Subsidies	Investments
Key actors	National governments and farmers	All levels of government (supra-national, national, regional and local), various local stakeholders (public, private, NGOs)

Source: OECD 2006 P.15

The increased focus on endogenous resources is therefore intrinsically linked with the new rural development paradigm. However, Woods (2011) summarises the main criticisms of endogenous approaches as being:

- A limited capacity to tackle fundamental structural disadvantage in relation to locational, infrastructural, economic and human resources deficits;
- A uneven capacity of local communities to engage in endogenous development and bottom up initiatives due to uneven distribution of social capital;
- A tendency for endogenous development to exclude certain sectors of the community.

The realisation of rural potential is therefore likely to depend on the effective harnessing of an appropriate mixture of endogenous and exogenous factors as a means of strengthening rural viability and capacity. Ray (2006) has written of the need for endogenous potential to look outwards as well as inwards in order to not only harness local resources and actors but to sell these to external consumers and policy makers, what Ray referred to as neo-endogenous potential. The ability of rural regions to determine the appropriate balance with which they need to connect both with wider exogenous networks (economic, political, governance, financial.....) as well as localised capacity and assets will therefore be central to their ability to successfully identify and harness their potential.

In the context of rural areas, an asset can be interpreted as a resource that has the capacity to benefit an area and by so doing to enhance the quality of life of the local rural community in economic or other terms. Such assets can operate at and be exploited at different scales from the individual to the entire population or from an individual household up to the entire region. The idea of increasing the competitiveness of rural regions through identifying ways in which they can harness and exploit their specific characteristics in order to fulfil their regional potential has increasingly dominated the rural development discourse in the EU in recent years and has increasingly influenced both regional policy and rural policy. The new rural paradigm represents an approach that requires the identification of assets rather than weaknesses of a region and seeks to build on existing capacities and characteristics rather than to identify deficiencies and deficits that need to be addressed. The approach emphasises the uniqueness of each region and the importance of context sensitive local solutions. Such assets can be hard / tangible (buildings, physical infrastructure, landscape...) or soft / intangible (skills, capacities, culture, networks....). Braithwaite (2009) identified seven forms of capital within a conceptual framework for Asset Based Community Development:

- Financial

- Built
- Natural
- Social
- Human
- Cultural
- Political

The task for local communities within this framework is, according to Braithwaite, to identify the characteristics of these assets in terms of the scale at which they could be developed, how this may change over time, how complimentary or conflicting demands can be addressed and what the associated costs (financial, emotional, human resources capacity, environmental....) may be now and in the future. The dynamic nature of such assets, where their value changes over time, is further exacerbated by the fact that such value will be perceived differently by different individuals, networks and communities.

The concept *of territorial capital* has emerged as a useful interpretive lens through which to assess regional potential and encapsulates the different types of capital identified by Braithwaite. The forces of globalisation and the ongoing dominance of neo-liberal ideologies in many European countries imply that there is likely to be increasing polarisation within and between regions for the foreseeable future. The evidence suggests that the winning regions are likely to be the metropolitan regions, particularly those with a highly accessible central location in either a European or national context. The losing regions on the other hand are likely to be those without large urban centres and in geographically peripheral locations. The new rural paradigm determines that such regions will have to rely on harnessing or commodifying their potential as EU and domestic policy and programmes move away from transfer payments and subsidies under the influence of public austerity measures.

The concept of territorial capital can be traced back to development theories that emerged in the early 1980s but has more recently re-emerged within the European spatial planning discourse and provides a means of conceptualising the increased diversity of Europe. In simple terms territorial capital suggests that all regions are unique and refers to the specific characteristics or talents of a region including both tangible and intangible factors, the latter being extremely difficult to identify and to assess. Hague et al (2011) define territorial capital as the sum of the unique combination of characteristics that are specific to all regions but one of the most frequently used definitions of territorial capital is:

"A region's territorial capital is distinct from other areas and is determined by many factors (which) … may include …geographical location, size, factor of production endowment, climate, traditions, natural resources, quality of life or the agglomeration economies provided by its cities. Other factors may be 'untraced interdependencies' such as understandings, customs and informal rules that enable economic actors to work together under conditions of uncertainty, or the solidarity, mutual assistance and co-opting of ideas that often develop in small and medium-size enterprises working in the same sector (social capital). Lastly there is an intangible factor, 'something in the air', called the environment and which is the outcome of a combination of institutions, rules, practices, producers, researchers and policy-makers, that make a certain creativity and innovation possible. This 'territorial capital' generates a higher return for certain kinds of investments than for others, since they are better suited to the area and use its assets and potential more effectively" (OECD 2001).

In recent EU policy and academic discourse territorial capital has increasingly been promoted as a means of strengthening regional competitiveness (Pike et al 2006) in regions where the market has failed to achieve the areas potential. The concept is therefore particularly attractive to many rural regions, particularly those in geographically peripheral locations that by definition tend to have more limited potential and therefore face greater development challenges.

"More recently understanding of territorial capital has been expanded by Roberto Camagni (2008) to account for mixed assets of development. These assets can be "soft" / "hard", public and private. Regional development policy has, until now, tended to focus on these assets, but not considered assets in between, the so called "club/impure public goods". Examples of these goods could include tourism and recreation facilities, place marketing, an innovative milieau and business network capacity. According to Camagni's taxonomy territorial capital includes: (a) *material and immaterial elements*, such as social capital, infrastructure, public goods and private fixed capital on the one side, and human capital, entrepreneurship and social capital on the other side; (b) *private and public goods*, as well as intermediate category of impure public goods and so called "club goods." (c) *functional and relational elements* in the form of inter-personal and inter-institutional linkages. Such capital is not always easy to build and maintain but it is extremely important for facilitating innovation, creativity, and economic competitiveness (ESPON 2010c).

The Territorial Diversity Project (TeDi) stated that regional development policies need to acknowledge the integrated nature of territorial capital by ensuring coherence between its various components. TeDi identified the lack of coherence between the economic, social and ecological dimensions of development to be the main problem rather than the lack of development assets. This implies that the

potential of rural regions depends primarily on the ability to strengthen coherence between these dimensions of territorial capital. In the context of TeDi, territorial capital involves three key components: human capital (people), natural resources and territorial positioning (place) and institutional context & governance structures (power) (ESPON, 2010b: 21-22)."

Territorial capital is a complex concept that is difficult to identify and to measure due to the intangible and qualitative nature of some of its elements. As a result, top-down quantitative methods and data are unlikely to be able to identify territorial capital with accuracy as the results will depend on a number of factors including the availability and scale of data. Some of the more recent research discussed above suggests that intangible assets have become "the key to enabling each rural region to fulfil its potential" and as these assets are frequently "aspatial" and hidden from the sight of external observers they "can only be captured on a region to region basis by some form of qualitative auditing." (Copus, 2010: 58). The PURR project contributes to the development of such an auditing methodology to assist with the identification of intangible assets.

Despite this however, there remains a strong emphasis on such quantitative data when seeking to identify an areas territorial capital and inform policy decisions due to the ease with which such data can be obtained and analysed. There has been much discussion in the context of ESPON and other knowledge arenas about the need to find a means to identify the intangible assets of territorial capital and this will involve accessing the more qualitative and tacit types of rural knowledges often possessed by regional and local stakeholders.

The role of rural knowledges

The complexities of providing knowledge with the capacity to effectively inform decision making in relation to rural development policy is acknowledged in the First ESPON 2013 Scientific Report:

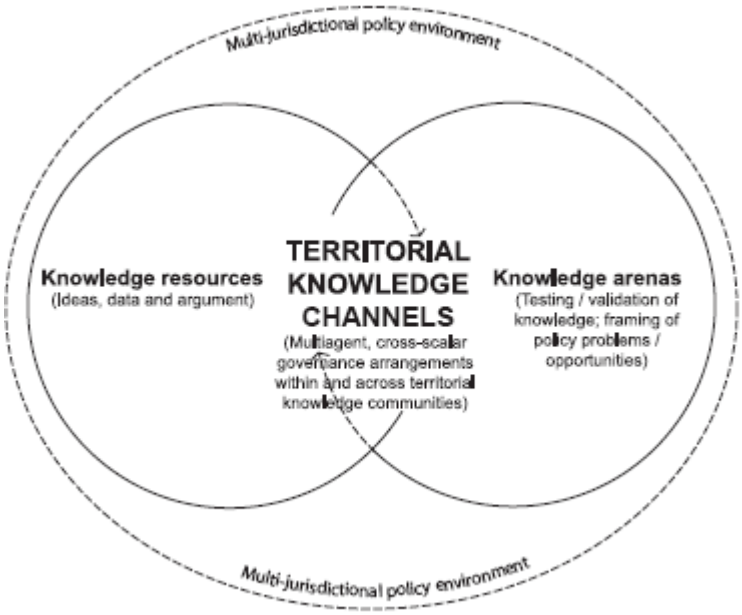
"Clearly rural change is an extremely complex and nuanced phenomenon; the more that policy makers can understand of the details of the local experience, and the more intervention can accommodate the full range of regional differences, the more effective it will be. Recent trends in policy design and implementation have introduced a greater degree of flexibility to meet local circumstances, through menu-based approaches, neo-endogenous paradigms and so on" (ESPON 2010:39).

There has been an increased focus on evidence based or evidence informed policy in recent years throughout Europe, both at the EU level and within the domestic contexts of the individual member states (Davoudi 2006, Faludi and Waterhout 2006a and 2006b) and this raises questions about the interplay between knowledge and policy development. How are ideas, data and argument, filtered through power

struggles and conflicts, translated into the organisational and institutional forces that shape the course of policy development? Adams et al (2011) have conceptualised knowledge as consisting of knowledge resources defined as ideas, data and arguments and knowledge arenas where they are subject to debate and tested and validated. There are multiple knowledge arenas active at different territorial scales within the complex reality of EU multi-level governance. The ESPON Programme and individual ESPON projects can be conceptualised as knowledge arenas as they are places where knowledge resources in the form of data, ideas and argument are debated, tested and validated. ESPON has generated substantial knowledge resources since the first projects in 2003, as have other EU programmes such as interreg. The PURR Project constitutes a knowledge arena within which stakeholders in the PURR regions have been able to discuss and debate rural development issues in relation to their own region but with reference to wider rural development debates.

Adams et al (2011) argue that the extent of the influence of the knowledge resources generated within PURR on policy development within the stakeholder regions will depend to a large degree on territorial knowledge channels, which are situated at the confluence between knowledge resources and knowledge arenas. In other words, if the regional stakeholders feel that the methodology developed (a knowledge resource) within the context of PURR (a knowledge arena) adds value to their quest to identify the potential of their region, they will seek to steer this knowledge resource into the appropriate governance structures (knowledge channels) with the power to influence policy development. Territorial knowledge channels can therefore be defined as the actual mechanisms such as steering groups or committees that facilitate complex processes of territorial governance and which facilitate interactivity between knowledge communities consisting of diverse groups of regional stakeholders. The extent to which different knowledge channels influence policy development will depend largely on the degree of power and influence that they can exert on the policy development process and their ability to link knowledge resources with relevant knowledge arenas for discussion and debate and where in turn they are validated, transformed or possibly even destroyed.

Figure 2: Territorial knowledge channels framework



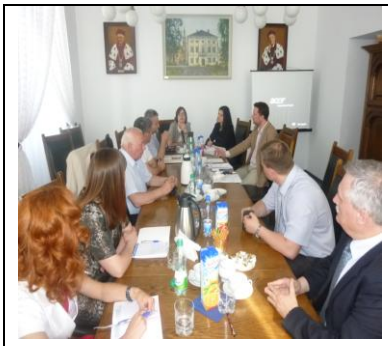
Source: Adams et al 2011

The territorial knowledge channels framework is process oriented and places a strong emphasis on the interaction between diverse groups of actors, networks and communities, referred to as territorial knowledge communities. Such knowledge communities can include expert groups, communities of practice and advocacy or interest groups and each network or community possesses different characteristics and different types of knowledge. A key challenge for any process will be to determine the extent to which different types of knowledge are most appropriate or what the correct balance is between the different types of knowledge in particular circumstances.

There are many types of knowledge that combine to accurately encapsulate the tangible and intangible assets of rural regions. These rural knowledges consist of scientific knowledge often based on quantitative data, expert knowledge often provided by external consultants based on good practice from elsewhere and the knowledge of local stakeholders that is often based on more intangible aspects that are difficult to identify and to measure. It is unlikely that in any given context one of these types of knowledge in isolation will be sufficient to provide an accurate reflection of the characteristics of an area. In the context of the PURR project the scientific knowledge referred to could be considered to be ESPON type knowledge based on primarily quantitative data and broad statistics. As with a satellite navigation system, a certain amount of quantitative data is used as an input and specific results are delivered often in the form of electronic maps and images. The

expert knowledge of an external consultant can be equated to the advice provided by the TPG during the course of the project based on good practice and experience from elsewhere. The knowledge from the regional stakeholders is of a more qualitative nature and based to a certain extent on local experiences and is therefore often more intangible tacit knowledge which is more difficult to quantify, measure and articulate. The regional workshops have been one of the primary means of generating such knowledge in the case of PURR.

Figure 3: Diverse types of knowledge



Different types of knowledge represented by the knowledge of local stakeholders, the scientific knowledge of the satellite navigation system and the expert knowledge of an external consultant

Source: Authors

The characteristics of these different types of rural knowledge are explained further in the table below:

Table 1: Characteristics of diverse types of knowledge

	Type of knowledge	Advantages	Disadvantages	Who has this knowledge?
Local knowledge	Endogenous. Tacit. Experiential. Deeply embedded in community. Often – aspatial. Mostly qualitative	Place based, contextual, detailed depiction of local rural reality	Difficult to unlock Loss of broader perspective	Locals
Scientific knowledge	Exogenous. Mostly quantitative. Based on accumulated data and existing theoretical generalizations	Standardized, quantifiable, can be re-used and generalized	Cannot not provide accurate in-depth description of local rural realities and context	Scientific and statistical databases
External knowledge	Exogenous. Based on previous work experience	Involved outsider perspective	Knowledge based on success stories from other instances that cannot always be transferred from place to place	Expert-consultant

Source: Authors

The scientific and other expert elements of these rural knowledges are primarily exogenous knowledge resources in the form of broad quantitative statistics and data that can be relatively easily measured and are therefore tangible. At the other end of the spectrum knowledge resources are primarily endogenous and more qualitative by nature meaning that they are less tangible and therefore more difficult to identify, articulate and measure. Such kowledges are often in the form of tacit and experiential knowledge that is usually deeply imbedded in local communities. A key challenge is therefore how to unlock and access this knowledge in order to allow local actors, networks and communities to articulate it so that it can enrich the knowledge and evidence base underpinning the policy development process.

Frameworks for policy development

There has been considerable debate in the knowledge arenas of regional development policy, practice and academia about the extent to which regional development trajectories are path dependent, that is they are shaped and influenced by past histories and legacies and the existing characteristics of places, or whether the regions can shape their own destinies through policy interventions and other choices. The general consensus based on recent discussion and debate is that the

future of rural regions will be determined by a complex combination of numerous exogenous and endogenous factors. The evidence in the discussion above suggests that the capacity of rural regions to respond to contemporary, evolving and future challenges and opportunities and to identify and harness intangible assets will increasingly become the key to enabling each rural region to fulfil its potential. The future development trajectory of a region will therefore depend on a combination of exogenous factors and decisions and actions undertaken within the region. Regional stakeholders need to clarify the extent to which they can influence the future development trajectory of their region and the extent to which they should take risks in terms of the choices that they make. These choices will involve complex dilemmas for regional stakeholders and the aim of this section of the chapter is to explore the types of dilemmas that could emerge, the potential implications of different choices and to suggest how a selection of scenarios for potential regional futures could be used as a framework to support policy development. The framework for policy development is based on consideration of options open to regional stakeholders, the influence of diverse storylines and paradigms and the framework for policy implementation.

1) ***Strategic postures and portfolio of actions****: the s*trategic postures of regions relate to the approach and type of actions that they choose to undertake and can be proactive, reactive or passive. Proactive strategies seek to shape the future whereas more reactive strategies seek to adapt to the future simply reserve the right to play (see figure below). Defensive strategies seek to maintain the status quo through opposing change. The choice of strategic posture determines to a large degree the portfolio of actions have varying degrees of risks and potential payoffs or benefits.

2) ***Prevailing development paradigms****, such as sustainability, convergence and regional competitiveness:* these paradigms set values and frameworks that help to determine paths according to which development can be best achieved.

3) ***Framework for policy implementation****:* the chosen framework determines the approach taken by stakeholders when implementing the regional development strategy and can be based on top-down and bottom-up approaches or more often somewhere between the two.

Strategic postures and portfolio of actions

Stakeholders will need to make an informed decision to either try to shape the future, adapt to the future or simply to reserve the right to play as illustrated in the figure below. The choice of strategy will depend on the human resources, financial, institutional and governance capacities of the region and the choice will also have

significant implications in determining the nature and extent of the actions necessary in pursuit of this choice.

Figure 4: strategic postures

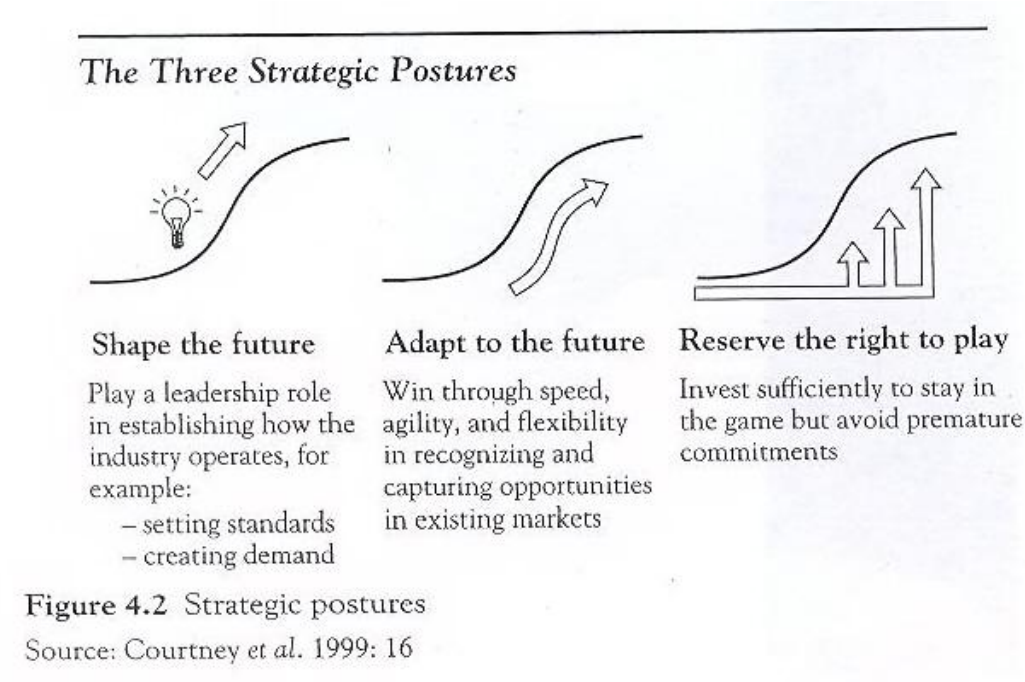


Figure 4.2 Strategic postures
Source: Courtney *et al*. 1999: 16

Source: Courtney, *et al* 1999, cited by Dimitriou, 2007.

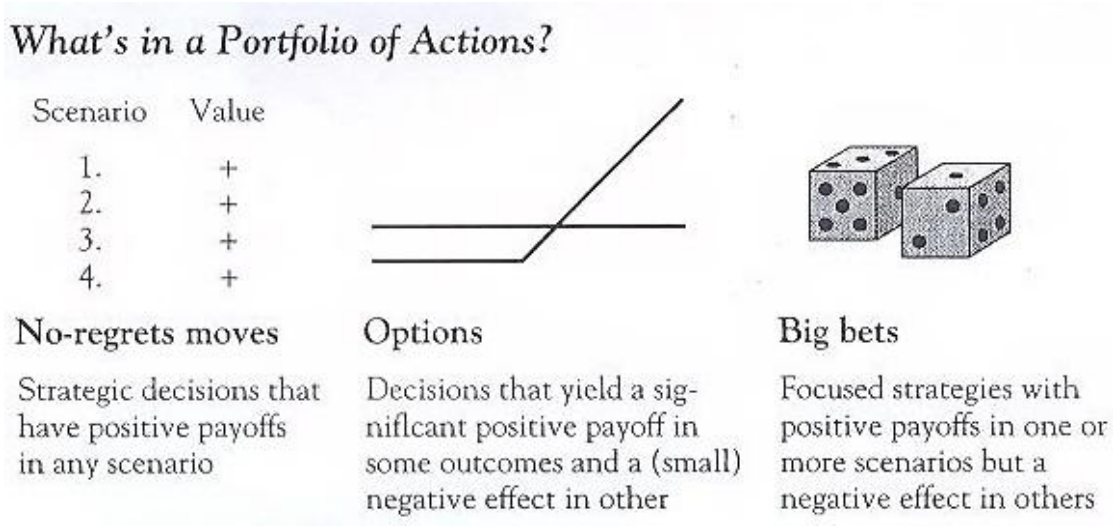
The first option in the figure is a high risk strategy that requires substantial regional capacities including path shaping qualities whereby the region has the capacity to undertake a leadership role. The second represents a more cautious approach but requires significant flexibility and the capacity to identify and capitalise on opportunities as they arise and adapt quickly to fluid situations. The third strategic posture represents is the most cautious approach whereby a region simply invests enough to stay in the game or in other words to maintain a sense of equilibrium.

The choices facing regional stakeholders have also been conceptualised as taking the *high road* or the *low road* to regional development. The high road to regional development implies the pursuit of high quality, highly skilled knowledge intensive jobs, locally embedded forms of development and a long-term sustainable strategy in a transparent governance context. A strategy in pursuit of the low road to regional development implies low skilled, low paid manual jobs that are often externally controlled and with low levels of job security. The ability of individual regions to pursue the high road will be highly variable and such strategies are likely to be time consuming and highly complex. In reality most regions choose to pursue the high road to regional development regardless of whether they possess the necessary characteristics and capacities to do so effectively.

Passive strategies aimed oppose change and resist policy innovation, new technological opportunities, new markets and because stakeholders are trying to counteract external and internal drivers this strategic posture is more defensive. Passive strategies choose not to pursue policies that prepare them for the future and are usually promoted by stakeholders who think that the costs of making changes are too high and they therefore prefer to maintain the *status-quo*. In some cases such passivity is justified because stakeholders are uncertain about their future and therefore, they choose to conserve their energy in order to stick to the usual way of doing things. To justify their inaction, stakeholders can even mobilise resources to create a false sense of stability and predictability, thus politicising different aspects of a development strategy. However, external drivers such as climate change and rising energy costs continue to influence development in regions where a passive strategy has been adopted regardless of the perceptions of local stakeholders. If such drivers are continuously ignored they can cause sudden breaks or events that stakeholders are unprepared for.

Regional stakeholders therefore have a variety of options available about the extent of the risks they should take. This applies to strategic decisions at the regional level as well as to the decisions made by individuals, networks and communities within the region in relation to business or social matters. Once such a decision has been made then this will determine the type of strategy that is appropriate. The choice of strategy can vary from a relatively safe strategy (the no regrets moves in the figure below) to high risk strategies (the big bets moves in the figure below).

Figure 5: the extent of risk in choice of strategy



Source: Courtney, *et al* 1999, cited by Dimitriou, 2007.

At one end of the spectrum the no regrets moves are relatively risk free and the strategy chosen is likely to have positive results leading to a win-win situation. A strategy to promote appropriate and sustainable tourism development in a rural region with a national park situated in close proximity to a large urban centre would be an example of no regrets moves. Alternatively the choice of strategy could lead to positive benefits in some situations or result in a negative impact in others as illustrated in the options move in the figure above. A strategy to promote the provision of eco-system goods and services for the benefit of local communities could have significant benefits on condition that these benefits can be harnessed and retained within local communities. However, if large-scale external interests are able to acquire access to the relevant natural resources then there is likely to be little or no benefit to local communities and resources will flow out of the region. The high risk or big bets strategy could deliver substantial benefits in some situations or lead to substantial negative benefits in other circumstances. Certain sectors including the provision of financial services, property development or high quality logistics services offer potentially significant benefits but are susceptible to external shocks such as the recent global economic crisis and an overemphasis on specific sectors has led to substantial negative impacts in some regions. Regional stakeholders therefore need to be aware of the options available to them but also to consider the potential consequences of their choices.

Prevailing development paradigms

There are a variety of potential development paradigms that can influence the choices made by regional stakeholders. Paradigms are in a continual state of evolution as new paradigms emerge and become dominant before being transformed or replace over the course of time. Care needs to be taken with the use of paradigms and the adoption of a particular paradigm at the expense of competing paradigms as different paradigms are likely to be appropriate in different circumstances (for example bottom up or top down). The adopted policy options and choice of dominant paradigm depend on the specific values of regional stakeholders and these shape policy concepts, determine principles of action and ultimately define the meaning of successful development. It is beyond the scope of this report to provide a complete overview of all development paradigms and policy options though a brief illustration of prevailing policy making dilemmas is useful. One longstanding debate concerns the adoption of equity or efficiency oriented policies and this also relates to the tensions and conflicts between cohesion and competitiveness based approaches at sub-national, national and EU level (Tewdwr-Jones 2011). Debates regarding equity / efficiency and cohesion / competitiveness have been highly influential in economic policy development in the latter part of the 20th century. Equity based approaches aim at mitigating internal social, economic and territorial disparities in development and income, whereas efficiency oriented policies aim at promoting faster economic

growth by investing in powerful economic drivers, via improved efficiency and competitiveness. Cohesion based approaches place social, economic and territorial cohesion as top priorities in all parts of a territory and promote co-operation, inclusion, stability and sustainable benefits. In rural regions this could potentially lead to more balanced urban-rural relations, the protection of local markets, support for farming as a way of life and diversification of the rural economy. Competitiveness based approaches promote individualism, dynamic change and immediate gains and in rural regions can potentially lead to unbalanced urban-rural relations, accelerating rates of urbanisation and migration and large-scale commercial farming.

Reducing social and economic disparities between regions and reducing the perceived backwardness of the least favoured regions has long been one of EU's key ambitions (EC 2006) and the priority of territorial cohesion was added with the adoption of the Lisbon Treaty (EC 2007). The concept of territorial cohesion has a central place in key EU documents such as the various cohesion reports and the recent Territorial Agenda 2020 and views on the meaning and application of the concept were sought via the Green Paper on Territorial Cohesion (EC 2007a). The relevance of cohesion type policies has grown significantly in recent years in response to the financial economic crisis, the need for territorial integration in the post enlargement EU, the volatility of energy prices, increasing demographic imbalances and the increasing impact of globalisation. The Green Paper on Territorial Cohesion (EC 2007a) emphasises the need for harmonious development of all types of places, and to ensure that the citizens of these places are able to make the most of the inherent features of their territories. Thus, territorial cohesion is an approach that seeks to optimise specific territorial assets and utilise territorial diversity as an element of development potential.

The Lisbon Strategy (EC 2000) has been a significant influence on EU policy in recent years marked a point of departure for more decisive orientation of EU's economy towards most competitive knowledge-based economy in the world. The strategy was an acknowledgement that Europe lags behind America and Asia in terms of expenditure on Research and development, amounts of venture capital, levels of labour and capital mobility as well as innovation. Competitiveness based approaches competition at the heart of policy development whereby investment is promoted in areas and sectors with more potential to guarantee higher returns in the future. Market based solutions, innovation based strategies and investments into competitive industries and territories are seen as key strategies for achieving optimal development solutions. The debate about equity vs. efficiency stretches across different levels of policy making, but ultimately come down to the question - what proportion of the budget should be spent on specific purposes? How should different

territories and sectors benefit from specific measures? How should governance, economic and social sectors be reorganised to reflect certain values?

Recent global developments have exposed the vulnerability of European economies and increased discrepancies between the more and the less developed regions in Europe. In response to financial and economic recession the European Commission has proposed 10 year strategy for reviving the economy in Europe 2020 (EC 2010). The Strategy identifies three mutually reinforcing priorities for increasing Europe's competitiveness in the world: smart growth (developing an economy based on knowledge and innovation), sustainable growth (promoting a more resource efficient, greener and more competitive economy) and inclusive growth (fostering a high-employment economy delivering social and territorial cohesion). Europe 2020 seeks to pursue an optimal balance between competitiveness and cohesion emphasising the need for building on local potentials and innovation (competitiveness) while emphasizing also the need for inclusion and sustainability (cohesion).

Hague et al 2011 have argued that the recent global economic crisis has increased the focus on the concept of regional resilience rather than regional competitiveness. Regional resilience refers to the extent to which individual regions are vulnerable to external shocks and how well they can react to and recover from such shocks. The evidence suggests that more liberal and open economies are particularly vulnerable to shocks related to global markets and therefore possess relatively low levels of regional resilience. Hague et al (2011) suggest that a strong regional system of innovation, a basis for becoming a learning region, modern transport and IT infrastructure, a skilled, innovative and entrepreneurial workforce, a supportive financial system and a diverse economic base are all characteristics that can help to make regions resilient to external shocks. However, the fact that many rural regions rely less on property speculation and are often relatively conservative in terms of financial markets implies that they may be more resilient to such external shocks than some more centrally located urban regions. In addition such rural regions often rely more heavily on the primary sector, which appears to have been far less severely hit by the economic crisis than other sectors such as finance and property, mechanical engineering, the car industry, logistics and various services which dominated the economies of many of the regions that have been worst hit. It may therefore be appropriate for some rural regions to pursue a strategy to strengthen or maintain regional resilience rather than to pursue regional competitiveness. Building regional resilience, decreasing vulnerability and increasing adaptability has also been emphasized while drafting European Territorial Agenda 2020:

> "In order to reduce the vulnerability of EU regions to negative consequences of globalisation there is a need to better tailor developmental polices to local conditions and requirements, i.e. to the specificity of the local and regional

endowments, such as endogenous potentials and development mechanisms." (Hungarian Presidency 2011a: 24)

In addition to broader development paradigms such as cohesion and competitiveness, there are more detailed options considered in various European territorial scenarios for specific policy areas. Approximately 20 scenarios in 9 thematic fields have been identified in the context of ESPON project 3.2. "Spatial Scenarios and Orientations in relation to the ESDP and Cohesion Policy." A list of the themes and development scenarios is provided in the table below. For each of the scenarios the driving forces, social, economic and spatial impacts and the medium and long-term dynamics of the scenario are discussed and stakeholders can use such scenarios when considering an appropriate policy-mix, choice of policy directions and instruments and a range of programmes and projects.

Table 2: thematic development scenarios

Theme	Development dilemmas / scenarios
Demography and migration	*Silver Century* *Open Border*
Transport	More investments in motorways Decoupling economic development from the mobility of people and goods
Energy	Europe in a context of high energy prices Europe after oil production peaking
Economy	*Best foot forward* *Euro Tigers* *Blühende Landschaften* National Revival
Governance	*Let a hundred flowers bloom* *Divide and Rule*
Enlargement	Europe as a "marketplace" Europe as a "Temple"
Rural development	*Open market* Sustainable rurality
Climate change	Repairing instead of preventing Anticipation of climate change by prevention measures
Socio-cultural evolution and integration	Non-mastered socio-cultural integration Towards a sustainable multicultural and socially cohesive Europe

Source: Based on ESPON (2006)

The scenarios above are a useful means of exploring potential alternative regional futures and the extent to which these futures can be influenced by policies and by exogenous and endogenous factors. Scenarios are not intended to determine a particular regional future but provide insights into ways in which different potential futures could unfold. Each of the scenarios above was developed in the context of

the ESPON Scenarios Project 3.2 and is described briefly below to illustrate how scenarios can be used by policy makers and practitioners when considering policy development.

The two scenarios relating to demography and migration paint contrasting pictures. In the *silver century* scenario the ageing process continues and immigration is tightly controlled resulting in a shrinking workforce and longer hours and higher taxes for those in employment. According to this scenario the political, economic and spatial balance of power will be increasingly dominated by older people and there will be a differential impact in different parts of the EU. The ageing process will be exacerbated in many rural areas due to increased outmigration of the younger population. The scenario will lead to an increasing division of space whereby young people are concentrated round urban employment centres and older people are distributed across suburban and rural areas. Naturally some rural areas will be favoured by wealthy retirees where they are in accessible locations and with high levels of service provision and quality whereas rural areas lacking these advantages will tend to retain the less mobile segments of their population. In the *open border* scenario the EU seeks to address the ageing of the population and the shrinking of the labour market by actively promoting immigration. There are positive impacts in the medium term in terms of a more balanced age structure and increased fertility rates though these trends are combined with increasing social tensions and conflicts particularly in some larger cities. There are increasing territorial disparities and population increases are generally confined to urban and suburban areas rather than rural (particularly remote rural) areas.

The transport theme also has two scenarios. The *more investment in motorways* scenario is a response to the unsuccessful modal split towards rail and maritime transport due to the lack of competitiveness of these modes. As a result the EU seek to maximise the road infrastructure and to significantly increase it with new motorways and roads. Not surprisingly the scenario delivers significant economic benefits though these are outweighed by the significant environmental costs. Some rural and geographically peripheral areas located in proximity to major road corridors become more attractive business locations but experience increased conflicts between land-uses. Economic development becomes more dispersed though the benefits do not significantly impact on more remote rural areas particularly those on the Eastern external border of the EU. Densely populated areas suffer increasingly from increased congestion and emissions and may rural areas suffer from damage to natural values and assets. The second transport scenario focuses on the *decoupling of economic development from the mobility of people and goods* and requires a combined strategy to promote long-term economic growth while protecting the environment. There is an active policy to limit road and short-distance air transport

and promote alternative modes of transport. The policy results in congestion and economic difficulties in the short-term until structural adaptations in behaviour start to take place. The regions that tend to benefit are those accessible by rail (particularly high speed links), waterways and maritime transport and conversely those most negatively affected are those reliant on roads and air transport, including many rural areas. Small and medium towns in rural areas (particularly remote rural areas) have continued to decline and become less attractive and the only rural areas to have gained population are those particularly attractive to retired communities.

The two energy based scenarios focus on *Europe in a context of high energy prices* and *Europe after oil production peaking*. In the first energy scenario the dramatic increase in energy prices in the coming years is primarily due to an increasing imbalance between supply and demand. The trends have a negative impact on energy intensive activities and the increased transport costs (both passenger and freight) make many rural areas, particularly remote rural areas, less attractive and less competitive. Development becomes even more concentrated in the pentagon and activities and landscapes in many rural areas become transformed due to increased areas used for bio-fuel production and wind farms. The second energy scenario envisages the peaking of oil production in the next few years with the peak in gas production being reached approximately ten years later resulting in massive increases in prices and scarcity. The result is a slow-down in globalisation processes and the new paradigm requires the organisation of production and consumption systems at the meso-scale to minimise transport costs. In this scenario Europe will go into a deep recession and large urban centres will become increasingly dependent on their rural hinterlands. Rural areas will generally benefit as demand for bio-fuels increases and labour intensive agricultural practices return resulting in counter-urbanisation processes even in more remote rural areas.

The four economic scenarios represent different segments in the relationship between efficiency and competitiveness:

- Higher efficiency and competitiveness – lower equity and cohesion (Best foot forward scenario);
- Higher efficiency and competitiveness – higher equity and cohesion (Euro Tigers scenario);
- Lower efficiency and competitiveness – lower equity and cohesion (National Revival scenario);
- Lower efficiency and competitiveness – higher equity and cohesion (Blühende Landschaften scenario);

The *best foot forward* scenario will primarily benefit those regions that are already strong mostly highly accessible regions (primarily situated in the pentagon) and with the capacity to support high level services and activities. Many rural areas will experience further decline and there will be a dramatic transformation of rural areas generally. Agriculture will be concentrated in the areas where it is most competitive and other rural areas will experience dramatic changes in land-use patterns with reduced agriculture and increasing proportions of land for recreational or environmental use or simply abandoned. Regional disparities will increase under this scenario. The *Euro tigers* scenario would see the EU pursue a simultaneous pursuit of economic competitiveness and territorial cohesion at the EU level and will require radical restructuring in many rural areas with some rural areas being more or less written off in terms of an ability to contribute to the overall competitiveness of the EU. Cohesion is likely to increase at the EU level driven by larger centres outside the pentagon but is also likely to decrease at the national level. The *Blühende Landschaften* scenario is strongly focused on cohesion and support for the development of sustainability based and cultural heritage initiatives and clean and knowledge-based businesses in lagging regions. This scenario would result in the pentagon losing its competitive edge in global markets and a net loss in terms of efficiency for the EU economy. Rural areas would be relatively stable due to continued high levels of subsidies for agriculture. Finally the *national revival* scenario would result in decreased support for European co-operation and for policies promoting competitiveness and cohesion. The scenario would involve the re-nationalisation of many policy areas and increasing competition between member states. The impact would be most negative for smaller and un-developed member states and disparities at the EU level would be likely to increase whereas disparities within countries may decrease over time. There would be a highly differential impact on rural areas with positive impacts in rural areas operating within a beneficial natural and economic context and negative impacts where natural and economic conditions are less favourable.

There are two scenarios elaborated under the governance theme: *Let a hundred flowers bloom* and *Divide and Rule*. The first governance scenario involves an integration of actors in the multi-level governance context of the EU and an increased focus on regions. In this scenario the functional integration of border regions increases moderately in the pentagon but significantly in the more peripheral areas of the EU. The most favoured regions in this scenario will be those located near borders and nationally peripheral locations, those with the capacity to develop cross-border co-operation and the regional capitals that benefit from increased devolution. In spatial terms, this scenario would see Europe develop in line with the bunch of grapes concept with numerous islands of development spread throughout the EU. In the *divide and rule scenario* national level actors dominate the policy context

resulting in an increased focus on sector based policies and the reinforcing of the role of the national capitals, especially those in the pentagon. The lack of co-ordination of sector polici8es results in a weakly integrated EU and a reduction in territorial cohesion at the EU level.

There are also two scenarios developed for the enlargement theme: *Europe as a "marketplace"* and *Europe as a "Temple"*. The debate about enlargement is clearly central to the EU integration process and is characterised by the debate between deepening or widening the enlargement and integration processes. The first scenario represents the widening of the enlargement process and results in lower levels of integration and increasing disparities. In the temple scenario deepening is preferred over widening so that the enlargement process is slowed and the focus is on deepening integration between existing member states. The latter will result in a more rapid convergence in levels of prosperity as support is given to areas outside the pentagon.

Two scenarios are developed for the rural development theme: *Open market* and *Sustainable rurality*. In the former market forces significantly influence the development of rural areas and have a particularly strong influence on agriculture. EU support for agriculture and for rural areas generally has been reduced in favour of more competitiveness oriented areas and sectors. There will be a significant increase in intensification and commercialisation of agriculture in more accessible rural areas with the most fertile soil and there will be a significant increase in the average farm size and reduction in the overall number of farms in these areas. In rural areas adjacent to large urban centres there will be increased development pressure resulting in some socio-economic benefits but also increased congestion and other negative impacts for the existing rural population. Rural areas that are attractive for tourism or as retirement destinations will also face significant development pressures and many natural areas will become cultivated either by increasingly intensive agriculture of with bio-fuels. The potentially increased levels of cohesion at the EU level will contrast with a reduction in territorial cohesion in many national contexts as the socio-economic viability of rural areas will depend on their proximity to larger urban centres. Environmental protection, increased competition and territorial cohesion are all pursued simultaneously in the *sustainable rurality* scenario and as a result the impact is less severe than the impact of the open market scenario. The number of farms will decrease and size of farms increase but much more gradually and there will be an increased focus on organic and regional products and landscape management supported by the EU. Agricultural areas will become more diversified and the extent and quality of natural areas will increase and stronger interactions will develop between urban and rural areas.

The two scenarios for the climate change theme reflect a reactive and a proactive approach to dealing with climate change. The first scenario focuses on *repairing instead of preventing* while the second scenario focuses on *anticipation of climate change by prevention measures*. In the former the key policymakers are reluctant to take potentially drastic preventative action due to a higher priority being given to other issues and adopt reparation measures only after events have taken place. There is therefore limited financial investment in the short-term but significant and increasing investment in the longer term as the economic impact of specific events and the increased costs of mitigating against further events more generally become apparent. The impact of this scenario on rural areas is different in different parts of Europe. Large parts of southern Europe become less attractive as temperatures increase, increased drought reduces agricultural viability and leads to desertification and land abandonment in places. Further north rural areas become much more intensively used for food and energy production and tourism. In the anticipation scenario politicians and society are much more united in the drive to address climate change and strong mitigation measures have been taken that have resulted in a slight reduction in economic growth in the short and medium term. Increased use of locally produced energy has reduced external energy dependency and mot only reduced energy costs but provided a competitive advantage for the EU in global markets. Agriculture and tourism in southern Europe have stagnated but the severe negative impacts of the open markets scenario have been avoided. The contrast between northern and southern Europe is more limited in this scenario.

The final theme focuses on socio-cultural evolution and integration with two contrasting scenarios *non-mastered socio-cultural integration* and *towards a sustainable multicultural and socially cohesive Europe*. As the name suggests, the first scenario results in increasing socio-cultural tensions between different income, ethnic and religious groups as public policies fail to ensure social cohesion, inclusion, integration and tolerance. The failure to integrate diverse groups into the labour market results in a falling employment rate which has significant negative consequences for economic development and contributes to a vicious circle as existing public services cannot be supported. The social tensions manifest themselves particularly in the cities and the rural areas in close proximity to cities come under significant development pressure as those who can seek to move out and commute into work. Retired people also seek to move to more socially quiet areas such as small towns and rural areas though the impact on more remote rural areas is likely to be limited. The overall picture is one of increasing polarisation and fragmentation with increasing levels of deprivation in the cities and increasing environmental problems both in the cities and in the surrounding rural areas. The contrasting scenario for the socio-cultural theme relies on increased resources aimed at integrating people into the labour market through investments in education,

training, social cohesion and culture. This will result in less people leaving cities thus decreasing the pressure o surrounding rural areas though accessible and attractive rural areas do experience some increase in population density. More remote rural areas have benefitted from the promotion of cultural identity and specific territorial assets and as a result have become more competitive and resilient.

The scenarios described above provide an illustration of how policy makers can consider the consequences of different courses of action and help to stimulate long-term strategic action. In addition they are a useful means of generating a dialogue among regional stakeholders and a useful aid to decision making.

Framework for policy implementation

Development paradigms usually strongly influence the implementation of development strategies. The advantages and limitations of top down and bottom up approaches to identifying regional potentials have been discussed earlier in this chapter. However, the question of top down or bottom up is also important in relation to the choice of strategy and the adopted approach to regional development. The approach adopted will depend on a variety of factors, not least the institutional and governance context within which the region is operating. Regions in some countries are constrained by prescriptive legislation, guidelines and policy options handed down from the national level whereas other regions have more flexibility to make the choices that can influence their future development trajectory. A comparison of some of the characteristics of top down and bottom up approaches is given in the table below.

Table 3: Top down or bottom up approaches

Principles	Top down approach	Grassroots approach
Inter-generational equality	Quick fix approach to attracting investment and jobs; driven by short-term targets and political goals	Long-term approach to local capacity and asset building; emphasis on creating durable jobs
Social justice	Wealth creation ethic, linked to rhetorical attachment to trickle-down effect; wage reduction seen as acceptable way to create wealth and arguably jobs	Emphasis on socially valuable products and services, including rewarding training and jobs and liveable wage
Geographical equity	Competitive ethos, open trade, place marketing and focus on attracting exogenous resources irrespective of impact on other potentially more valuable assets	Attempts to create localised economy with fair trade terms both locally and externally and the avoidance of zero sum inter-locality competition.
Participation	Corporatist inclusion of large institutional investors, plus tokenistic engagement with community groups to 'buy' legitimacy	Engagement of local community with all stages of strategy from design to implementation and strong links to local democracy
Holistic approaches	Economic development delivers social wellbeing and environmental improvement; trickle down works, though targeted linkage schemes might be acceptable	Virtuous integration of attempts to improve local economic development, social conditions and the environment

Source: Haughton *et al* (1998)

In reality the framework for policy implementation is likely to be situated between the two with a combination of top-down and bottom-up approaches. The table above illustrates that top down approaches are potentially paternalistic and tokenistic in terms of participation and engagement and can employ devices to provide an illusion of participation seeking to legitimise a pre-determined solution. Such approaches are conducive to the efficiency or competitiveness based approaches discussed in the previous section and seek to generate maximum wealth and the attraction of exogenous resources. In contrast, bottom up approaches rely on local knowledge, capacity and actions and take a more long-term perspective and are more closely linked to the equity or cohesion based approaches discussed previously.

A Rationale and Structure for the Stakeholder Template

The Template component of the PURR methodology is designed as an instrument to encourage grounded self-reflection by local stakeholders seeking to identify and

assess the potentials of their rural areas and its alternative futures. In broad terms it instructs reflection on issues such as:

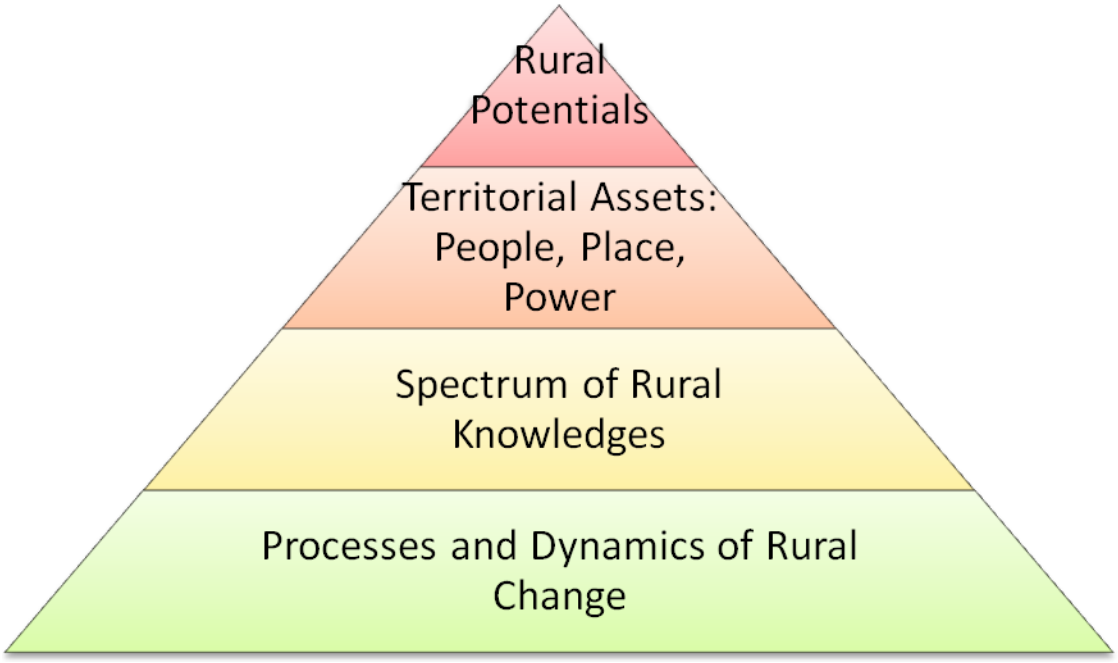
- What are the most important factors influencing regional rural development and potential in this region?
- What are the key territorial assets that provide opportunities or constraints for regional development?
- Which regional futures can be identified for the region and what are some of the policy options that could be pursued?
- How do we identify, harness and support regional potential?
- Current and possible future policy responses, strategies and initiatives?
- What synergies, barriers or challenges to effective participation and collaboration can be identified between different actors and areas within the region?
- How does this regional potential translate in spatial or territorial terms in different parts of the region?

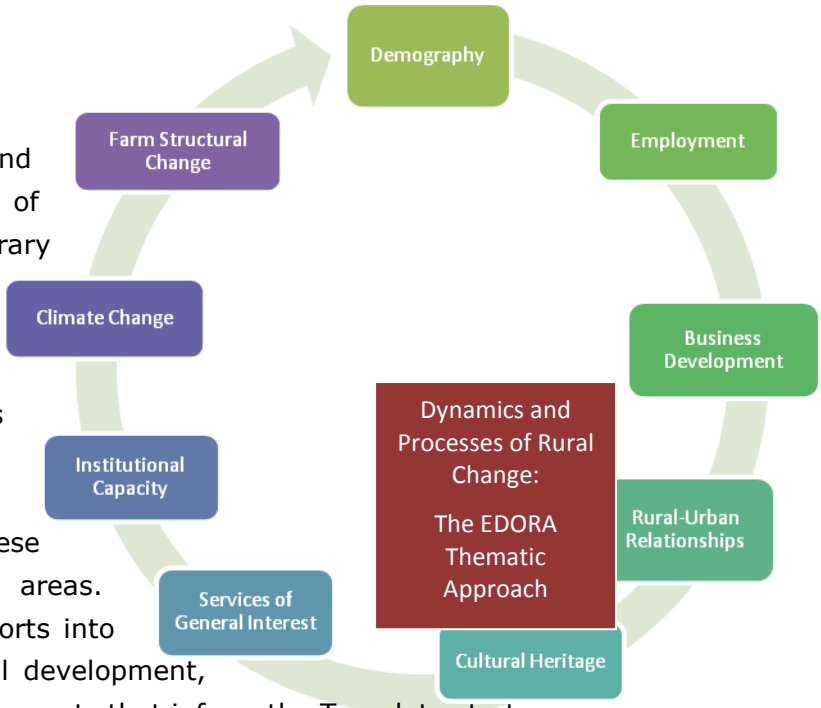
The Template seeks to present a series of data collection tasks, of both quantitative and qualitative nature, and is built upon and adapted from current thinking on concepts of regional potentials, territorial assets and analysis of processes and dynamics of rural change. It is envisaged that the Template be used to inform and structure workshop meetings of local stakeholders with targeted brainstorming and visioning exercises. The information generated should then be consolidated with the broader Benchmarking analysis and data components of the PURR 4 Step Methodology. The main outputs of the Template will be in the form of ideas and policy synergies between participants. The data and ideas generated by a cross-section of diverse regional stakeholders will provide useful insights and supplement data from other (primarily documentary) sources.

B Template Design: The Rural Potentials Pyramid (RUPP)

It is important to explain the rationale to the structure of the Template and the thematic and systematic way in which data collection and questioning has been organised. The following Rural Potentials Pyramid (the RUPP) is a useful heuristic device to achieve this:

Figure 6. The Rural Potentials Pyramid (RUPP)



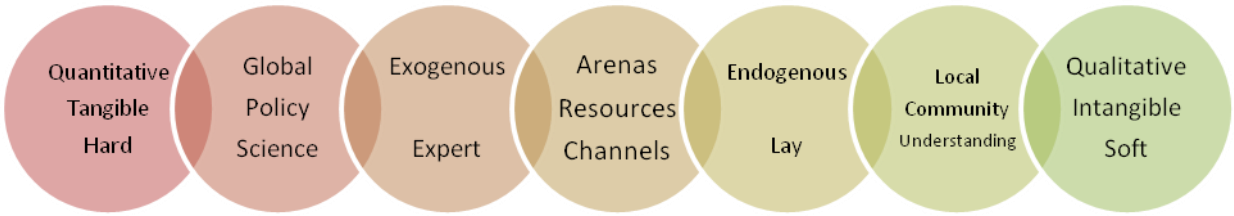


At the base of the pyramid and underpinning consideration of rural potentials, are contemporary **processes and dynamics of rural change**. As has been previously discussed the EDORA analysis has usefully synthesized a range of rural development analyses and hypothesis concerning these dynamics into nine thematic areas. This work, alongside other reports into strategies of rural and regional development, provides a range of ideas and concepts that inform the Template strategy.

However, such forms of academic and policy analysis form just one position across a **spectrum of rural knowledges** and experiences, a point made through the second layer of the pyramid. Again, as was discussed earlier in the chapter, the PURR methodology is explicit in the need to be sensitive to these other knowledges. They range from data and analysis grounded in 'hard' quantitative statistical indicators, to

that targeting tacit and so-called 'soft' knowledges through qualitative and interpretative means. Such knowledges bring into contrasts and differences between 'expert and 'lay' understandings, between global policy science narratives and discourses, and those understandings formed and embedded in local communities and business networks. These different forms of exogenous and endogenous knowledge work through a range of arenas and channels and provide participants with resources for their interests. Such a spectrum of knowledges whilst sometimes complementary and sometimes conflicting is always crucial to understanding rural change and negotiating and envisaging rural potentials.

Figure 7. Spectrum of Rural Knowledges

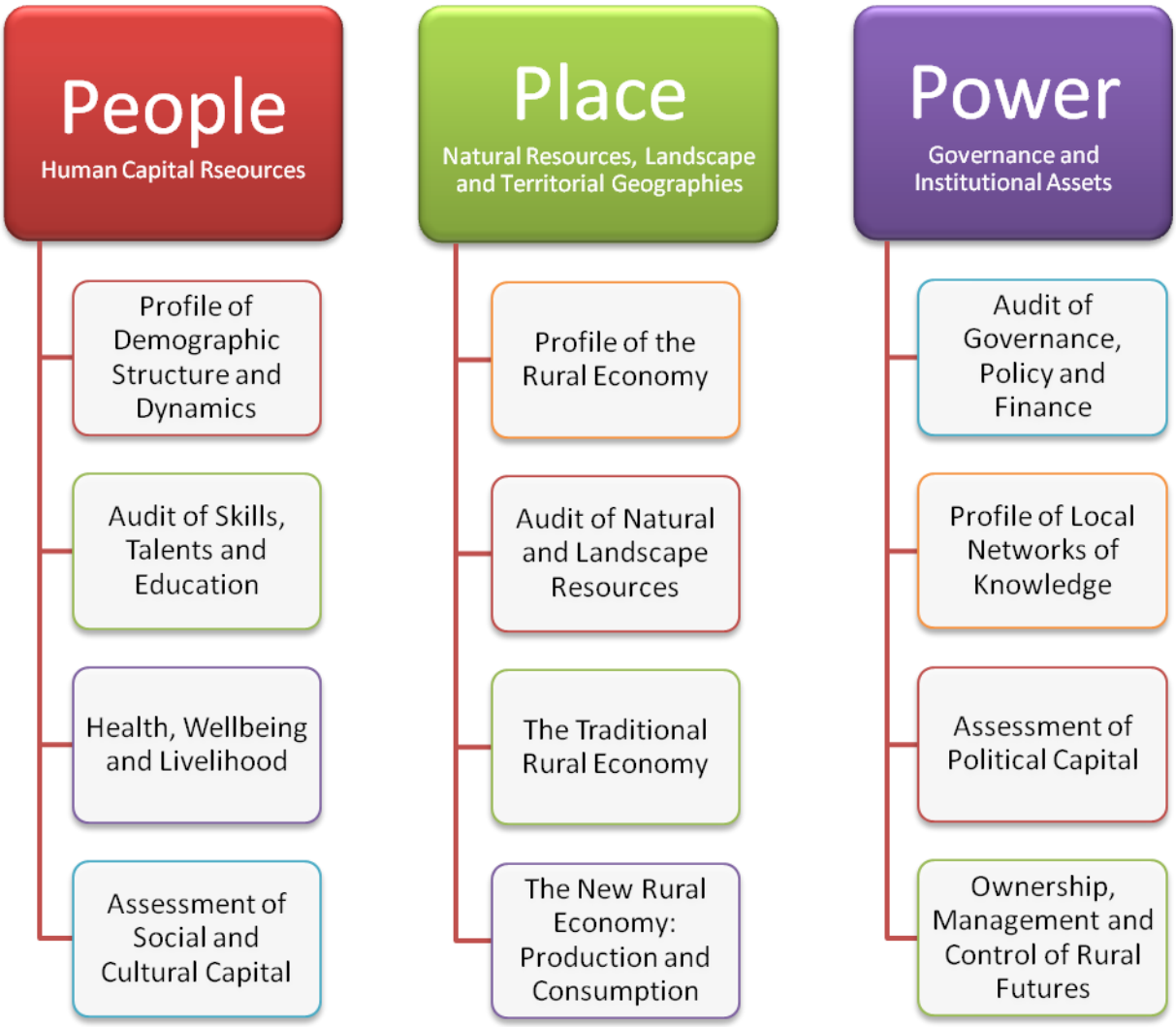


Upon these two preparatory layers of the pyramid rests its core strategy for considering rural potentials. This directs stakeholders to appraise and evaluate the territorial assets of their area through three thematic areas: **people, place and power**. These build upon and develop the ESPON TeDi (2010) report approach to identifying and harnessing endogenous assets and potentials, as well as the OECD (2001) understanding of a region's territorial capital.

- The **people** heading focuses knowledge collection and analysis on the importance of local human capital resources to the areas potentials and futures.
- The thematic stream of **place** directs attention to the stakeholder region's natural resources base, natural and cultural landscapes, built infrastructures and its internal geographies and territorial positioning vis-à-vis other strategic areas.
- The final stream, that of **power,** focuses on the importance of policy structures, networks and institutions of governance, and relationships of power, political capital and ownership to a rural area's future potentials and development pathways.

In turn, we then structure each thematic stream into strategic enquiry under four sub-headings, as shown below, the rational for which we now turn to.

Figure 8. People, Place and Power: Analysing Territorial Assets



1 People as a Territorial Asset

People provide a self evidently important starting point for any consideration of a rural regions future potential. The four sub-thematic areas of the template attempt to explore different components and approaches to people as a territorial capital or asset.

The first sub-heading focuses on the need for a statistical audit of any stakeholder region's **demographic profile, structure and dynamics.** As was outlined in more depth above, population is a complex driver of change. Such an audit should reveal: key dynamics of growth or decline: structures of age, sex and ethnicity; class

profiles; population densities and regional geographies. This provides a platform for a SWOT analysis of the areas human resource base.

The second sub-heading takes this further by provoking an assessment of what traditional labour market analysis would describe as the key features of human capital – an audit **of skills, talents and education** amongst the local population. This again would principally be achieved through statistical means. However, such notions of skills and talents also invites consideration of not just more tangible indicators, such as formal education and training outputs, but also more intangible assets held by the local population, such as entrepreneurial culture and innovativeness, life and work experiences.

The general **health, wellbeing and livelihood** of an areas people are also important to realising future potentials and the third sub-heading invites reflection upon this. Statistics of tangible measures of such issues, such as health records, wealth, income, wage levels, worklessness and so forth, will be an important contribution to the discussion. Moreover, this section provokes analysis of the local population's access to services of general interest, alongside whether these are being met and how might they be met in the future. The notion of wellbeing also involves consideration of less tangible features, such as community morale and psychological strengths and weaknesses.

The final sub-heading invites stakeholder engagement with what in many ways are less tangible people assets but attributes that nevertheless form crucial elements for any potential rural future: **an assessment of social and cultural capital.** Drawing on Brathwaite (2009), amongst many authors, the notion of social capital tries to capture forms of social organisation, such as networks and norms of trust, co-operation and mutual assistance that exist in communities and which strengthen social cohesion. Such bonding and bridging structures play important roles in servicing and provision of community needs as well as strategies of community reliance which are important to future potentials. Closely linked to social capital is the notion of cultural capital. This seeks to capture the features and importance of shared attributes, characteristics, values and tacit knowledges of local people. The existence of vibrant festivals, languages, organisations across civil society and the like provide one means of understanding the importance of these more soft and intangible territorial assets.

2 Place as a Territorial Asset

The concept of place enables a different angle into territorial assets possessed by stakeholder regions. It tries to capture the physical geographies of the territory, its built infrastructures and settlement structures, landscapes and natural resources. Such geographies are important considerations in terms of people's access to services, both now and in the future and will emerge in discussions of such themes.

Additionally, in terms of assessing rural potentials, it provokes questions of what forms of economic activity are currently supported by these geographical features and landscapes? It also invites consideration of what might be supported in the future, given an evaluation of key strengths and opportunities.

The first sub-heading seeks to address the first of these questions by inviting a statistical **profile of the rural economy** currently supported by this landscape. Analysis of key sectors, employers and activities, indicators of productivity, output and gross value added, employment levels and so forth, provide grounding for any consideration of potential future rural economic trajectory.

The second sub-heading seeks to promote an **audit of natural and landscape resources** across the region: what assets exist, how are they being used and what potential uses might be made of them? Such an audit should provoke wide ranging and creative thought. Some such assets are more tangible and easy to recognise, such as minerals reserves, water and forestry resources and farming land. Similarly tangible are built infrastructures, such as road and rail networks, air and port facilities, communication infrastructures, settlement and community facilities and the like. Some forms of cultural assets also have a more tangible character, such as archaeological remains, historic monuments, sacred and religious sites and may play important roles in terms of regional potentials. However, some landscape assets will be of less tangible. Atmospheric conditions and landscape geographies may offer potentials in terms of future energy production and eco-system services delivery, but also other more subjective sensual features, such as stillness, tranquillity, darkness and beauty. The aesthetics of landscape will of course feature strongly in tourism and other regional marketing strategies.

The remaining two thematic areas attempt to further direct appraisal of how place assets may underpin rural economic potentials. As was discussed in the earlier review of existing rural analysis, a key theme is the distinction between traditional 'productivist' activities that have underpinned rural livelihoods, notably farming and food production, mining and forestry, as opposed to the emergence of a New Rural Economy of more diverse 'post-productivist' and consumption based activities.

The first analysis provokes stakeholders to consider the strengths, weaknesses and opportunities by activities of **the traditional rural economy** in their area. Viabilities of agriculture, mining and forestry are complex and involve consideration of volatile global markets for primary products, ownership and supply chain relationships and subsidy regimes. Nevertheless, they remain a central feature in any consideration of potentials.

Equally, however, structural changes to the rural economy and how existing and new producers and consumers are responding to such challenges are pivotal to rural

potentials. The **new rural economy** stream of enquiry focuses in this direction. Partly, it examines new roles and responses by traditional producers, as they adopt more diverse activities, often related to landscape, wildlife and environmental management, and seek new markets for traditional products. Partly the focus is on new and potential entrants and economic structures and activities. These potentials in turn can be plotted against a spectrum of **production** and **consumption** goods, services and activities. It raises reflection on potentials linked to such things as: new agricultural products and markets; new business activities linked to communications and IT technologies; renewable energy supply potentials; eco-system goods and services; rural tourism, recreation and leisure; housing, health and personal services.

Running in and across all the above place based evaluation of rural potentials will be two important strands of thought. Firstly, the impacts of processes of climate change and the threats and opportunities this provides in terms of rural livelihoods. For example, significant climate change may threaten traditional agricultural practices, whilst at the same time enabling new ones. Moreover, as public policy and private investment and subsidy increasingly focus on the ways in which landscapes can contribute to processes of climate change adaption and mitigation so there may be new rural potentials grounded within so-called eco-system goods and services. Secondly, it is important to locate a sense of the territorial positioning of the area vis-à-vis other neighbouring areas as well as wider national and global networks of connection, and the competitive advantages and markets opened-up through such geographies.

3 Power as a Territorial Asset

The realisation of ambitions concerning rural potentials is of course also a question of the political capacity of a region and its key stakeholders to affect change; the organisational ability to marshal resources of power in and across policy regimes and networks of governance, as well as access investment and funding streams. Territorial assets in this regard form the third stream for analysis and reflection.

Rural areas will be located within a hierarchy of governance institutions and existing policy ambitions which produce key discourses of future change and its possibilities and what will be supported through public funding and finance. A key initial step, therefore, is to construct an **audit of governance, policy and finance** structures, the key political narratives they contain and how the region is configured strategically in relationship to these. The importance of this first step relates strongly to also developing a clear **profile of local networks of knowledge** through which the potentials of the region can to be articulated and pursued. These will range in style and formality across public, private business and community third sector organisations. Some will have more hard characteristics, others more informal and

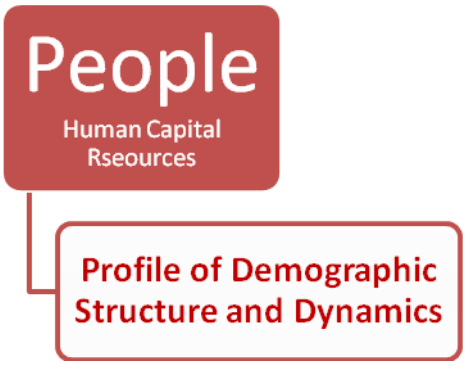
soft. Moreover, many will have a fluid and shifting character, never fixed, but subject different degrees of intensity and effectiveness depending on the energies and synergies of key participants.

The thickness, or not, of institutional structures and forms of co-operation and mutual support that they offer are a key territorial asset and important in realising regional potentials. They, therefore, form one part in a broader **assessment of political capital**, which forms the third form of directed stakeholder reflection. This focuses on the ability of the region to influence wider networks and the local distribution and use of financial and other resources. The impact of contemporary and anticipated processes and geographies of state restructuring will also impact upon these political capacities. The notion of political capital asks where does power lie and arenas need to be entered into in order to capture it. Moreover, it asks at what geographical scale are different rural potentials most effectively influenced and the kinds of political alliances that might be necessary to encourage them.

The final issue for stakeholder reflection is to consider issues of **ownership, management and control of rural futures**. What business models and ownership structures for the local economy and forms of service delivery best provide for rural potentials? What should be the future role and balance between traditional share owning business models and associated values of profit, enterprise, individualism and competitive entrepreneurialism, as opposed to alternative forms of voluntary and community social enterprise, co-operative ownership and so-called associative forms of entrepreneurialism?

The following pages illustrate how the Template might look, and the contents of the Template.

Rural Potentials: Stakeholder Template Questions for Identifying Territorial Assets



Target Statistical and Quantitative Data:

- Population Change Statistics (birth/death rates; migration rates etc)
- Population Structure (age, sex, ethnicity etc)
- Regional Population Densities and Geographies
- Travel to work and commuting patterns

Stakeholder Analysis:

- What are the key demographic profiles and shifts in this region and what are the consequences for spatial development strategies and rural potentials?
- What are the geographies of population losses/gains between urban/suburban/small settlements/rural areas?
- What are the key drivers of these shifts? (e.g. lack of jobs and services, house prices and availability, rural gentrification, new employment growth, seasonal tourist flows etc)
- Are these demographic shifts problematic or do they offer new rural potentials?
- Which areas should be prioritized to accommodate population growth and what patterns of development are most appropriate?
- Which areas should be prioritized for actions to mitigate population decline? What might these actions be?

Rural Potentials: Stakeholder Template Questions for Identifying Territorial Assets

Target Statistical and Quantitative Data:

- Education attainment of local population
- % population educated to University degree undergraduate/postgraduate level
- Skills and training: vocational skills and apprenticeships
- Number of business start-ups?

Stakeholder Analysis:

- What are the regions other less tangible skills that can act as an asset for future development?
- Are there distinctive local life and work experiences?
- Does the population possess distinctive rural craft skills?
- Is there a culture of entrepreneurship and innovation?
- What features best describe the local population character?
- Is the local population 'resilient'?
- Are local people welcoming and hospitable?
- What other key talents exist in and amongst the local population?

Rural Potentials: Stakeholder Template Questions for Identifying Territorial Assets

Target Statistical and Quantitative Data:

- Indices of wealth and income
- Levels of employment, wage rates, worklessness
- Health statistics
- Number of doctors per thousand inhabitants
- Indices of multiple deprivation
- Crime statistics
- Proportion of population owning a car
- % of households with internet access / broadband access
- Average distance to access key services
- Distances to key administrative centres

Stakeholder Analysis:

- In many instances rural markets struggle to provide a critical mass to sustain many services. What kinds of services are crucial to the social, economic and cultural character of this region?
- What are the key challenges facing access to services in this region? Which areas, sectors of the population and services are worse affected?
- What kinds of mitigation and adaptation strategies have been developed/might ameliorate deficiencies in service provision?
- From which point onward does a further decrease of service levels lead to an escalation of rural decline processes? Conversely, what are the critical service provision thresholds for stimulating rural growth processes?
- Which parts of the region have already (or are likely in the future) to reach alarmingly low SGI levels? What are the likely consequences for the development of these areas? What are their response capacities?
- To what extent is it feasible to ensure access to critical/minimum threshold levels of service provision in all parts the region?
- At what level is the psychological wellbeing and morale of local communities?

Rural Potentials: Stakeholder Template Questions for Identifying Territorial Assets

Target Statistical and Quantitative Data:

- Number of local voluntary, social and community organisations
- Number of local civic societies and self-help organisations
- Number of Leader Local Action Groups

Stakeholder Analysis:

- Are there strong networks of local social capital?
- What impacts are demographic changes having upon social cohesion inside and between the regions?
- What are the key cultural attributes of the region and what functions to they currently perform in terms of the socio-economic well-being of the region?
- What are the key local cultural events and festivals?
- Are there emergent new and alternative cultures in the region and how might they contribute to future regional development?
- Do existing cultural attributes constitute a barrier to future regional development potentials?
- What kinds of issues need to be faced when balancing patterns of future economic growth with the character of local cultures and landscapes?

Rural Potentials: Stakeholder Template Questions for Identifying Territorial Assets

Target Statistical and Quantitative Data:

- Current economic structure by sector
- Number and size of businesses – from large to SMEs
- Employment by sector
- Proportional contribution of GVA to regional economy
- Productivity and output by sector

Stakeholder Analysis:

- What are the characteristics and geographies of current rural employment structures across the region?
- What are the key sectors which offer the greatest potential for future rural employment opportunities in this region?
- Which sectors and areas are at greatest risk? What are the ownership structures of local employment opportunities?
- Which areas within the region should be prioritized for future employment growth?
- What is the best route toward sustainable and stable rural employment: economic diversification or specialization?

Rural Potentials: Stakeholder Template Questions for Identifying Territorial Assets

Target Statistical and Quantitative Data:

- Natural resource surveys
- Landscape audits and designations
- Transport infrastructures: road , rail, port, air
- Energy and power resources?
- Number and type of national historic and cultural designations and / or percentage of territory under designations
- Number of UNESCO World Heritage areas
- Density of registered monuments
- Number of EU structural funds and Interreg projects with cultural heritage focus

Stakeholder Analysis:

- What are the key geographical assets and geographical areas which offer the greatest potential for future rural employment opportunities in this region?
- What are the key tangible cultural landscape assets of this region?
- What kinds of transport investments will contribute to the regions future potential?
- How important are travel times and physical distances to the development potentials of this region?
- How should issues of accessibility be dealt with by spatial planning strategies? Will increased accessibility by road and transport infrastructure benefit your area?
- How important will new electronic and other communication media is to rural development? What strategies should underpin the geographies of service provision between urban and rural areas?
- To what extent are different parts of the region, or different parts of the regional economy, moving along different development paths?

Rural Potentials: Stakeholder Template Questions for Identifying Territorial Assets

Target Statistical and Quantitative Data:

- Total employment in agriculture, forestry and mining
- Total land area of traditional rural activities?
- Changes in employment, ownership structures, productivity?
- Proportional contribution of GVA to regional economy of traditional rural sectors
- Average size of farm holdings
- Proportion of farm holders over 55 years of age

Stakeholder Analysis:

- How important are traditional rural sectors, such as agriculture, mining, forestry, to the local economy and the region's identity?
- How can value be added to local agricultural practices in terms of branding, new markets, new co-operative arrangements between farms etc? To what extent are such practices already underway?
- What have been the relative impacts of the recession on traditional rural economic activities? Is the recession an opportunity for accelerated restructuring of rural economies? If so, how can policy best stimulate and facilitate this?
- To what extent do local supply networks support local agriculture and is there potential to strengthen these networks? Who are the key actors and driving forces responsible for this?
- To what extent are different parts of the region, or different parts of the regional economy, moving along different development paths?

Rural Potentials: Stakeholder Template Questions for Identifying Territorial Assets

Target Statistical and Quantitative Data:

- Total employment in tourism, leisure and recreational services
- Employment in personal, consumer and financial services
- Proportional contribution of GVA to regional economy of non-traditional rural employment sectors?
- Number of tourism establishments and beds

Stakeholder Analysis:

- What kinds on New Rural Economy activities are found in the region? What are there future potentials?
- How important are tourism, leisure and recreation goods and services to the local economy?
- What opportunities are there for harnessing climate change as a vehicle to develop a new green economy?
- To what extent is the region equipped to respond to potential new markets for rural land management, ecosystems services provision and delivery (such as flood control, water storage, carbon storage and sequestration, biodiversity targets....) and a new 'green' economy?
- What adaptation and mitigation strategies and/or policy responses are in place to address climate change in the region?
- What have been the local impacts (in terms of landscape character, the nature of local agriculture) of the shift in focus of rural policy away from production to a broader rural development focus? What rural potentials do they offer?

Rural Potentials: Stakeholder Template Questions for Identifying Territorial Assets

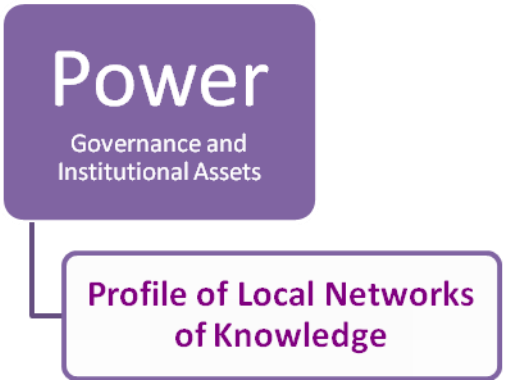
Target Statistical and Quantitative Data:

- A mapping of the number and type of public governmental institutions actively involved in rural issues and rural development (including nature and extent of policies and funding, number of active employees)
- Detailing of key policy documents, their strategic ambitions and prominent development paradigms
- Extent and nature of participation of public equivalent bodies in the region with EU programmes (interreg, LEADER....)

Stakeholder Analysis:

- What are the key development paradigms and political ambitions embedded in strategic rural policy and governmental statements?
- Are policy discourses and ambitions consistent between and across scales of government and governance?
- What are the key/potential funding sources for rural development activities from public, private and voluntary sources?
- What are the experiences and lessons from past rural development strategies and initiatives in the region?
- To what extent does the region seek to learn from lessons from elsewhere?
- What are the key challenges for rural governance in the region and to what extent are current structures effective?

Rural Potentials: Stakeholder Template Questions for Identifying Territorial Assets



Target Statistical and Quantitative Data:

- A mapping of other non-governmental private, community and voluntary sector networks and structures actively involved in rural issues and rural development (including nature and extent of policies and funding, number of active employees)

Stakeholder Analysis:

- To what extent are formal and informal business structures, networks or clusters influential in your region in terms of supporting innovation and regional potential, along with the flow of products, people, information, knowledge, financial resources and labour to local employers??
- What synergies, barriers or challenges to effective participation and collaboration can be identified between different actors and areas within the region?
- To what extent do local stakeholders engage with and have access to relevant arenas and channels to influence policy development?
- What role can both formal and informal networks and communities of actors play to ensure potentials?
- Are there effective support structures, networks and communities in place to support of traditional economic sectors and the transition to the NRE?
- To what extent are local knowledge and research networks active in relation to the development of traditional economic sectors and the transition to the NRE?

Rural Potentials: Stakeholder Template Questions for Identifying Territorial Assets

Target Statistical and Quantitative Data:

- What and where are key political arenas, channels and networks?
- What are current levels of local representation?

Stakeholder Analysis:

- What are the most important factors and who are the most important actors / networks / communities with the potential to promote regional development and realise regional potential in this region?
- What are the most relevant arenas and channels in relation to influencing rural policy development?
- Do prominent development paradigms embedded in strategic policy and governmental statements fit well with local circumstances and opportunities?
- What kinds of strategic policy postures are most appropriate to this region given its degree of political and financial capital?
- Is there a need to draw on external knowledges in relation to local rural development and regional potentials?
- To what extent does a collaborative milieu exist in terms of shared objectives between key agencies and stakeholders?
- What synergies, barriers or challenges to effective participation and collaboration can be identified between different actors and areas within the region?
- Is there cooperation (networks) between public, private and voluntary sectors that have lead to positive results? What networks of cooperation are needed?
- What are the main barriers currently inhibiting rural governance in the region?

Rural Potentials: Stakeholder Template Questions for Identifying Territorial Assets

Target Statistical and Quantitative Data:

- Current ownership structures of local businesses and providers of services of general interest.
- Extent of endogenous or exogenous capital and financing?

Stakeholder Analysis:

- What kings of business and ownership models dominate in and across the region?
- To what extent is the region locally or externally owned, financed and controlled and how is this changing over time?
- Are there different models of business ownership beyond traditional share owning and family models? How important are associative forms of entrepreneurialism, such as voluntary and community social enterprises and co-ops?
- Which business models and ownership structures offer the greatest potential for the region and why?
- How are services of general interest delivered in and across the region? Which forms of delivery or self-provisioning could make the region most resilient?

C Application of the template

There are a number of issues that are still under discussion particularly in relation to the application and interpretation of the template and the TPG would appreciate feedback from the regional stakeholders and from the ESPON CU in relation to this so that these issues can be addressed in the Final Report. The template is a tool to be used by regional stakeholders to stimulate and facilitate a process of grounded self-reflection to assist in the identification of regional potential. In relation to the application of the template the following issues need to be addressed:

- How will the Template be APPLIED? Who is answering these questions? In what formats and at what stage? (different stages in planning, strategizing, scenario building)
- How should participants fill out the template? Individually/collectively or a combination of both?
- In what order should they answer the questions? Can they skip questions that are not relevant to them? If so, do they provide reasons for skipping these questions?
- Do we offer only open-ended questions or some questions are closed or Likert's scale type? Are answers coded in some way, so they can later be processed and analysed more easily?

Clarity is also required as to how the answers to the questions in the template should be are INTERPRETED? This Template provides great potential for interpretation. By asking the questions in the Template we are trying to avoid "thin knowledge" resulting from observations of "external map maker", "consultant" and the template encourages a more participatory processes. However, the more tacit the knowledge is, the more insightful and careful we have to be in interpreting that knowledge. Relevant questions here include:

- Should template answers be collected and analysed in some systematic pattern? Is there some sort of score for each question that is counted to calculate the overall potential of "People", "power" or "place"? Or are we adopting a less structured approach?
- Are answers to specific questions leading participants to some "typologies" which describe their situation? And if so, do these typologies enable them to act more wisely than they are currently acting?

A final issue is how template answers are to be TRANSFORMED into POLICY OPTIONS? After the Template is completed, we have inputs from participants that we can interpret and use for developing policy options. The question is how can this be done most effectively? One possibility is to start by locating regions according to the perceived relevance of EDORA meta narratives (globalization, urban-rural relations, agri-centric) and use this to determine an appropriate

policy mix. Strategic postures could be identified in relevant areas, prevailing development paradigms and policy implementation styles (through "power " section of the template or asking some additional questions) and finally, their possible actions in cohesion/competitiveness scenarios could be considered taking into consideration their frameworks of policy implementation.

These matters will be addressed further in the Final Report.

C3. Methodology

PURR is a *stakeholder driven, targeted analysis*. The contents of the project are based on stakeholder demand. This means that the stakeholders have provided the project with a topic, which is based on their own experiences and requirements. In PURR, *the first objective is to look into and derive the territorial potentials* of the five rural stakeholder regions. The TPG's view is that the only way of doing this is in dialogue with representatives of the stakeholder regions, and that it is necessary to let the methodology as well as the applied contents of the project develop as a part of this dialogue (what the TPG calls an "*inductive approach*"). This was an important baseline assumption laid out by the TPG in the application for the project. By adapting this bottom-up (BU) approach, the TPG implicitly recognises the differences between the stakeholder regions and allowed the regions to be presented in slightly different ways.

The *second objective of PURR is to develop a common methodology*, which can be adapted by other rural regions in their quest for assessing their potentials. The methodology developed below is not a "black box", which given certain inputs returns the territorial potentials and policy options for any region automatically. We chose not to develop such a "black box" because we strongly believe that such a general tool does not exist, since the actual regions being analysed are very different in many aspects. These differences influence the choice of analytical framework (methods), the empirical information adapted in each case and the resulting territorial potentials. The regions are, in a sense, individuals. Therefore, stakeholder participation is required when the potentials of territories are to be developed. We do, however, believe that the contribution of PURR should be a methodology that can be applied when the territorial potentials and policy responses of regions are being analysed, helping the stakeholders in structuring both (external and internal) information and thoughts in an analytical manner, and helping them reach the level of knowledge required to assess their potentials.

Third, one of ESPON's requirements is that *the methodology developed in PURR should be based on previous ESPON research and data* (a.o. the large priority 1 projects), including typologies that were developed as a part of this research. We have applied ESPON information (section C2 and C4, and of course in section C5), where especially information (data and typologies) from EDORA, but also from other sources, was used extensively.

The methodology proposed can be summed up in four steps, of which all of them have been applied to the five stakeholder regions. These steps are:

1. Benchmarking the stakeholder region in a European perspective
2. The Regional Context and Stakeholder Perspective
3. Assessing the region's Territorial Potential
4. Policy Options and Future development

The four steps are elaborated further below. Together, they form a coherent methodology for assessing the territorial potentials of rural regions in Europe, based on a combination of BU and TD (Top Down) approaches. Although we consider the proposed methodology relevant and coherent for assessing territorial potentials, the methodology cannot be viewed a "black box" which automatically generates answers (territorial potentials) based on inputs. The methodology must instead be considered a way of sorting information from different sources, but aimed at assessing territorial potentials. In this sense, the methodology can be used for planning purposes as well as for more strategic analysis of stakeholder regions, but not without stakeholder representatives making the final step (including weighting different sources of information together) towards assessing the stakeholder region's territorial potential. Important features of the methodology are, however, that it points to what types of information from different sources that is relevant for assessing this potential and that it stimulates a process of grounded self reflection among stakeholders.

Some concepts: Development and potential

Regional (territorial) development can be defined as the development within a region (territory) over time. Books have been written on how to interpret the term "development". It might include a set of indicators, or a single indicator. An important indicator used for describing and comparing the situation in different regions is the GDP (which also can be interpreted as level of income). Economic growth (GDP growth) then becomes an important indicator of development

In our view, regional (territorial) development does not restrict itself to one indicator. It should involve different indicators, for instance like the ones applied in the EDORA project.

The term "region" ("territory") is also a blur concept, of which books have been written. It is applied for small spatial units, like a municipality or even a part of a municipality, but it is also applied for continents (like Africa). We have therefore chosen a pragmatic approach to this term, which is that a region (territory) is a sub-national spatial unit. In this sense, it becomes a part of a hierarchy, which starts on the local level, then the regional (territorial) level (of which there might be several tiers, for instance NUTS 3, 2 and 1), then the national level and then the supra-national level (the EU, Europe, the World). We have not, on the other

hand, restricted the term region (territory) to administrative, territorial units. A region might cross administrative borders, and sometimes even national borders.

Rural development can be defined using the same concept. Here, we have therefore simply defined this as regional development in a rural territory. What we mean by "rural" then becomes the next question. Clearly, typologies have been developed by for instance the OECD, by the EU, by ESPON, by national governments and even by regional governments. All these concepts are, in one way or another, based on the urban-rural dichotomy. In this sense, rural could be defined as non-urban. However, the urban-rural typologies are normally much more refined in the sense that they are divided into different classes of urbanity (or rurality).

We have adapted different typologies when we have categorised the PURR regions according to the urban-rural concept (see Stage 1). This categorisation, which is a part of the benchmarking process, is of course helpful as a part of the analysis. However, the five regions of PURR have been pre-included in the project irrespective of their urban-rural placement. This also implies that these regions' development potentials have to be discussed within the framework of PURR, although their degree of "rurality" might be low or although their territorial potentials might lie in developing the most urban part of the region.

The concept of **rural potential** takes the concept of rural development a bit further, in the sense that we put something more normative or positive into it. Where *rural development* can be viewed merely as an observation of how an indicator (indicators) change over time in a rural region, *rural potential* ranges one (or more) line of development before others. The potential of a region is, in this sense, what (maximum) development level the region might achieve. Of course, a region's ability to reach this potential highly depends on the actions of the actors within the region, the system of governance, the networks, their innovative capabilities, access to (different) capitals and so on. In a sense, the PURR methodology is about discussing which factors influence rural development, about discussing rural development outcomes, about discussing rural potentials, and about discussing strategies and policies that can be applied to reach these potentials, the key question being how the stakeholders can utilise their assets in a way that maximises the outcome to reach the territorial potential[2] of the rural region. At the heart of a region's potential lies, of course, what makes the region genuine or original, or what contributes to generating the region's competitive or absolute advantages. The concern about revealing *rural* (as opposed to urban) potentials in PURR acknowledges the fact that in general rural regions seem to lag behind urban regions in development and thus have to be more preoccupied with utilising the regions' accessible resources to survive in a competitive world.

[2] The concept "Territorial Potential" is based on Barca 2009, and discussed further in the Annex to the Inception Report.

From a Modernisation Paradigm to a New Rural Paradigm

The emergence of a new rural paradigm based on endogenous potential to replace the previous modernisation paradigm that was dominant in rural development until the rise of neo-liberal ideologies in the 1980s and 1990s is well documented (Woods 2011). The modernisation paradigm was based on the modernisation of agriculture, the rural economy (usually in the form of economic diversification), infrastructure and social structures. As it became increasingly apparent that the modernisation approach was not only failing to achieve the desired results but in fact had a variety of negative consequences (over-production, environmental degradation, social inequality....), the increased emphasis on neo-liberalism determined that state led initiatives fell out of favour on ideological grounds as well as financial and resource grounds as governments sought to promote market solutions and reduce public spending.

The shift to a new rural paradigm involved a move away from focusing on inward investment to a focus on endogenous development. The characteristics of this new approach included focusing on the development of resources found within a rural region, a shift from a top-down to a bottom-up approach and a move away from a sector based approach to the approach based on the territorial capital or specific characteristics of an area, as promoted by Barca. This new rural paradigm has become dominant in Europe and this is reflected in the increased emphasis on the Leader Programme. More recently Ray (2006) has written of the need for endogenous potential to look outwards as well as inwards in order to not only harness local resources and actors but to sell these to external consumers and policy makers, what Ray referred to as neo-endogenous potential.

Despite the increased emphasis on the endogenous development paradigm in Europe, a number of critiques have emerged that are of relevance to rural regions in Europe. Woods (2011) summarises the main criticisms of endogenous potential as being:

- Limited capacity to tackle fundamental structural disadvantage in relation to locational, infrastructural, economic and human resources deficits;
- Uneven capacity of local communities to engage in endogenous development and bottom up initiatives due to uneven distribution of social capital;
- A tendency for endogenous development to exclude certain sectors of the community.

The realisation of rural potential is therefore likely to depend on the effective harnessing of an appropriate mixture of endogenous and exogenous factors as a means of strengthening rural viability and capacity. The specific territorial capital (see the Inception Report) of a region will determine the appropriate balance whereby rural spaces interconnect both with complex wider networks (economic, political, governance, financial.....) as well as localised capacity and resources.

Step 1: Benchmarking the Region in a European Perspective

By *benchmarking the region*, we simply mean comparing a stakeholder region and other regions. This can be done on different spatial levels, using different types of indicators and/or typologies.

The *European Perspective* is an important perspective to ESPON, but it should also be an important perspective to regions aiming at assessing their potentials. Benchmarking the region in a European perspective should then start with comparing the relevant indicators and typologies (see below) using information from European databases (ESPON data). Representatives from the stakeholder regions of PURR also underline the importance of benchmarking their region in a national and sub-national perspective. We therefore propose that this perspective is added to the European perspective during the benchmarking process.

Spatial Level of the Stakeholder Region

Before discussing what data and typologies to use, we have to discuss what we mean by a stakeholder region. Five stakeholder regions participate in the PURR project and are therefore defined as such. One of the aims of the project is to develop a methodology that can be applied by other regions in the future. In our view, a practical definition of a stakeholder region in this sense is a region which is interested in applying the PURR methodology in its quest for determining and reaching its territorial potential. This is a relatively wide definition, covering many different types of regions, but the PURR experience shows that the regions are very different indeed.

ESPON data and typologies are generally based on the standard territorial units for statistics in Europe on a fairly aggregated level (NUTS 2 and NUTS 3). These territorial units often coincide with national, administrative territorial units or are aggregates of such. Were all the stakeholder regions NUTS 2 or NUTS 3 regions, ESPON data and typologies could relatively easily be adapted directly. However, these territorial units are not always the most relevant ones for territorial development. Lower administrative levels, or other, non-administrative spatial units (such as "planning regions"), might be more functional and therefore also more relevant for planning and development purposes.

In PURR for instance, we have analysed five very different stakeholder regions. They are not on the same (or similar) spatial level, nor are all of them administrative units within their national system[3] of governance. In addition, they differ in size, economic structure, demographic structure, rural structure and in many other ways. Benchmarking all of the stakeholder regions using only ESPON data and typologies, which are based on NUTS 2 and NUTS 3 territorial units, was not feasible, since ESPON data and typologies were not accessible at the relevant regional level.

[3] The Cambrian Mountains in Wales does for instance not correspond to any statistical or administrative are within the UK governance structure.

Relevant Indicators, Data and Typologies

Many variables influence rural development. These variables can be divided into two main categories: external and internal (or endogenous and exogenous) factors. The internal (endogenous) factors are factors that can be influenced by the stakeholder region and are discussed more in detail in step 2 below. External (exogenous) factors might be defined as factors that are determined outside the stakeholder region's control. They range from natural given factors (like location and the climate) via structural factors (i.e. demographic and industrial structure, hierarchy of centres etc.) to factors that are determined fully outside the region (world market prices on commodities, national policies, European policies).

Variables were selected from several thematic areas such as demography, economy, energy, climate change, transport infrastructure, knowledge society and innovation. Key developments in each of these thematic areas have been examined in ESPON scenario building projects, such as ESPON 2002 Project 3.2 "Spatial Scenarios and Orientations in relation to the ESDP and Cohesion Policy" and ESPON 2013 Project 2013.2.6 "Spatial Perspectives at Nuts-3 Level" (SPAN) In addition, several thematic areas that are relevant for rural areas, were selected from EDORA project. While taking into consideration demography (structural factor) and climate change (external factor), EDORA also examines such thematic areas as rural employment, rural business development, rural-urban interactions, access to services of general interest, role of cultural heritage in rural development, institutional capacity, farms structural change and the role of agriculture in rural development. These thematic areas reflect endogenous character on rural development and are therefore important for determining rural potential.

To provide description of territories in the context of existing research in Step 1, data from ESPON 2006 and 2013 projects[4] were used. Data about area types and accessibility, natural heritage and environments, demography, climate and natural hazards, cultural heritage, energy, the role of agriculture and governance were used to provide general description of PURR areas in Step 1. To take into account the diversification of rural economy, interaction with urban areas, and their economic performance, PURR areas were examined by more nuanced structural typology elaborated in EDORA project. EDORA data was used to describe and compare PURR regions with each other and also with other regions in respective countries.

[4] Specific projects from ESPON 2006 programme included: 1.1.2 Urban-Rural relations, 1.1.4 Demographic Trends, 1.3.2. Natural heritage, 1.3.3. Cultural heritage, ESPON study 1.4.1. Small & Medium Cities, and Policy impact projects, such as 2.1.3. CAP Impact and rural development policy, 2.1.4. Energy, 2.2.1 Structural Funds Impact, 2.2.2. Pre-Accession Aid, 2.3.2. Governance, 2.4.1. Environment, 3.2. Territorial futures and spatial scenarios. In addition data from applied research projects in ESPON 2013 programme were used. These projects included EDORA "European development Opportunities for Rural Areas", DEMIFER "Demographic and Migratory Flows Affecting European Regions and Cities", as well as targeted analysis project TeDi - "ESPON Territorial Diversity in Europe." Intermediate report of ESPON typology compilation (2013/3/022), and Territorial Observations were used as quick reference to maps and summaries of relevant typologies.

EDORA typology distinguishes between four types of non-urban regions: (1) agrarian economies, (2) consumption countryside, (3) diversified (with important secondary sector), (4) diversified (with important market services sector). In agrarian economies agriculture is still significant. Agrarian economies are those where % employed in primary sector, % of GVA from primary sector, and Agricultural Work Unit as share of total employment exceed the EU27 mean for non-urban regions. Consumption countryside is defined by eight indicators relating to tourism capacity and intensity, access to natural areas, and small scale and diversified agriculture.

The remaining rural regions are denominated as diversified and divided into two groups – (a) regions in which secondary economic sector activities were important to market services GVA. These are diversified regions with strong secondary sector and (b) regions where market services have become dominant. These are diversified regions with strong private services sector.

After dividing regions according to their structural types and their urban-rural typology EDORA project also measured their performance by composite regional performance indicator which was derived from the following variables: (a) net migration, (b) GDP per capita, (c) average annual change in GDP, (d) average annual change in total employment, (e) and unemployment rate. The analysis of performance of rural areas show that depleting areas usually face demographic ageing, low economic activity rates, low human capital and structural problems. Depleting areas are usually found in remote rural areas and have a strong trend of rural-urban migration. Accumulating areas, on the other hand, show counter urbanisation trends. They have family dominated demographic structure, diversified rural economy, higher human capital, higher economic activity and lower unemployment (EDORA Final report, 2010: 10).

In cases where comparable European level data was missing, data on national and regional level was taken into account, but since different countries use different typologies and ways of collecting statistics, comparisons across typologies in national and European level are not always meaningful. The nature and diversity of the themes and the availability of statistics mean that it is more appropriate to use quantitative indicators in some cases whereas in others qualitative data is more appropriate.

The Magnifying Glass Method

To overcome this problem, the TPG and the Lead Stakeholder of PURR (Notodden municipality) developed what we called *the magnifying glass method* for benchmarking the regions. The main purpose of this method is to apply ESPON data and typologies to the stakeholder regions even if the data and typologies are not available directly from ESPON projects and databases. This involves a two-stage process:

- *The first stage* is to locate each stakeholder region within its corresponding NUTS 2 and NUTS 3 unit. In some cases, a stakeholder region might be a part of more than one NUTS 2 and/or NUTS 3 unit. Data and typologies are extracted from ESPON projects and databases using the information relating to the corresponding NUTS units. The extracted information (data and typologies) is then compared to the European level. In the case of Notodden municipality, Telemark is the relevant NUTS 3 unit, while South-East Norway is the relevant NUTS 2 unit.
- The stakeholder region will normally be smaller than a NUTS unit. NUTS 2 and NUTS 3 data and typologies will therefore normally contain too much information to benchmark the stakeholder region itself. *The second stage of the magnifying glass process* is therefore to collect information that only covers the stakeholder region. National or regional statistical offices (where they exist) should be the first sources to gather information from. If relevant information does not exist there, other sources of existing data (existing surveys, reports, consultancy analyses and other sources of information) should be applied. Local authorities or other agencies might also be able to provide relevant information. If all potential sources of secondary (or existing) information have been emptied, and not all relevant data have been found, one has to look into the possibility of creating primary information (collecting information directly). There are several ways of collecting information directly. They are normally expensive (for instance collecting the relevant information for an indicator by asking all relevant actors) or uncertain (like surveys and/or using experts), and the relevance and importance of the missing information has to be assessed in this perspective. This is discussed more below.

We apply data, indicators and typologies from European sources in stage one. Stage two focuses on data which can be used to construct similar indicators and typologies on the stakeholder region level, and thus can be used to benchmark the stakeholder region in a European perspective. We would, however, also like to point out that if they exist, national or regional typologies might be very relevant for a stakeholder region. Therefore, and depending on an assessment of the relevance of national and regional typologies, we think that benchmarking a stakeholder region in a national (regional) context in many cases could provide a necessary supplement to the European benchmarking.

The magnifying glass method involves looking more closely into the stakeholder region than European data allows us to. It is therefore difficult to limit the magnifying glass method clearly to Step 1 of the general methodology, as Step 2 is a continuum of Step 1.

Step 2: The Regional Context and Stakeholder Perspective

The benchmarking process, as it is outlined in Step 1, is not sufficient to assess a stakeholder region's territorial potential. As stated in all previous PURR

documents, stakeholder participation is a very important part of the assessment. This was also an important prerequisite in ESPON's Tender for the project. Stakeholder participation has also been essential when developing the methodology, as well as for assessing the territorial potentials of the five stakeholder regions in chapter C5, based on the methodology developed in Step 1 through Step 4.

There are many reasons for involving the stakeholders in the process of harnessing the regions territorial potential. The first and foremost is of course that the New Rural Paradigm leaves much of the responsibility for regional development to the regions (or rather: to actors within the regions) themselves. Therefore, they have to do the work. In our view, the information provided from European databases like Eurostat and ESPON is useful in Step 1 of the process (the benchmarking), but it does not apply to each stakeholder region specifically. European data and typologies are found on the level of pre-defined territorial units (NUTS). This problem has hopefully been overcome in stage two of the Magnifying Glass Method. Still, the challenge remains to find the relevant information for the stakeholder region. When we apply data and typologies on the regional level, we move from benchmarking the region (which is necessary) to analysing the region. Analysing regional development and potential therefore requires region-specific information.

- First, data and indicators from Step 1 are not necessarily *detailed enough* to address the challenges and/or the potentials of the stakeholder region. Therefore, more relevant and detailed information has to be gathered from the stakeholders directly. This includes more detailed structural statistics (or alternative information) as well as an overview of the "territorial capital" (natural resource capital, human capital, financial capital etc.), including traditions and history.
- Second, there might be *on-going processes in the region* that are not publicly known (networks, initiatives and so on). These processes have to be brought into light.
- Third, there might be *strong (individual) actors* (businesses, people, organisations or politicians) that influence the region's potentials. This might be viewed under the headline "human capital", but at the same time reflects something more.
- Fourth, there might be specific *governance factors* including factors connected to planning that are important in the stakeholder region.
- Fifth, there might be other factors specific to the region that at the same time are important to regional development and potential.

To access this information, we have proposed a four-stage procedure:

1. Discussions with relevant stakeholders throughout the time the project is running. This includes a discussion of what they expect the outcomes of the project will be. In PURR, the stakeholders wanted quite different things (see chapter 3), which implies that the methodology should be flexible regarding anticipations and thus contents.
2. A workshop where representatives from the TPG and the relevant stakeholders discuss questions regarding conditions for development, potential (negative or positive) development opportunities, territorial potential and the road (including measures) towards reaching the territorial potential. Guidelines for this workshop have been developed.
3. A template of questions based on the benchmarking process. The purposes of using the template are to get the stakeholders to relate their view of the region to the results of the benchmarking process and to stimulate a process of grounded self reflection among stakeholders.
4. A SWOT analysis, where the stakeholder representatives on a "free" basis are asked to define the regions strengths, weaknesses, opportunities and threats.

This four-stage procedure is designed to secure that the stakeholders contribute freely with their own inputs to the analysis as well as relate their own views to the benchmarking done by the TPG in Step 1. In this sense, Step 2 is the part of the methodology where mainly "soft" information, but also "hard" information supplementary to the benchmarking, is gathered from the stakeholders. Step 2 is necessary to be able to continue the analysis in Step 3 and Step 4.

Step 3: Assessing the Region's Territorial Potential

Step 1 and 2 are the necessary information gathering steps of the methodology. In Step 3, we aim at assessing the region's territorial potential. Step 3 is therefore where the information is analysed, with the aim of assessing the region's potential.

When analysing the information gathered, we should aim at discussing *different regional development perspectives*, given the structures of the region as well as the framework conditions for development. The different perspectives will provide the stakeholders with a range of development possibilities. When trying to determine the territorial potential, which one might say is the highest ranking possible development perspective, one has to take into consideration the region's competitiveness. Generally, the region's competitiveness increases with its competitive advantages. In order to determine the region's competitive advantages, one has to look into the region's distinctive features. These will, by definition, vary between regions. Typically, a region's distinctive features might be related to its capitals (human, resource/nature, history, financial), its structures (demographic, industrial), its accessibility, governance etc. Therefore, the benchmarking process is an important part of the methodology. The territorial

potential has to be derived as the cross section between the gathered information, the development perspectives and the competitive advantage of the region.

One of the aims of PURR is that the methodology can be adapted by regional stakeholders. Above, we stated that due to the differences between regions, the methodology cannot take the shape of a "black box" where inputs are fed into the box and results in the form of territorial potentials automatically come out of it. Instead, we want the methodology to be a systematic gathering of information, where both benchmarking information and information from the regions are used to assess the territorial potential of a stakeholder region. In chapter 3, we have given a brief overview of how the methodology was adapted for the five PURR regions and the resulting potentials. The results for the five regions are an important part of PURR and as such interesting by themselves. At the same time, they also serve as examples regarding how to apply the derived methodology for these analyses. Towards the draft Final Report, we aim at developing the methodology further by describing it in a "menu" that preferably can be read and used by non-scientists.

Step 4: Policy Options and Future Development

The final step of the methodology is to discuss the relationship between a region's territorial potential and future development. This involves discussing the probability of reaching the territorial potential without local action, which is a sort of "free-market" view on development. Can the potential be reached in this case? Or is local action necessary to reach the potential?

Probably, some sort of local action will be needed. A range of actions can be taken. These actions can also be named policy options. The important thing is to choose the right policy options for the region in question. If the policy action involves public spending, the local (regional) authorities have to find the "right" way of spending money. Another question is whether the local authorities have money to spend, or if national or EU measures can be applied in a way that fits the region's territorial goals. This, of course, depends on the access to means, the system of governance and what type of policy measure one wishes to use. Other policy measures can be for instance to use land use planning as a part of the development process, to establish networks between different actors and so on. The main question is of course how to utilise the region's resources better as a part of a strategy towards reaching the territorial potential. Again, such strategies per definition have to be made individually in each region, depending on Step 3 and on the possibilities for policy actions that exist in the region in question. In chapter 3, we have discussed this for the five stakeholder regions in PURR. Below, we present some general views on the systematic use of scenario techniques, which might be adapted as a part of Step 4. We have applied parts of this technique in section C5, but will look deeper into the question of doing it in a more systematic way as a part of the work towards the Final Report.

Scenarios

A variety of development paths for rural regions are possible. First, these paths depend on the very nature of changes that stakeholders are trying to promote. In so called pro-active scenarios stakeholders have full perception and even anticipation of change which may soon be under way or is already happening. In pro-active scenarios policy makers actively consider new policy goals and styles and are active in pursuing them. In trend scenarios (sometimes called – status-quo scenarios) stakeholders are not active in pursuing new policy goals and styles. They might not be aware of the change to come. In some cases, costs for changing the status-quo are seen as too high and the status-quo is retained. Though, the usual way of doing things is accepted in trend scenarios, several external factors, such as climate change, economic turbulence, energy paradigm, large scale natural disasters, can give rise to sudden breaks, which stakeholders are not ready for. In some cases, stakeholders show very weak reactivity to changing internal and external context and are explicitly opposing policy innovation, new technological opportunities and new markets. This scenario has been described as defensive scenario in ESPON Span-3 project (ESPON SPAN-3, 2010).

Secondly, development options can be chosen with respect to specific values that shape policy concepts. The distinction between equity and efficiency oriented policies is often made to reflect broader debate about territorial cohesion and competitiveness considerations in national and EU level. Both considerations are very important in policy making, and have been accompanied by extensive debate since the last half of the 20th century. Equity oriented policies aim at mitigating internal social, economic and territorial diversities in development and income, whereas efficiency oriented policies aim at boosting faster economic growth, via improved efficiency and competitiveness. Cohesion-oriented options policy options place with social, economic and territorial cohesion as top priority in all areas. Priority is given also to environmental and health related concerns. In cohesion scenario policy rural diversification is active, and opportunities for SMEs, tourism and residential functions are encouraged. Reducing disparities between different levels of development among the regions and reducing backwardness of the least favoured regions has been one of EU's key ambitions (see, Treaty on European Union and of the Treaty Establishing the European Community Treaty, 2006: Art 158) Over the past few decades the relevance of cohesion type policies has grown. Regional policy has become one of the most important policies of the Union and now represent over 35% of the Community's budget expenditures.

In the same time, it has been recognized that Europe lags behind America and Asia in terms of lower expenditure to R&D, smaller amount of venture capital, lower level of labour and capital mobility, and innovation. Lisbon Strategy marks a point of departure for more decisive orientation of EU's economy towards most competitive knowledge-based economy in the world. Competitiveness oriented

policy options places competition as the key objective of all policies. It offers to invest in areas and sectors with more potential to guarantee higher returns in the future. Free market solutions, innovation based strategies and investments into competitive industries and territories are seen as key strategies for reaching optimal development solutions.

The debate about equity vs. effectiveness stretches across different levels of policy making, but ultimately come down to the question: what share of budget should be spent on specific purposes? How different territories and sectors benefit from specific measures? How should governance, economic and social sectors be reorganized to reflect certain values?

Recent financial and economic recession not only exposed vulnerabilities of previously fast growing economies in East and Central Europe but also increased discrepancies between more developed and less developed regions in Europe. In response to financial and economic recession EC proposed 10 year strategy for reviving the economy - Europe 2020. It set three mutually reinforcing priorities for increasing Europe's competitiveness in the world, such as smart growth (developing an economy based on knowledge and innovation), sustainable growth (promoting a more resource efficient, greener and more competitive economy) and inclusive growth (fostering a high-employment economy delivering social and territorial cohesion). Fifth Cohesion Report was launched to support the Europe 2020 strategy and highlight the contribution that European regions can make to meet these objectives. It was emphasized that Europe 2020 headline targets cannot be achieved only by policies formulated at EU or national level alone. This agenda could only succeed with strong national and regional participation and ownership on the ground. Therefore it was necessary to strengthen connections between European and local perspective. To achieve this objective territorial diversity first had to be acknowledged and then turned into strength, as the Green Paper on Territorial Cohesion stated (Green Paper on Territorial Cohesion, 2008: 616) This stance symbolized departure from traditional approaches which focused on remote rural areas as "permanent handicaps" and "additional costs." (ESPON TeDi, 2010: 16) Instead endogenous development strategy of development was advocated. In this strategy regions had to increase competitiveness of their local assets and capitalize on existent potentials. However, a risk associated with the focus only on endogenous potentials is that by focusing only on individual territories and cases, rural areas can fail to consider opportunities for external territorial cooperation. In fact, such cooperation takes place inside and outside national borders.

In post-recession economy, policy options in PURR rural regions are to large extent influenced by interventions in public sector. These interventions have already changed economic and political landscape, especially in Latvia and the UK. ESPON SPAN-3 project distinguishes between two fields of policy making. Demand generating policies provide exit from the present deficit of Member

States budgets in form of indirect public expenditure or appropriate regulatory policies, creation of new sources of aggregate demand, like the opening up of new markets, launching of new production paradigms, the conquest of new internal and international markets through enhanced competitiveness of local production and smart utilization of public procurement of goods and services. Supply generating policies involve provision of internal infrastructure, far looking regulatory policies, structures of economic incentives and regional policies (ESPON SPAN-3, 2010: 37)

Since these policies are in fact policy packages, they largely depend on successful planning and implementation in local, regional, national and EU level. This is the role of governance. In today's world of growing interdependency and vulnerability to external risks and opportunities governments must not only provide effective administration and re-distribution of resources, but also encourage strong cooperative behaviour and knowledge sharing among institutions and various social groups. Therefore important catalysts of successful policies are not only government structures but also established relationships. Cooperation and coordination capacity of governments are important determinants of policy outcomes. Unlike traditional styles of governance which emphasize hierarchy, multi-level approach to governance emphasizes involvement of many stakeholders in each level of authority (Böhme et. al., 2004). In addition to multi-level approach, policy making should address issues of different sectors (multi-sector governance). Finally successful territorial governance combines the strengths of multi-sector governance and multi-level governance and leads to strategic vision and policy making for the territory.

Central to design of policy options and the assessment of policy impacts is the notion of balanced development of territorial capital. ESPON TeDi project has found, that in some areas development difficulties might be not so much because of the lack of development assets but more because of insufficient coherence of economic, social and ecological dimensions of development. This makes future development unsustainable. In this sense, potentials of rural regions can be seen as possibilities of improving coherence between the components of territorial capital. ESPON TeDi examines local development by combining three main components of territorial capital. These are human capital, natural resources and territorial positioning, and institutional context & governance structures (ESPON TeDi, 2010: 21-22)

Summing Up

We have proposed a methodology in four steps. Step 1 and 2 are mainly about gathering information, while Step 3 and 4 are mainly about analysis. Each of the four steps might involve more than one stage.

Step 1 Benchmarking: The main feature here is the two-stage Magnifying Glass Method, which aims at using existing information to benchmark the region in a

European and national (and regional) perspective using data and typologies mainly from EDORA and national sources.

Step 2 The Regional Perspective: The purpose of this step is to gather supplementary information from the stakeholder regions. We have proposed a four-stage procedure to gather this information. This involves informal discussions (stage 1), a more formalised work-shop with guidelines (stage 2), a template for discussing the results of the benchmarking process with the stakeholders, which is supplemented with a questionnaire (stage 3), and a SWOT analysis (stage 4).

Step 3 Assessing the Territorial Potential: The purpose of this step is to apply the information from the previous steps to discuss different regional development perspectives, and to discuss which of them best represents the region's territorial potential.

Step 4 Policy Options and Future Development: The purpose of this step is to discuss what actions to take to reach the territorial potential, within the general framework of which options that exist. This step might include a discussion of *systematic scenarios*, which we will look into as a part of the draft Final Report.

These steps together represent the methodology that has been applied to the five PURR regions in section C5, but also the methodology proposed by the TPG as the framework for analysing the Territorial Potentials of Rural Regions. Our view is that the stakeholder representatives in PURR have had an important role in developing this methodology, which has been developed in dialogue with them. However, the stakeholders are also an important part of the analysis. Especially in Stage 3 and 4, we think that the analysis cannot be done without stakeholder participation. When we have developed the "menu" as a part of the final report (see Stage 3), we hope that the methodology will help future stakeholders assessing their potentials without expert assistance. Our methodology represents a systematic way of gathering and processing information, but it cannot be applied without some analytical capacity in stage 3 and 4.

C4. Use of ESPON Results

Benchmarking process involved comparing PURR stakeholder regions with each other and describing them in the context of other regions in ESPON space. European Perspective is important perspective to regions aiming at assessing their potentials. Benchmarking process starts with comparing relevant indicators and typologies based on information found in databases and various reports.

Overcoming data gaps – the magnifying glass method

Data collected in European scale is generally based on the standard territorial units for statistics in Europe on a fairly aggregated level (NUTS-2 and NUTS-3). These territorial units often coincide with national, administrative territorial units or are aggregates of such. Were all the stakeholder regions NUTS-2 or NUTS-3

regions, ESPON data and typologies could relatively easily be adapted directly. However, these territorial units are not always the most relevant ones for territorial development. Lower administrative levels, or other, non-administrative spatial units (such as, planning regions), might be more functional and therefore also more relevant for planning and development purposes. For instance, stakeholder region The Cambrian Mountains in Wales does not correspond to any statistical or administrative are within the UK governance structure. Thus, stakeholder regions are not on the same (or similar) spatial level, nor are all of them administrative units within their national systems of governance. In addition, stakeholder regions differ in size, economic structure, demographic structure, rural structure and in many other ways.

Therefore, benchmarking of stakeholder regions using only data collected on NUTS 2 and NUTS 3 territorial units cannot provide accurate results. To overcome this limitation, *magnifying glass method* was used. This method compensated for missing knowledge at NUTS-2 and NUTS-3 territorial scale and helped to acquire higher resolution information where it was missing. The method involved *a two-stage process* (See, figure 8).

- *Stage 1. The aim of the first stage was to locate each stakeholder region within its corresponding NUTS 2 and NUTS 3 unit*. In some cases, a stakeholder region might be a part of more than one NUTS-2 and/or NUTS-3 unit. Data, statistics and indicators were extracted from the following sources: (i) the overall ESPON Database of the ESPON 2006 and ESPON 2013 programmes, (ii) ongoing ESPON projects, (iii) Eurostat Regio Database, and other sources. Information about different typologies was also extracted from individual research reports using the information related to the corresponding NUTS units. For example, in the case of Notodden municipality in Norway, the region of Telemark is the relevant NUTS-3 unit, while South-East Norway is the relevant NUTS-2 unit. PURR stakeholder territories and their corresponding NUTS units are listed in table 4.

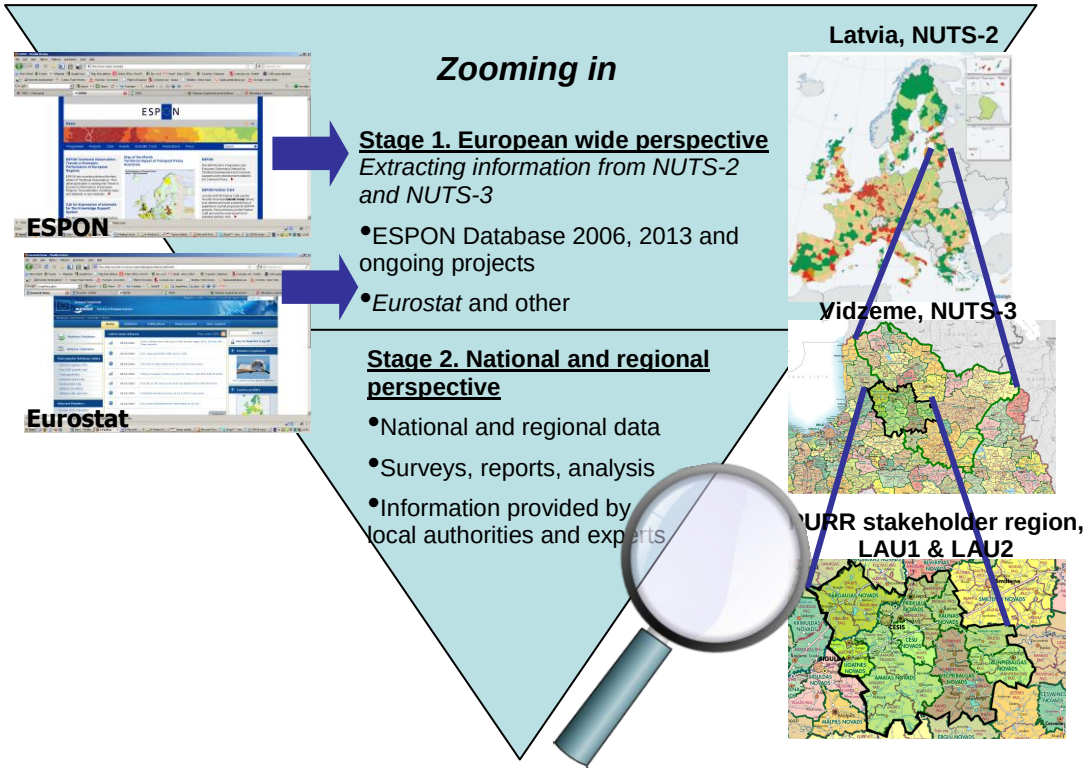


Figure 8 Application of Magnifying Glass Method. Example of PURR stakeholder region in Latvia.

- *Stage 2. In second stage information that was related only to stakeholder region was extracted.* This was done for those stakeholder regions that were smaller than a NUTS unit. NUTS-2 and NUTS-3 data and typologies would therefore normally contain too much information to benchmark the stakeholder region. National or regional statistical sources were consulted for information. If relevant information did not exist, other sources, such as existing surveys, reports, analyses and other sources were applied. Local authorities and other agencies were also consulted for relevant information. If all potential sources of secondary (or existing) information were exhausted, and relevant data had not been found, one had to look into possibilities in collecting primary information (collecting information directly). There can be several ways of collecting information directly. They are usually expensive (for instance collecting the relevant information for an indicator by inquiring all relevant actors) or uncertain as to the validity of data (like surveys and/or using experts).

Table 4. PURR stakeholder territories

		United Kingdom				Norway	Latvia
Stakeholder region		**Dumfries and Galloway**	**North Yorkshire**	**Cambrian Mountains**		**Notodden and Tinn**	**Amata and surrounding areas**
Statistical unit type		NUTS-3	NUTS-3	Functional area		Sub NUTS-3	Sub NUTS-3
Code		UKM32	UKE22	UKL1		NA	NA
Area size (km^2)*		6,426	8,038	1,958		2,963	2,975
Population for statistical unit (2010)		148,190	599,700	16,771		18,433	56,000
Statistical units for which data are extracted at *Stage 1*	NUTS-2	South Western Scotland	North Yorkshire UKE2	West Wales and The Valleys UKL1		Sør-Østlandet NO03	Latvia LV0
	NUTS-3	Dumfries and Galloway UKM32	North Yorkshire CC UKE22	Powys UKL24	South West Wales UKL14	Telemark NO034	Vidzeme LV008
	Area size (km^2)	6,439	8,038	5,179	5,775	15,299	15,257
	Population (2010)	148,190	599,700…	131,313…	662,900	169,185	234,005
Areas for which information is collected at *Stage 2*	Sub NUTS-3	Former Annandale and Eskdale, Nithsdale, Stewartry and Wigtown district council areas …	Craven, Harrogate, Selby, Ryedale, Scarborough, Hambleton and Richmondshire district councils and Yorkshire Dales and North Yorkshire Moors national parks	Area identified as part of Cambrian Mountains Initiative…		Notodden and Tinn	7 local rural municipalities (*novads*) Amata Rauna, Jaunpiebalga, Vecpiebalga, Ligatne, Priekuli, Pargauja and 21 LAU2 areas- *pagasts*

*Area sizes for 2006 according to ESPON 2006 Database.

National or regional typologies are relevant for stakeholder regions. Depending on relevance of national and regional typologies, benchmarking of a stakeholder region in a national (regional) context in many cases adds explanatory value to benchmarking performed at European level. The magnifying glass method involves looking more closely into the stakeholder region than European data allows. It is therefore difficult to limit the magnifying glass method only to Step 1 of PURR general methodology – *Benchmarking* as Step 2 "*The Regional Context and Stakeholder Perspective*" is a continuum of Step 1.

Selecting relevant data

Many variables influence rural development. These variables can be divided into two main categories: external and internal (or endogenous and exogenous) factors. The *internal* (*endogenous*) factors are factors that can be influenced by the stakeholder region. *External* (*exogenous*) factors might be defined as factors that are determined outside the stakeholder region's control. They range from

natural given factors (like location and the climate) via *structural factors* (i.e. demographic and industrial structure, hierarchy of centres etc.) to factors that are *outside the control of the region* (world market prices on commodities, national policies, European policies).

These factors are captured by statistics and indicators, which are indirect measures of issues and are developed for a certain purpose to assess situation. Composite indicators combine indicators into single indexes by means of mathematical calculation summarizing underlying dimensions of the issue and policy at stake. Different typologies also provide powerful insights for issues and policies. Some variables reflect territorial situation or the impact of the policies that have a territorial impact, such as, accessibility for example. Variables can also be used to present trends and disparities.

While the use of ESPON results in *Step 1* of general PURR methodology focuses more on capturing main spatial characteristics of regions, analysis in *Steps 2 and 3,* provides more issue-based interpretation of data. In addition, temporal dimension is accounted for in cases where it is deemed relevant, such as in case of GDP change and demographic scenarios.

The choice of data for benchmarking of stakeholder regions in European perspective is based on general territorial challenges, such as demography, economy, energy, climate change, environment hazards, transport infrastructure, and social and cultural transformations. These challenges have been highlighted in European spatial development scenarios.[5]

Territorial challenges have been addressed by different policy responses and orientations. Cohesion oriented responses have emphasized need for balanced territorial development approaches, quality of environment, accessibility and inclusion which leads to reduction to disparities, while competiveness approaches emphasize need for innovation and competitiveness to achieve a degree of concentration (critical mass) for development, and enter "new economy," based on knowledge and innovation. In addition several overarching dimensions, such as networks and cooperation have also become relevant in the context of polycentric development.

Indicators for benchmarking were therefore selected to reflect these general policy considerations. Indicators which measure specific issues that are relevant for territorial cohesion included: natural heritage and environment, climate and natural hazards, accessibility, human development index, environmental hazards, social and cultural affairs and others. Several of cohesion indicators have been suggested by ESPON INTERCO project which is developing knowledge base for

[5] ESPON (2006). *Spatial Scenarios and Orientations in relation to the ESDP and Cohesion Policy*. *Final Report.*

measuring territorial cohesion.[6] Many of these indicators are also considered here.

To measure issues that are relevant for competitiveness policy responses, economic measures, including GDP statistics, innovation and R&D were chosen. In addition, indicators illustrating area structural types, demographic trends, energy, and climate change were used to provide overall characteristics of stakeholder regions.

Indicators reflecting networking and cooperation dimensions in transport and accessibility and governance were also selected.

Development of rural regions has several specific themes. These themes have been highlighted in EDORA project. In addition to general territorial challenges such as demography and climate change, EDORA examines issues of rural employment, rural business development, rural-urban interactions, access to services of general interest, role of cultural heritage in rural development, institutional capacity, farms structural change and the role of agriculture in rural development. These themes are examined at higher resolution during *Steps 2* and *3,* while *Step 1* provides a general comparison of stakeholder areas according to combined typology of rural areas developed by EDORA. This is done to account for diversification of rural economy, interaction with urban areas, and their economic performance. EDORA data was used to describe and compare PURR regions with each other and also with other regions in respective countries.

In result, the choice of indicators came down to eight thematic categories: *(1) Economy, (2) Demography, (3) Transport, accessibility, (4) Natural assets, Environment, natural hazards and climate change, (5) Energy, (6) Rural areas, (7) Social and cultural affairs and cultural heritage, (8) Governance.*

Figure 9 shows the choice of relevant data and indicators for benchmarking of the stakeholder regions in European level.

[6] ESPON (2011). *Interco. Indicators of territorial* cohesion. Interim Report, pp. 40-41.

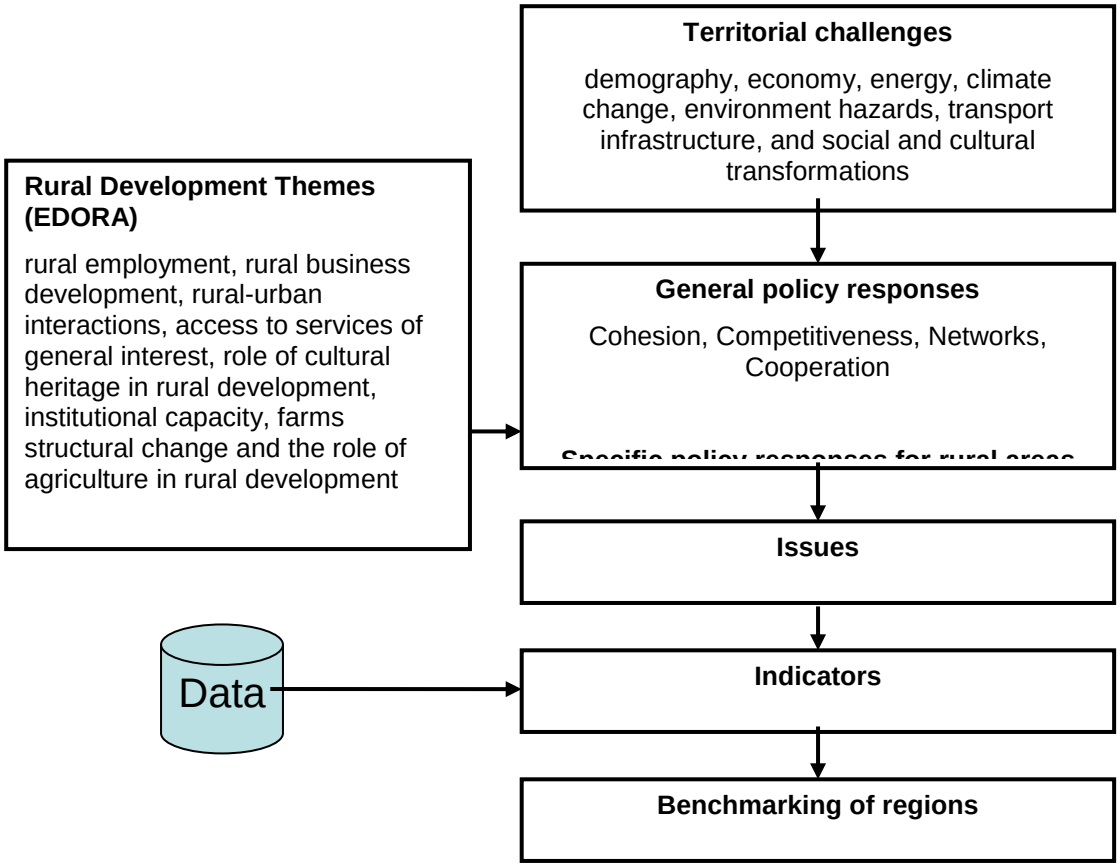


Figure 9. Choice of data and indicators for benchmarking, based on territorial challenges and policy responses.[7]

Indicators for benchmarking were retrieved from Eurostat, and ESPON data base. [8] Selected indicators are listed in Table 5.

[7] Adapted from INTERCO Project. See, ESPON (2011). *Interco. Indicators of territorial cohesion. Interim Report*, p. 18.

[8] Projects from ESPON 2006 programme included: 1.1.2 Urban-Rural relations, 1.1.4 Demographic Trends, 1.3.2. Natural heritage, 1.3.3. Cultural heritage, ESPON study 1.4.1. Small & Medium Cities, and Policy impact projects, such as 2.1.3. CAP Impact and rural development policy, 2.1.4. Energy, 2.2.1 Structural Funds Impact, 2.2.2. Pre-Accession Aid, 2.3.2. Governance, 2.4.1. Environment, 3.2. Territorial futures and spatial scenarios. In addition, data from ESPON 2013 programme projects, such as EDORA, DEMIFER, ReRisk, TeDi and others was used. ESPON Territorial Observations, Synthesis reports and Scientific reports were used as quick reference to maps and summaries of relevant typologies.

Table 5. Selected Indicators for Benchmarking

		Available at:		
Category	**Indicators**	**NUTS 0,1,2**	**NUTS 3**	**Source and reference of data or typology**
Economy	Lisbon performace measurement	X		
	GDP/capita	X	X	Eurostat Regio
	Employment	X		Eurostat Regio
	Unemployment		X	Eurostat Regio
	Total R&D expenditures	X		Eurostat Regio
	Median disposable annual household income	X		Eurostat Regio
	Share of tertiary educated people	X		Eurostat Regio, CLIMATE
	Human Development Index	X		UNDP Human Development Report
	Happiness Index	X		Report by the Commission on the Measurement of Economic Performance and Social Progress
	Happy Planet Index	X		NEF
	At risk of poverty rate	X		Eurostat Regio, EUROISLANDS
Demography	Population	X	X	Eurostat Regio
	Urban-rural population	X		Eurostat Regio, DG Regio, DG Agri
	Population density	X	X	Eurostat Regio, METROBORDER
	Life expectancy	X		Eurostat Regio, EUROISLANDS
	Population change	X	X	Eurostat Regio,
	Dependency ratio	X	X	Eurostat Regio, EUROISLANDS
	Ageing Index	X	X	Eurostat Regio
	Life expectancy at birth	X		Eurostat Regio, EUROISLANDS
	Typology of the demographic status	X		ESPON Database, Eurostat, NSI
	Future perspectives on population development	X	X	DEMIFER
Transport, accessibility	Multimodal accessibility	X	X	RRG, ESPON Accessibility update
	Potential accessibility by air	X	X	RRG, ESPON Accessibility update
	Potential accessibility by rail	X	X	RRG, ESPON Accessibility update
	Potential accessibility by car to population and to GDP	X	X	RRG, EU Parliament Cohesion study
	Households with broadband access	X		Eurostat Regio
	Access to nearest national roads (min)	X	X	RRG, EU Parliament Cohesion study
	Access to nearest railway station (min)	X	X	RRG, EU Parliament Cohesion study
	Population potential 50 km	X	X	RRG, EU Parliament Cohesion study
	Areas in 45 minutes reach from an urban center	X	X	ESPON 1.1.1.
	Distance to next MEGA	X	X	ESPON 1.1.1.
	Workers commuting to another NUTS-2 region	X		Eurostat Regio
	Regional GVA in industries with high energy costs	X		ReRisk

Selected Indicators for Benchmarking (*table 5 continued)*

		Available at:		
Category	**Indicators**	**NUTS 0,1,2**	**NUTS 3**	**Source and reference of data or typology**
Natural assets, environment, natural hazards and climate change	Land cover		X	ESPON 1.3.2., Corine 2000, 2006
	NATURA 2000 areas	X	X	5th Cohesion Report, EEA
	Ecological footprint	X		Global Footprint Network
	% of green space and open space per inhabitant		X	EEA
	Greenhouse gas emission	X		ESPON 3.3. Eurostat Regio
	Summer smog: ozone	X		Eurostat Regio, EEA
	Summer smog: PM10 concentrations	X		Eurostat Regio, EEA
	Residence density, settlement density		X	EEA
	Urban pressure		X	ESPON 1.3.2.
	Urban influence and human intervention		X	ESPON 1.1.2
	Land fragmentation		X	ESPON 1.3.2.
	Share of natural and seminatural areas and population density		X	ESPON 1.3.2.
	Share of areas with high ecological value	X		Eurostat Regio
	Natural hazard potential		X	ESPON 1.3.1.
	Impact of climate change	X		Lautenschlager et. al, ESPON 2013 Database
Energy	Share of industrial consumption of electricity	X		ESPON 2.1.4
	Dependency on industries with high energy spending	X		ESPON ReRisk
	Energy poverty	X		ESPON ReRisk
	Share of employees in industries with high energy purchases	X		ESPON 2.1.4
	Energy self-sufficiency and price sensibility	X		ESPON 2.1.4
	Renewable energy consumption	X		Eurostat Regio
	Wind power potential	X		EEA
	Solar energy output	X		JRC, Sunbird Database
	Future perspectives	X		ESPON ReRisk
Rural development	Contribution of Agriculture to GVA		X	ESPON 2.1.3.
	Agricultural work productivity		X	ESPON 2.1.3.
	Farm structure		X	Eurostat Regio
	Urban-rural typology		X	EDORA
	Structural typology of rural areas		X	EDORA
	Performance of rural areas		X	EDORA
	Future perspectives for rural areas		X	ESPON 3.2., EDORA
Cultural heritage				
	Share of population in cultural professions		X	ESPON 1.3.3.
	Demand and supply of cultural resources		X	ESPON 1.3.3.
	Density of monuments		X	ESPON 1.3.3.
	Main functions of culture		X	ESPON 1.3.3.

Selected Indicators for Benchmarking (*table 5 continued*)

		Available at:		
Category	**Indicators**	**NUTS 0,1,2**	**NUTS 3**	**Source and reference of data or typology**
Governance				
	Basic governance structure	X		ESPON 2.3.2.
	Structural dimension and relationship dimension	X		ESPON 2.3.2.
	Horizontal coordination and relationships	X		ESPON 2.3.2.
	Horizontal and vertical performance	X		ESPON 2.3.2.
	World Governance Indicators	X		World Bank
	Electoral participation	X		Eurostat Regio

Main results

While all stakeholder regions are rural they show different characteristics while sharing also some common properties.

Review of relevant data suggests that regions differ significantly in terms of economy size, structure, performance and cohesion. The later aspect has become relevant especially after financial and economic recession, which was "survived" with different success by stakeholder regions.

To illustrate differences, regional GDP in pre-recession period for Vidzeme region per capita was about 26-50% of EU average, North Yorkshire scored slightly above EU average, and Dumfries and Galloway scores slightly below EU average. So did South West Wales. In terms of economic structure, only Vidzeme can be described as typically agrarian. Most rural areas in UK and Norway are described as consumption countryside areas. This means that they are more economically diversified or have stronger secondary and services sector. Most regions show positive economic performance while Vidzeme experience rapid population loss, poverty risk and social inequalities. According to future population projections, population size will increase in Sør-Østlandet, North Yorkshire and South Western Wales, but it will decrease in South Western Scotland and Latvia.

The accessibility of European regions and cities is increasing. Although accessibility levels vary widely across the regions and cities in Europe, core areas with higher population density also have better access. According to commonly used urban-rural typology, regions of Vidzeme and Telemark can be described as predominately remote and rural. PURR areas in UK share many rural characteristics but are generally closer to larger cities. There has been overall increase in combined accessibility level from 2001 to 2006 for all PURR regions with more limited increase for South West Wales. Broadband connection can also be important in bridging regional physical remoteness. It is important to stress, that all regions are internally diverse when it comes to levels of accessibility.

Most European areas still have a lot of open space. Regions in Scandinavia, Spain and Turkey, Western Balkans and in the Baltic countries show highest amount of open space per capita because of their large unfragmented cover and/or because

of low population density. In Vidzeme landscape is dominated by rural mosaic and pastures landscape as well as forested landscape, most of North Yorkshire landscape is broad pattern of intensive agriculture. In Dumfries and Galloway as well as in Cambrian Mountain regions intensive agriculture landscape is less prevalent. Considerable part of these territories is also taken by rural mosaic and pasture landscape, as well as by open semi-natural or natural landscape. In Vidzeme the share of agricultural land has been declining and is slowly replaced by forests. Urban influence is rather low in surveyed areas, though human footprint and ecological footprint varies. The patterns of climate change in Norway in Latvia will be to some extent different from the patterns in UK.

European economy is highly dependent on energy. Since fossil energy resources are becoming scarcer they are also more expensive. Rural regions are vulnerable to rising energy prices, though the extent of vulnerability depends on several factors. Among all surveyed areas, energy challenges are more relevant for Vidzeme, which has rather low energy self-sufficiency and high price sensibility. UK and most of Norway has low price sensibility and high self sufficiency. Future scenarios imply that regional economies are at risk of rising energy prices, especially those who are more industrialized. Nevertheless, rural peripheral regions are also in need for support policies, since they are unable to implement energy efficiency measures and invest into renewables.

Rural development paths are becoming more diversifyied, with diversification of rural areas. Initial assessment of rural development meta narratives elaborated by EDORA project suggest, that for UK rural regions meta-narratives offer more opportunities. For Telemark and Vidzeme narratives of rural development contain more challenges. Patterns of rural differentiation are shaped also by governance arrangements and ways how cultural heritage is managed.

Economy

On European scale economy is concentrated mainly in capitals and agglomerations. Significant East-West divide between old and new EU Member states still exists. Countries in which PURR stakeholder regions are located show different levels of economic performance which obviously affect regions themselves.

Employment in Europe is higher in Northern part of Europe, Benelux countries and in the UK. Since 2000 many regions in Europe experienced employment growth. At the same time many regions with high employment also experienced decline in employment. Unemployment in Europe is strongly correlated with GDP. In post-recession economy regions with highest unemployment (above 10%) are located in Southern Spain, Southern Italy, and Eastern part of Germany. Some regions in Poland, Hungary, Slovakia and Greece also have high unemployment. Unemployment is lower in Norway, some regions in the United Kingdom, Belgium, the Netherlands and capital city regions in Eastern Europe. Disposable household

income is higher in old EU member states and Norway and considerably lower in Eastern Europe.

According to composite Lisbon performance measurement, which combines seven indicators, such as GDP/capita (PPP), employment rates, R&D expenditure, unemployment, PURR countries showed different level of performance. In 2006 high economic performance was in Sør-Østlandet region in Norway (1,5-2,0) and North Yorkshire (1,5-2,0) in England. Both regions scored near the highest quartile of European Lisbon performance measurement. PURR areas in Wales and Scotland above EU medium performance (2,0-2,5), whereas Latvia performed below average EU performance (2,5-3,0). From 2000-2006 all PURR regions increased their relative performance, especially Latvia and South Western Scotland which showed strong improvement on European scale (<0,4) North Yorkshire and Cambrian Mountain areas also showed improvements in relative performance (0,4…0,1), but in Norway relative performance remained unchanged (0,1…-0,1).

In 2008 regional GDP per capita in EUR amounted between 25,001-30,000 EUR in North Yorkshire, and Dumfries and Galloway, and 10,001-15,000 in Cambrian Mountain Area. Regional GDP per capita was the lowest in Vidzeme (4,000-5,000 EUR). When expressed in % of EU average, regional GDP of Vidzeme was about 26-50% of EU average in 2008. North Yorkshire scored slightly above EU average (101-125%), whereas Dumfries and Galloway scored slightly below EU average (76-100%). So did South West Wales (51-75%). When expressed in PPS, regional GDP showed similar results.

From 2000-2008 all PURR regions with the exception of Powys region experienced growth in GDP/capita while Powys experienced decline (-1 to - 5%). Vidzeme experienced the highest growth in GDP/capita (from +101 to 150%). Although the growth was high in European context, one has to remember that GDP growth in Latvia started from very low level. GDP / capita growth in PPS was more modest in North Yorkshire, Dumfries and Galloway and South West Wales (from +26% to +50%).

Investigation of regional GDP over time shows that GDP/capita growth in PURR regions was most uneven in Latvia due considerable economic and demographic differences between the capital Riga and other regions, while in the UK GDP dispersion among NUTS-2 regions is lower than EU27 average. Economic disparities between Latvian capital and hinterlands have increased over time. Estimations provided by ESPON FOCI project suggest that from 1995 – 2004 GDP per capita ratio has increased by about 0,62 for capitals of three Baltic States Riga, Vilnius and Tallinn.

After experiencing significant economic growth from 2000-2007 Latvia's economy went into substantial decline in 2008-09. Among all PURR countries Latvia experienced largest surge in unemployment. Unemployment level after recession

was significantly lower in PURR regions of Norway and England, whereas in Scotland and Wales unemployment rate was slightly higher, but still far below Latvia's unemployment level (ESPON Territorial Observation No. 3, 2010).

Currently unemployment rate in Vidzeme for 2009 remains high in context and it is also the highest among PURR regions (21-25%), followed by Cambrian Mountain areas and North Yorkshire (6-10%). Unemployment was only 1 to 10% in Telemark and Dumfries & Galloway. Unemployment in Vidzeme increased by 6 to 10% from 2000-2009, mainly due to recession. In other regions unemployment grew slower. In North Yorkshire unemployment grew by 1 to 5% from 2000-2009, but in Telemark and Dumfries and Galloway it actually decreased (0 …-4%)

Employment rate among those aged 15 to 64 in 2009 was the highest in Norway (Sør-Østlandet region) and in North Yorkshire (71-75% of population). In South Western Scotland employment rate was between 66-70%. In Latvia and in Cambrian Mountains employment rate was between 61-65%. In the same time rural regions where employment level was high, experienced decline in employment from 2000-2009. North Yorkshire experienced decline by -1 to 0 % and Sør-Østlandet region by -3 to -2%. Regions in Cambrian Mountains and South Western Scotland and Latvia experienced increase in employment rate from 2000-2009.

Disposable household income of private households measured as purchasing power is considerably higher in Norway and UK than in Latvia. Disposable household income in 2007 was from 5,001-10,000 in Latvia; 17,501-20,000 in North Yorkshire, 15,001-17,500 in South West Scotland and 12,501-15,000 in West Wales and the Valleys. While household income in Latvia has considerably increased from 2000-2007 it is still significantly lower than EU's average in absolute terms.

While GVA contribution of agriculture in European economy is relatively low, significant differences in PURR areas can be observed. In terms of economic structure, only Vidzeme region can be described as typically agrarian. Most rural areas in UK and Norway are described as consumption countryside areas, which mean that they are more economically diversified or have stronger secondary and services sector.

Employment in wholesale and retail trade, hotels, restaurants and transport as share of total employment in 2007 (NUTS-2) is similar to average level in EU. It is higher in Dumfries & Galloway and Vidzeme (26-30%), but lower in North Yorkshire, West Wales and the Valleys as well as in Sør-Østlandet region in Norway (21-25%). The employment in these sectors has increased from 2000-2007 especially in Vidzeme.

In terms of economic performance according to EDORA typology Telemark and North Yorkshire are strong accumulating regions, South West Wales and Powys

score above average in EDORA performance rating. Dumfries and Galloway scored below average performance, but Vidzeme is only PURR area which is depleting.

The share of tertiary educated people in 2009 was highest in North Yorkshire and East Wales (36-40%) and, but lower in South Western Scotland, West Wales and the Valleys, and Sør-Østlandet (31-35%). In Latvia the share of tertiary educated people was between 21-25%. R&D expenditure as percentage of GDP in 2006 was between 1 and 2% in UK and Norway accounting and less than 1% in Latvia.

To account for territorial cohesion of PURR areas, several indicators associated with social and economic well-being were selected. All these indicators are available in NUTS-0 level.

Human Development Index calculated by UNDP ranks countries by life expectancy, education and per-capita GNI. Although generally HDI have increased in European countries since there are considerable differences among countries. Index values for 2010 suggest that In Europe there are five groups of countries which show different levels of HDI. Highest performers are Norway, Sweden, Ireland, Netherlands and Germany. Norway was also the best best-performing country world-wide in 2010. In a second group there are Belgium, Switzerland, France, Spain, Iceland and Finland. Third group of countries consist of Austria, Italy, Czech Republic, Greece and the UK. Then two groups of countries follow. These countries show lower HDI on European scale. These countries include Baltic States, Poland, Slovakia, Slovenia, Hungary, Portugal, Croatia), followed by the rest.

It is possible to observe three distinct levels of HDI in PURR areas in 2010. While Norway shows the highest human development performance in the world (0,89-1,00), and UK demonstrates HDI level above European average (0,85-0,86), Latvia's HD score is lower (0,77-0,78). It is also lower than HD scores for neighbouring Estonia and Lithuania.

Among PURR areas Latvia had the highest poverty risk with 22-26% of population living with 60% of the national equivalent median income in 2009. In UK poverty this measure is 17-19%, but in Norway only 11-13%. Amount of population in persistent risk of poverty rate is measured against 60% of national median income. The percent of population at risk of poverty is highest in East European countries, especially in Latvia, Romania and Bulgaria. On the other end of the spectrum are Czech Republic, Slovakia and Norway.

Since GDP measures cannot account for all aspects of development, including also for personal and social well-being of population, several wellbeing indicators were also applied to describe PURR regions.

In terms of overall well-being, Scandinavian and Alpine populations express higher levels of overall, personal and social wellbeing compared to new EU

member states. Thus, in Norway happiness index (2007) showing overall subjective wellbeing in scale from 0 to 10, was above European average (5,7-5,8), while in UK it was lower but still on European average (5,1-5,2). Similar trends can be observed in case of personal wellbeing. In terms of social well-being UK scores a bit lower than European average (4,9-5,0). No such data was available for Latvia.

However, according to Happy Planet Index which incorporates ecological footprint, life-satisfaction and life expectancy, PURR countries and most European countries showed similar scores overall. According Happy Planet Index (HPI), Latvia received higher score (36,7), followed by Norway (40,4) and United Kingdom (43,3). Life satisfaction (from 0 to 10) was higher in Norway (8,1), followed by UK (7,4) and Latvia (5,4). Higher overall happiness score according HPI can be explained by lower ecological footprint (3,5). In Norway ecological footprint value was 6,9, but in United Kingdom – 5,3 in 2005. Key indicators of economy are examined in Table 6.

Table 6. Key indicators of economy

NUTS-0

Dimen-sion	Indicator	United Kingdom	Norway	Latvia	Year (s)
Cohesion	Human Development Index	0,85-0,86	0,89-1,00	0,77-0,78	2010
	Population in persistent risk of poverty (population share with 60% of the national equivalent median income)	17-19%	11-13%.	22-26%	2009
	Overall subjective well-being (0 to 10)	5,1-5,2	5,7-5,8	NA	2007
	Happy Planet Index	7,4	8,1	5,1	2005
Competi-tiveness	R & D expenditure (% of GDP)	1-2%	1-2%	0-1%	2006

NUTS-2

Dimen-sion	Indicator	South Western Scotland	North Yorkshire	West Wales and the Valleys	Sør-Østlandet	Latvia	Year(s)
Competi-tiveness	Lisbon performance indicator	Above medium performance 2,0-2,5	High performance 1,5-2,0	Above medium performance 2,0-2,5	High performance 1,5-2,0	Below medium performance 2,5-3,0	2006
	Share of tertiary educated people	31-35%	36-40%	31-35%	31-35%.	21-25%	2009
	Disposable household income	15,001-17,500	17,501-20,000	12,501-15,000	NA	5,001-10,000	2007

Key indicators of economy (continued)

NUTS-3

Dimension	Indicator	Dumfries and Galloway	North Yorkshire CC	Cambrian Mountains, Wales		Telemark	Vidzeme	Year (s)
				South West Wales	Powys			
Competitiveness	Regional GDP (EUR)	25,001-30,000	25,001-30,000	10,001-15,000	10,001-15,000	…33,500 (2007)	4,000-5,000	2008
	GDP growth 2000-2008 as %	+26…+50%	+26…+50%	+26…+50%	-1%...-5%	NA40,8 (1999-2007)	+101…150%	2000-2008
	Unemployment	1-10%	6-10%	6-10%	6-10%	1-10%	21-25%	2009
	Unemployment change 2000-2009 as %	0…-4%	+1…+5%	+1…+5%	+1…+5%	0…-4%	+6…+10%	2000-2009
Structure of rural economy according EDORA typology		Diversified (Market Serv.)	Consumption Countryside	Consumption Countryside	Consumption Countryside	Consumption Countryside	Agrarian	2009
Performance of rural economy according EDORA typology		Below average	Accumulating	Above average	Above average	Accumulating	Depleting	2009

Demography

European population growth is slowing down. Soon it is expected to peak, but later go into decline. Population decline is strongly linked with ageing. European regions can be grouped in three categories according to their demographic profiles and scenarios. There are regions which experience challenge of ageing. In these regions population is ageing but population decline is compensated by positive net migration rate. A high share of elderly people and low education levels impair the functioning of regional labour market and constrain development of the regional economy. Second group of regions face the challenges of labour force. In these regions population is younger, but it lacks employment opportunities. These regions are losing population through natural balance and out-migration. Third group of regions experience general challenge of decline. These regions have negative population development due to low fertility rates and negative net migration. The proportion of older workers (above 55 years) is significantly higher than in the rest of ESPON space and the share of younger adults (20-39 years) is below average. Therefore, these regions face problems in maintaining sustainable social welfare systems, since their workforce will be declining.9

Among PURR regions Vidzeme belongs to group of regions which face challenges of decline. Regions with similar characteristics are located in Bulgaria, parts of Greece, Eastern part of Germany, Central Sweden, parts of Hungary, Eastern Finland also in Estonia. PURR regions in UK and Norway fall into intermediate category closer to regions that might experience challenges of ageing with stagnating natural balances but positive net migration. Nevertheless PURR regions are in better position than regions in Northern Italy, Southern France, Northern Spain and Portugal where challenges of ageing are more visible.

All PURR areas experience negative natural population balance. While Dumfries & Galloway, North Yorkshire, Cambrian Mountains and Telemark experience general population increase, this is mainly due to positive migratory balance. Vidzeme region shows strong signs of population depletion with negative migratory balance and negative natural balance. In addition Vidzeme is a region with significant international out-migration. Domestic migration patterns in PURR regions mainly reflect urbanization and sub-urbanization processes. In UK migration flows between neighbouring regions dominate, whereas in Latvia and Norway migration flows are more directed towards dominant capital city. Overall these migration trends reinforce mono-centric development in countries dominated by capital city.

Variances in demographic situation of PURR stakeholder regions can be summarized using typology elaborated in DEMIFER project. Typology of DEMIFER distinguishes between seven types of regions which are affected differently by

[9] ESPON (2010). *ESPON 2013 Synthesis Report*, p. 60.

demographic and migratory flows. It is based on four indicators (share of people aged 20-39, share of people aged 65+, natural population increase and net migration). The typology is available for NUTS-2 level.

According to DEMIFER, demographic situation in South Western Scotland and Wales is close to the overall population average of the ESPON space. The natural population balance is negative, but it is compensated by positive net migration rate. This is true also for North Yorkshire and Telemark region. Western parts of South Western Scotland, such as South Ayrshire experience more severe population decrease because of negative natural balance. In Latvia, one can observe a general trend of population decline. From 2001-2005 Latvia had both negative natural population balance and negative migratory balance. These trends will lead to depopulation accompanied by demographic ageing. In Latvia only Riga and Riga region is experiencing population increase, but this is only because of positive in-migration from peripheral regions.

In Western and peripheral regions of Norwegian population is younger than the average age in the country. It also has rather high natural population increase as well as positive migration rate. From 2001-2005 natural population growth in Norwegian Southern was between 0-0,5%. According to DEMIFER this increases "family potential." Family potential also increases in some regions of Central England. However other regions in South West England also face challenges of ageing, where the proportion of the older age groups is significantly higher than in other parts of ESPON space. In the same time these regions are also affected by positive migration rate and therefore experienced population increase. Overall, natural population development for 2001-2005 was slightly positive (0-0,5%) only in outer London and in some regions in North West England and North Eastern Scotland. Dumfries and Galloway shows negative natural population development. So is North Yorkshire and Telemark region in Norway.

Average life expectancy at birth in Europe is among 72 to 84 years. New member states have significantly lower life expectancy than old member states. In Norway and North Yorkshire life expectancy is in range of 81-82 years, while in Latvia between 72-75 years. In South Western Scotland life expectancy was in the range of 76-78 years, but it was higher in Cambrian Mountain areas (79-82 years). In general life expectancy tends to be lower in UK than in European Southern regions.

Ageing indexes and old age-dependency ratio (pop. 64 + / pop. -15) is higher for Vidzeme than for other PURR regions (1,26-1,50), though it is lower than in Northwest Spain, Italy, Greece, Bulgaria, and in East Germany, where ageing levels are even higher. Old age dependency ratio is below EU's average for Telemark (0,76-1). Data was not available for UK.

Population densities are typically lower in Northern Scandinavia and Baltic States. Non-urban regions have rather similar population densities which are higher

among secondary and tertiary cities. Internal disparities in population density between territories are considerable in Norway and Latvia, but less pronounced in UK. In Vidzeme and Telemark settlement density was low - 0-2,5% of urban fabric on regional area. In the same time ratio of urban-rural population (2008) is high in Latvia and also in South Western Scotland and East Wales which is a sign of population concentration in agglomerations. In North Yorkshire the rural population exceeded urban population in 2008. According to DG Agri typology (2004) which builds on OECD's measure of population density at the local level at 150 inhabitants / km2 and the share of local units of a certain type within region, Dumfries and Galloway, Powys and Vidzeme can be described as predominately rural where more than 50% of population were living in rural communities. North Yorkshire and South West Wales is significantly rural with 15-50% of population living in rural communities.

Residential structure of PURR regions correspond to rural areas with small and medium sized towns. According to typology of regional types of urban-rural spatial patterns elaborated by Study Programme on European Spatial Planning (1999) territory of Dumfries and Galloway as well as most of Highlands and Islands were rural areas with small and medium sized towns, whereas North Yorkshire is described as polycentric region with high urban densities. The same is true for Powys in Wales. Telemark is described rural area with small and medium sized towns. No data for Latvia and Vidzeme region was available from this typology. From the methodology of the project one can derive that parts of Vidzeme also fall into category of rural areas with small and mediums sized towns, whereas parts of it are remotely rural. No data for Norway was available in this project. However, similar regional typology used by OECD in 2005 identified Telemark also as predominately rural region. Most regions in Scotland and Norway are characterized as predominately rural according in OECD's typology.

It is important to consider demography in temporal perspective. In trend scenario produced by Eurostat, the population projections describe the possible future demographic developments assuming that the forces that counted in the past will mostly continue to work in the future. According to Eurostat projection, population size will increase in Sør-Østlandet, North Yorkshire and South Western Wales, but it will decrease in South Western Scotland and Latvia (See, Figure 10).

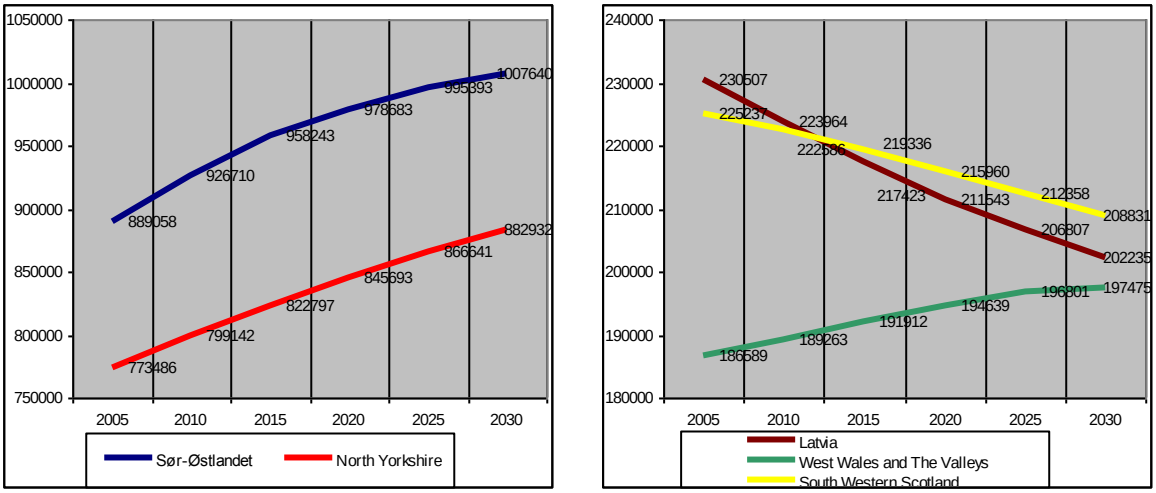


Figure 10. Population projection in trend scenarios in PURR regions.
Source: Eurostat.

DEMIFER project offers several scenarios for migration impact on population in the next 40 years (2005-2050) In status quo scenario demographic regime remains unchanged. In "No Migration" scenario population in regions change due to births and death only. In "No extra Europe migration" scenario population changes naturally and due to internal and international intra-ESPON space migration. The impact of migration on population is assessed as difference in population in the "Status Quo" and "No Migration" scenario.

The results of DEMIFER model show that by 2050 in Latvia population will decrease by 20%, but South West Scotland, North-Yorkshire and Sør-Østlandet region will experience population increase. The increase is forecasted to be especially high in North Yorkshire (+107%). In South West Scotland and Sør-Østlandet it will be moderate (+20%). However, coastal areas of Norway in the North will experience population decline by 10%. Population dynamics will also be influenced by different policies. Therefore DEMIFER project also presents four possible futures based on economic and distribution dimensions.

In case of Growing Social Europe scenario with high economic growth enabled by technical and social innovation and moderate increase in migration, strong collectivism values, population growth will occur in all PURR areas except in Vidzeme. Population growth will also occur in Expanding Market Europe scenario which predicts high economic growth, growing individualism and high increase in migration. Population growth will be lower in Limited Social Europe scenario with growth limited by environmental constraints, moderate migration and collectivist values and Challenged Market Europe scenario with low growth which is limited by environmental constraints, low increase in migration and individualist values. According to all four DEMIFER scenarios only Latvia will experience population decline by 25-50% by 2050. Dumfries and Galloway are expected to experience population decline in Expanding Market Europe scenario, according to DEMIFER model. Main population trends in PURR regions are summarized in Table 7.

Table 7. Key Demographic Indicators

NUTS-2

Indicator	**South Western Scotland**	**North Yorkshire (including York)**	**West Wales and the Valleys**	**Sør-Østlandet**	**Latvia**	**Year (s)**
Typology of the demographic status	Euro Standard*	Euro Standard	Euro Standard	Euro Standard	Challenge of decline	2010
Population size	2,285,810	786,100	1,888,500	900,152	2,281,310	2007
Life expectancy	76-78	81-82	79-82	81-82	72-75	2008
Future population projections for 2030	Decline -5 -10%	Growth +10 +15%	Growth +5 +10%	Growth +10 +15%	Decline -10 -15%	2005-2030
Impact of migration on population in 2050 (%)	Increase +10+20%	Increase +40+107%	Decline -20-30%	Increase +10 +20%	Decline -20%-10%	2010-2050
Future perspectives in different migration scenarios						
Growing Social Europe	Increase +0.0 -25.0%	Increase +25.0 +50.0%	Increase +25.0+50.0%	Increase +25.0+50.0%	Decline -50-25%	2010-2050
Expanding Market Europe	Decline -25-0.0%	Increase +25.0+50.0%	Increase +25.0+50.0%	Increase +25.0+50.0%	Decline -50-25%	2010-2050
Limited Social Europe	Decline -25-0,0%	Increase +0.0-25.0%	Increase +0.0-25.0%	Increase +0.0-25.0%	Decline -50-25%	2010-2050
Challenged Market Europe	Decline -25-0,0%	Increase +0.0-25.0%	Increase +0.0-25.0%	Increase +0.0-25.0%	Decline -50-25%	2010-2050

Euro Standard* - close to average of ESPON space.

Key Demographic Indicators (*table 7 continued*)

NUTS 3

Indicator	**Dumfries and Galloway**	**North Yorkshire**	**Cambrian mountains, Wales**		**Telemark**	**Vidzeme**	**Year (s)**
			South West Wales	**Powys**			
Population size	148,190	599,700	662,900	131,313	169,185	234,005	2010
Population density (population per km^2)	23	75	114	25	11,0	15,3	2010
Residential type according DG Agri typology	Predominately rural	Significantly rural	Significantly rural	Predominatel y rural	Predominately rural	Predominately rural	2004
Population development by components for 2001-2005	Increase	Increase	Increase	Increase	Increase	Decrease	2001-2005
Migratory balance	Positive	Positive	Positive	Positive	Positive	Negative	2001-2005
Natural balance	Negative	Negative	Negative	Negative	Negative	Negative	2001-2005
Natural population development for 2001-2005	Decline -0,5%-0,0%	Decline -0,5%-0,0%	Decline -0,5%-0,0%	Decline -0,5%-0,0%	Decline -0,5%-0,0%	Decline -1,0%-0,5%	2001-2005
Annual net migration development for 2001-2005	Growth 0,0% +0,5%	Growth +0,5% -1,0%	Growth +0,5% -1,0%	Growth +0,5% -1,0%	Growth 0,0% +0,5%	Decline -0,5%-0,0%	2001-2005
Old age dependency ratio (pop. 64 + / pop. -15.	NA*	NA	NA	NA	0,76-1	1,26-1,50	2009
Residential type	Rural area with small and medium sized towns	Polycentric region with high urban densities	Polycentric rural region with high urban densities	Polycentric rural region with high urban densities	Rural area with small and medium sized towns	Rural area with small and medium sized towns	1999
Residential density (%of urban fabric on regional area)	NA	NA	NA	NA	0-2,5	0-2,5	2006

* NA – Data not available.

Accessibility and Transport

The accessibility of European regions and cities is increasing. Although accessibility levels vary widely across the regions and cities in Europe, core areas with higher population density also have better access. The same is true for most capital regions. Although core-periphery pattern is still prevalent, it is increasingly mediated by more polycentric connections. In general regions with high accessibility tend to be more economically successful than remote and isolated regions. Good internal and external accessibility can help in strengthening economic cohesion.

Measures of accessibility are based on population and the effort in time to reach that population. One of urban-rural typologies that is often used to measure accessibility and distinguish between rural and urban areas is the one developed by Lewis Dijkstra and Hugo Poelman. This typology is modified version of OECD's urban-rural typology. It combines a classification of remoteness, based on driving time to the closest city, with the OECD classification of regions into predominantly urban, intermediate and predominantly rural regions (Dijsktra & Poelman, 2008). In predominately rural regions, more than 50% live in rural local units. In urban regions, less than 15% live in rural local units. In intermediate regions, between 15% and 50% live in rural local units. A region is considered close to a city if more than half of its residents can drive to the centre of a city of at least 50 000 inhabitants within 45 minutes. Conversely, if less than half its population can reach a city within 45 minutes, the region is considered remote (Dijsktra & Poelman, 2008).

According to this typology Dumfries and Galloway is described as predominately remote region that is close to a city. So is Powys . North Yorkshire is described as intermediate remote region. So is South West Wales. Telemark and Vidzeme are described as predominately remote regions. Dumfries and Galloway with Scottish Borders and Powys in East Wales were the only predominantly rural regions close to city in the mainland. Only North Western part of Scotland is considered as predominantly rural and remote. In England most of other regions can be described as intermediate regions close to city. North Yorkshire is one of such regions, but it is surrounded by urban regions. North Yorkshire has two towns with population of more than 50,000 inhabitants, and it is close to a number of significant cities. However the accessibility in North Yorkshire varies. Upland areas and costal parts are less connected.[10] Vidzeme has no towns with population more than 50,000. Therefore, it is the only predominately rural region in Latvia. Latgale region is described as intermediate region which is close to city, Rīga region and Zemgale region are described as predominately rural and close to city. Kurzeme region is described as intermediate, but remote.

[10] ESPON (2010.) *ESPON 2013 Synthesis Report*, p. 43.

PURR regions vary in terms of distances to next MEGA. For North Yorkshire distance to next MEGA is on average 25-50 km, in Dumfries and Galloway 10-25 km. It is longer in Vidzeme (50-75), Cambrian Mountain areas, and Telemark (75-100).

Population potential shows the number of people within reach of 50 km airline distance. This indicator is useful for calculating provision of services, since they require minimal service base. On European scale Benelux, Wet Germany, South England and North Italy are regions with highest population potential, while those in Scandinavia, Baltic States and East Europe have lower population potential within 50 km radius. Among PURR regions North Yorkshire has population potential above EU average (126-150). It is followed by South Western Scotland (76-100), West Wales and The Valleys (51-75), Vidzeme (26-50), and Telemark (6-10).

In addition the extent of accessibility of PURR areas can be assessed using data measures of accessibility of areas within 45 minutes by car from functional urban areas (Nordregio/ESPON 1.1.1. project). ESPON 1.1.1. report distinguishes between areas in 45 minutes reach from an urban centre and areas which are more than 45 minutes from the nearest urban centre. Urban centre is defined, according to typology of ESPON 1.6. According to this typology Northern parts of Dumfries and Galloway are in 45 minutes form urban centre, whereas Southern parts are outside this reach. Most of North Yorkshire is located within 45 minutes reach, excluding some pockets in the central and Western part. Also North-East part of Telemark are within 45 minutes reach from Oslo. Some areas near the network of roads in Vidzeme are also within 45 minutes reach from Riga (including also some pockets in PURR area), however majority Vidzeme territory is outside 45 minutes reach. This is true also for Cambrian mountain areas. Potential accessibility to population by car measures the number of people that can be reached by car from each origin, weighted by a function of distance and travel time. This potential is high for Benelux, countries, Western Germany, Southern England and Northern Italy. Potential accessibility by car is the highest for North Yorkshire – above EU27 average (151-175). Cambrian Mountains, Dumfries and Galloway has lover score (76-100). Telemark and Vidzeme show lower scores (11-25).

Access to national road can also be important in terms of mobility. Short travel times to national roads are those with less than 10 minutes (Germany, Italy, and England). Long travel times take 20, 30 and even more. According to this measurement, in Dumfries and Galloway it takes on average 16-20 minutes by car to access national road. North Yorkshire, Vidzeme and Cambrian Mountain areas show score of 21-25 minutes, while in Telemark region it takes on average 26-30 minutes to access national roads. Car travel times to next railway station are generally longer in regions with lower railway densities (Alps, Scandinavia, Spain, Scotland, Romania and islands).It takes on average shorter time to reach

railway station in Vidzeme (21-40 min), and North Yorkshire (41-60 min), but longer in Cambrian Mountains, Dumfries and Galloway (61-80 min), and Telemark (81-100 min).

Accessibility can also be measured in terms of minimum travel times between NUTS-3 region for rail, road and air, whereas the indicator of so called multimodal accessibility combines effects of three modes of transportation. Average accessibility is usually expressed as standardized value for EU 27 (100). Regions which are better accessible score more than 100. Regions which are worse accessible score less than 100.

According to *ESPON Accessibility update* (2009) potential accessibility by air for Dumfries and Galloway, Cambrian mountain areas and Telemark was in the range of 50,1-75,0. It was the highest for North Yorkshire (75,1-100), and lowest for Vidzeme (25,1-50,0). In case of Telemark the level of air accessibility was not significantly lower than for other regions in Norway. In case of Latvia, Kurzeme and Latgale scored lower. Potential accessibility by rail was lower in Vidzeme and Telemark (0-25,0), but higher in Dumfries and Galloway, Cambrian mountain areas and in North Yorkshire (50,1-75,0). The accessibility by road showed similar patterns. There has been general increase in combined accessibility level from 2001 to 2006 in all PURR regions with an exception of South West Wales. From 2001-2006 Vidzeme region has experienced highest increase in air accessibility.

It is generally assumed that regional accessibility is important for economic and social opportunities. Therefore general accessibility levels can be combined with GDP-PPS per capita figures. According to ESPON Accessibility update of 2009 Cambrian Mountain areas, Dumfries and Galloway and Vidzeme scored below ESPON average levels in potential multimodal accessibility and GDP-PPS per capita. Telemark scored above the average GDP-PPS levels but fell short of achieving average potential accessibility level. This situation was similar also in other parts of Norway and for Nordic Europe in general. It is possible to conclude that in case of Norway accessibility is not the only determinant of economic development. However, in North Yorkshire this relationship seem to hold. North Yorkshire scored well above the average in GDP-PPS and in multimodal accessibility.

Accessibility levels correlate with share of commuting workers and overall transport dependency. Eurostat data on commuting for 2005 aggregated in ESPON ReRisk project show that PURR areas in UK show average levels of commuting compared to other countries of available data (12,03-25,21%). This level of commuting is comparable also to Sør-Østlandet in Norway. The share of daily commuters is lower in South Western Scotland (5,09-12,03%).[11]

[11] ESPON (2010). *ESPON 2013 Synthesis Report*, p. 94.

Ensuring accessibility for people and goods can become expensive, since oil prices are likely to increase. The impact of rising prices may have serious affect on regional accessibility and development. ESPON ReRisk project estimates vulnerability of regions by transport dependence. The results show that levels of commuting are linked to the number of jobs in the area and that most vulnerable regions are large logistic centres, peripheral regions, islands, regions dependent on work opportunities in urban poles and agricultural regions with high export levels. The regional GVA in industries with high energy costs is above average in Latvia, as well as in some regions in Central Europe, Central Spain and Northern Italy and others. No data was available for UK and Norway.

Broadband connection is sometimes seen as factor decoupling of economic activity and physical remoteness. Share of households with broadband internet access in 2010 for all households was approximately the same for all PURR areas (81-85%), although Sør-Østlandet region has higher broadband penetration (86-90%).

Although data on areal typology and accessibility reveals some general features of PURR regions, internal diversity of regions can be considerable. Table 8 summarises some key accessibility features of PURR regions.

Table 8. Access indicators in PURR regions

NUTS-2

Indicator	South Western Scotland	North Yorkshire	West Wales and the Valleys	Sør-Østlandet	Latvia	Year (s)
Population potential within 50 km radius	76-100	126-150	51-75	26-50*	26-50**	2007
Share of workers commuting to another NUTS-2 region (%)	5,09-12,03	12,03-25,21	12,03-25,21	12,03-25,21	NA	2005
Share of households with broadband internet connection (%)	81-85	81-85	81-85	86-90	81-85	2010

*Data for Telemark at NUTS-3 level.
** Data for Vidzeme at NUTS-3 level.

NUTS-3

Indicator	Dumfries and Galloway	North Yorkshire CC	Cambrian Mountains		Telemark	Vidzeme	Year (s)
			South West Wales	Powys			
Urban-Rural Typology according to Dijkstra and Poelman	Predominately remote. Close to a City	Intermediate Remote	Intermediate Remote	Predominately rural. Close to city	Predominately remote	Predominately remote	2006
Areas with 45 minutes to reach from urban centres	Northern parts in 45 minutes from urban centre	Most of territory within 45 minutes reach.	Most of area is outside of 45 minutes reach from urban centre.	Most of area is outside of 45 minutes reach from urban centre.	North-East parts are within 45 minutes reach from urban centre	Most of area is outside of 45 minutes reach from urban centre.	2004
Access to national road by car (min)	16-20	21-25	21-25	21-25	26-30	21-25	2007

Access indicators in PURR regions (*continued*)

Indicator	**Dumfries and Galloway**	**North Yorkshire CC**	**Cambrian mountains, Wales**		**Telemark**	**Vidzeme**	**Year (s)**
Car travel time to next railway station (min)	61-80	41-60	61-80	61-80	81-100	21-40	2007
Distance to next MEGA (km)	10-25	25-50	50-75	50-75	75-100	50-75	2011
Potential accessibility by air	50,1-75,0	75,1-100	50,1-75,0	50,1-75,0	50,1-75,0	25,1-50,0	2006
Potential accessibility by rail	50,1-75,0	50,1-75,0	50,1-75,0	50,1-75,0	0-25,0	0-25,0	2006
Multimodal potential accessibility	50,1-75,0	50,1-75,0	50,1-75,0	50,1-75,0	0-25,0	0-25,0	2006
GDP-PPS per capita versus potential multimodal accessibility	50,1-75,0	75,1-100	50,1-75,0	50,1-75,0	50,1-75,0	25,1-50,0	2006
	Below ESPON average in GDP-PPS Below ESPON average	Above ESPON average in GDP-PPS Above ESPON average	Below ESPON average in GDP-PPS Below ESPON average	Below ESPON average in GDP-PPS Below ESPON average	Above ESPON average in GDP-PPS Below ESPON average	Below ESPON average in GDP-PPS Below ESPON average	2006

Natural assets, environment, natural hazards and climate change

Natural assets are essential part of regional territorial capital. These assets must not only be preserved from hazards, but sustainably managed and used as part of integrated development strategy. Natural heritage also forms landscape which can become part of cultural heritage.

Majority of European areas still have a lot of open space. Regions in Scandinavia, Spain and Turkey, Western Balkans and in the Baltic countries show highest amount of open space per capita because of their large unfragmented cover and/or because of low population density. Only regions in Germany, Benelux, parts of France and Italy and the agglomerations have less open space. PURR regions in Norway and Latvia have 96-100% open space. On the other hand Central European countries show low figures of open space with less than 50 square km per capita. Among PURR regions Telemark has largest open space per capita (1001-2000), followed by Vidzeme. Both have low settlement densities which is typical for Northern Europe. No measures were available for PURR regions in UK regions although their areal and population sizes suggest that settlement density there is probably higher.

In all PURR regions agricultural land takes more than artificial land. The landscape patterns in PURR regions are rather different. In Vidzeme landscape is dominated by rural mosaic and pastures landscape as well as forested landscape, most of North Yorkshire landscape is broad pattern of intensive agriculture. In Dumfries and Galloway as well as in Cambrian Mountain regions intensive agriculture landscape is less prevalent. Considerable share of these territories are also taken by rural mosaic and pasture landscape, as well as by open semi-natural or natural landscape. In Vidzeme the share of agricultural land has been declining and is slowly replaced by forests.

Land-cover estimations also give rough idea of natural assets. The percentage of artificial built-up is generally low in PURR regions, and the area cover for semi-natural areas is the highest in Vidzeme (more than 50% of area). PURR areas in UK have lower coverage of natural areas (20-50%). Semi-natural area is defined as natural areas with specific mix of cultural and natural values, since undisturbed natural area hardly exist anywhere in Europe (ESPON 1.3.2. Pt. 2: 49).

According to CORINE land cover survey, Latvia has the highest percentage of forest coverage among all PURR areas and the coverage has tendency to increased. It is estimated that from 1991-2001 that agricultural area has decreased in UK by -7%. No such data on European level was available for Latvia and Norway.

Another relevant measure for natural resources is also land fragmentation. High land fragmentation in general is regarded as threat to biodiversity, because of impacts of proximity, disturbance and isolation of habitats. Fragmentation index shows the number of semi-natural area patches and the average size of patches

for NUTS-3 regions. As expected, the fragmentation of land was lower in Vidzeme of which more than 50% are natural area with 10-30 patches per 10 km^2. Fragmentation was higher in UK, especially in Cambrian mountain's region (20-50% of natural area and more than 30 patches per 10 km^2) In North Yorkshire and Dumfries and Galloway the fragmentation was about 20-50% of natural area and 10-30 patches per 10 km^2).[12]

Latvia also has more areas of higher ecological value (16-20%), while UK has lower value (11-15%) No data was available for Norway. In general West European countries have smaller shares of areas with high ecological value. Thus, proportion of *Natura2000* areas (seaside areas excluded) is higher in Vidzeme (21-25%) of territory similar to other regions in New Member states where the share is higher than in old member states. No such data is available for Norway and UK.

According to measure of natural assets, which is calculated form the sum of five individual input variables such as urban-rural typology, high nature value farmlands, proximity to natural areas, air quality and degree of soil sealing, most of Vidzeme territory ranked according category 3 (average natural assets) with some areas also in category 4 (high natural assets). So did areas in Dumfries and Galloway, and Cambrian Mountains. Whereas in North Yorkshire measure of natural assets was lower (category 2) with some pockets of category 3 (average). No data was available for Norway.

Measure of ecological footprint allows assessing ecological balance. It is a measure of the amount of land which is required to provide for all resource requirements plus the amount of vegetated land required to absorb all CO2 emissions. This figure is expressed in units of "global hectares" per capita. According to Global Footprint Network calculations, in 2007 European average total footprint of consumption was 4,7 per capita, but average biocapacity 2,9. Largest ecological footprints were in Belgium, Denmark, Estonia, Ireland, The Netherlands and Sweden. In the same time Sweden and Finland also have high biocapacity. Ecological footprints of PURR countries were above average in Europe (United Kingdom – 4,9; Latvia – 5,6; Norway – 5,6). Biocapacity for PURR areas was above average in Latvia (7,1), Norway (5,5), and below EU's average in UK (1,3). Among PURR countries only Latvia had positive ecological balance (1,4), while other two had ecological deficit (Norway -0,1; UK - -1,8). Average ecological deficit in Europe was -1,8.

In order to measure the impact of socio-economic factors on semi-natural areas, in regional level ESPON 1.3.2 project introduced indicator of urban pressure. This indicator combines four input indicators, such as population density, GDP2000/area, road density and bed density into four classes – low, medium,

[12] ESPON (2006). *Territorial Trends in the Management of Natural Heritage. 1.3.2. Final Report*, 2, p. 98.

high and very high urban pressure.[13] No measures of urban pressure were available for Vidzeme and Telemark in ESPON 1.3.2 project. North Yorkshire and South West Wales had medium level of urban pressure, while Powys and Dumfries and Galloway had lower urban pressure in relation to semi-natural land cover.

CURS/ESPON 2006 project "1.1.2 Urban-Rural relations" offers urban-rural typology based on the two main dimensions, that is, *degree of urban influence* on the one hand, and *degree of human intervention* on the other hand. Urban influence is defined according to *population density* and *status of the leading urban centre* of each area. Land cover reflects both the degree of human intervention and actual land use. Degree of human intervention is determined by the relative share of land cover according to the main land cover. The main classes are *artificial surfaces*, *agricultural areas*, and *residual land* cover. The two classes of *urban influence* and the three classes of *human intervention* are combined into a six-type model. According to this typology the territory of Dumfries and Galloway, Vidzeme and Telemark are described as having low urban influence areas and low human footprint areas. North Yorkshire, South West Wales and Powys have low urban influence and medium human footprint.

Dumfries and Galloway is surrounded with areas which have medium human footprint in the East. Areas which are North to Dumfries and Galloway and closer to Glasgow and Edinburgh have high urban influence and high human footprint. Only Dumfries and Galloway and most of Highlands and Islands have similar characteristics in the United Kingdom. Most of regions in England have high urban influence and high human footprint. In ESPON 1.1.2. (2003) whole Norwegian territory with exception of Oslo and Sogn of Fjordane territory were described as areas with low urban influence and low human footprint. Vidzeme region in Latvia has similar characteristics. In this respect it is similar to Kurzeme region. Only areas near Riga have high urban influence and medium human footprint. Latgale and Zemgale both have low urban influence but medium human footprint.

Human and natural impact can cause hazards to territories. ESPON 1.3.1 Project "The Spatial Effects and Management of Natural and Technological Hazards in Europe" (2005) focuses on potential and intensity of natural hazards, such as avalanches, drought, earthquakes, extreme temperatures, floods, forest fires, landslides, storms, tsunamis, volcanic eruptions, winter and tropical storms and technological hazards, such as air traffic hazards, major accidents, nuclear power plants, oil production, processing, storage and transportation. According to aggregate hazard map, the highest hazard classes in PURR areas (75%-90% percentile) are located in UK (South West Wales, North Yorkshire). Hazard potential is lower in Powys, Dumfries and Galloway (25%-75% percentile).

[13] ESPON (2006). *Territorial Trends in the Management of Natural Heritage. 1.3.2. Final Report*, 3, p. 164.

Telemark region meets hazard level of 10-25%, whereas Vidzeme scores the lowest hazard level among PURR regions (0-10%).[14]

Vulnerability to hazards measure is based on GDP per capita, population density and proportion of fragmented natural areas to all natural areas. According to the vulnerability map created in ESPON 1.3.1 project PURR regions do not score high. The vulnerability potential for South West Wales, North Yorkshire and Vidzeme is rather low (category-2), but for all other PURR territories the vulnerability is low (category-1). The aggregated risk map combines vulnerability and aggregate hazard potential. According to this map most PURR areas have hazard intensity which is less or equal to ESPON average. These include Telemark and Vidzeme. For areas in UK the hazard intensity is higher, especially for North Yorkshire.

The level of greenhouse gas emissions (expressed in CO2 equivalents indexed to Kyoto base year) varies among PURR regions. In Latvia as well as in other East European countries the level of greenhouse gas emissions is lover than in industrially more developed countries (46-60). This can be explained by closure of the industrial basis, while in Norway and UK, the level is significantly higher. In UK it is 81-90, but in Norway it is higher 91-100. Higher levels are also observed in Mediterranean countries. Latvia, Estonia, Ireland also has lower population exposure to air pollution by ozone (1001-1500), followed by UK (1501-2000). In Central and Southern Europe urban population exposure to air pollution by ozone is significantly higher. No such data is available for Norway. Similar trends are observed in relation to air pollution by particular matter. Summer smog exposure of urban population is generally lower in Nordic countries (Estonia, Finland) and Ireland (11-15). Latvia and UK suffers for higher smog exposure (16-20). No data is available for Norway.

PURR areas will be affected by climate change just as every other region. The analysis of European patterns of climate change and resulting typology could be useful to provide general description of likely impacts in next 90 years. According to ESPON Climate Project, 2009 the impacts of climate change in Europe (1961-2100) will be different in Northern Europe, Northern-Central Europe, Mediterranean region, Northern-western Europe and Southern Central Europe.[15]

PURR areas in UK belong to Northern-western European cluster where there is going to be more days of heavy rain, more winter rain, but less summer rain. Mean annual temperatures will be higher and there are going to be more summer days but fewer frost days.[16] PURR areas in Norway and Latvia will experience strong increase in annual temperature, but also in annual mean precipitation. There are going to be more days with heavy rainfall, more evaporation, but

[14] ESPON (2005). *The Spatial Effects and Management of Natural and Technological Hazards in Europe. 1.3.1. Final Report*, p. 10.

[15] ESPON (2010). *ESPON 2013 Synthesis Report*, pp. 87-94.

[16] ESPON (2010). *ESPON 2013 Synthesis Report*, p. 92.

strong decrease in frost and snow cover days.[17] This might increase the risks of river flooding and landslides (in Norway). Sea levels in coast are likely to rise during storms. That might cause problems for coastal infrastructure, households and businesses.[18]

[17] ESPON (2010). *ESPON 2013 Synthesis Report*, p. 92.

[18] ESPON (2010). *ESPON 2013 Synthesis Report*, p. 92.

Table 9. Key indicators of Natural assets, environment, natural hazards and climate change

NUTS-0

Dimension	Indicator	United Kingdom	Norway	Latvia	Year (s)
Cohesion	Ecological footprint	4,9	5,6	5,6	2007
	Biocapacity	1,3	5,5	7,1	2007
	Ecological balance	-1,8	-0,1	+1,4	2007
	Greenhouse gas emissions	81-90	91-100	46-60	2008
	Exposure to air pollution	1501-2000	NA	1001-1500	2008
	Summer smog exposure	16-20	NA	16-20	2008
	Impact of climate change	More days of heavy rain, more winter rain, but less summer rain. Mean annual temperatures will be higher. More summer days, but fewer frost days.	Increase in annual temperature, and mean precipitation. More days with heavy rainfall, more evaporation, but strong decrease in frost and snow cover days Possible risks of river flooding and landslides. Sea levels in coastal areas will rise during storms.	Increase in annual temperature, and mean precipitation. More days with heavy rainfall, more evaporation, but strong decrease in frost and snow cover days Possible risks of river flooding and landslides. Sea levels in coastal areas will rise during storms.	1961-2100

Key indicators of Natural assets, environment, natural hazards and climate change (*table 9 continued*)

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	Summer smog exposure	16-20	NA	16-20	2008
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Key indicators of Natural assets, environment, natural hazards and climate change (*table 9 continued*)

NUTS 3

Indicator	**Dumfries and Galloway**	**North Yorkshire CC**	**Cambrian mountains, Wales**		**Telemark**	**Vidzeme**	**Year (s)**
			South West Wales	**Powys**			
Landscape type	Rural mosaic and pastures Open semi-natural or natural landscape	Intensive agriculture	Rural mosaic and pastures Open semi-natural or natural landscape	Rural mosaic and pastures Open semi-natural or natural landscape	NA	Rural mosaic and pastures Forested landscape	2006
Natural assets	Average	Below average	Average	Average	NA	Average	2009

Indicator	**Dumfries and Galloway**	**North Yorkshire CC**	**Cambrian mountains, Wales**		**Telemark**	**Vidzeme**	**Year (s)**
			South West Wales	**Powys**			
Degree of urban influence and degree of human intervention	Low urban influence areas and low human footprint	Low urban influence and medium human footprint	Low urban influence and medium human footprint	Low urban influence and medium human footprint	Low urban influence areas and low human footprint	Low urban influence areas and low human footprint	2006
Hazard intensity and vulnerability	Medium intensity of hazard. Low vulnerability	High intensity of hazard. Low vulnerability.	NA	Medium intensity of hazard. Low vulnerability	Low intensity. Low vulnerability	Low intensity. Low vulnerability	2005

Energy

Future access to energy supplies is a growing concern in the world. European economy is highly dependent on energy. In the same time fossil energy resources are becoming scarcer and more expensive. Although Europe has become less dependent on imported energy, not all countries can produce sufficient amount of energy to satisfy their own needs. The changes in energy prices also significantly affect development potential of the countries and industries. The consumption of energy in turn depends on energy intensity of national economies and on the welfare level of countries. More developed countries typically have lower energy intensity per unit of GDP produced, but higher energy consumption per capita.[19]

ESPON ReRisk project "Regions at Risk of Energy Poverty" presents regional dependency on industries with high energy spending. The regions in which more people are involved in industries with high energy spending tend to be highly vulnerable to energy price fluctuations. ReRisk project distinguishes between four clusters of countries. Three Baltic States, Sweden, Finland and Northern Scotland and Ireland form a cluster of regions which are located outside European pentagon. This cluster is at disadvantage in terms of transport dependence, and it has high energy demand for heating. Southern Norway and PURR areas in UK belong to a cluster of regions where people have high disposable income and demand for heating is lower.

According to ReRisk project, the share of employees in industries with high energy purchases is vulnerability in fluctuating energy markets. This share is especially high in Czech Republic and Italy (9,72-14,23%). The number is also rather high for Sweden, Estonia, Latvia and Lithuania. In Latvia the share of employees in industries with high energy purchases was among 6,22-9,72%. In PURR areas in UK the averaged figures were lower (2,31-4,07), (ESPON ReRisk, Draft final report, 2010) But in case of Sør-Østlandet the figure was in between (4,07-6,22%). However, Norway and the UK both have higher level of energy sufficiency. Norway produces about 9 times more energy than it consumes, but in UK the level of self sufficiency is about (80-143%). Therefore, among all PURR areas, energy challenges seem more relevant for Vidzeme, which has rather low energy self-sufficiency and high price sensibility. UK and most of Norway has low price sensibility and high self sufficiency.[20]

Energy poverty can be better understood with reference to social situation of the households. Comparison of gas and electricity prices in PPS at country level for second semester of 2009 suggest that energy costs are most relevant for people living in Hungary, Poland, Slovakia, but far less relevant for Norway. United Kingdom and Latvia are close to EU27 average.[21]

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[19] ESPON (2010). *ESPON 2013 Synthesis Report*, p. 68.

[20] ESPON (2005). *Territorial trends of energy services and networks and territorial impact of EU energy policy*, *2.1.4. Final Report.*

[21] ESPON (2010). *ESPON 2013 Synthesis Report*, p. 75.

In Norway and Latvia high share of energy is generated from renewable sources. Latvia and Ireland also has considerable biomass potential, solar and wind energy potential. Due to high shares of hydro power generation Finland, Sweden, Austria, Portugal, Latvia, Romania and Norway have high share of renewable energy in gross final energy consumption. In Benelux countries, Ireland, Cyprus and the UK there are significantly smaller shares of renewable energy in gross final energy consumption. In Latvia share of renewable energy in gross final consumption is high 21-44%, but in UK it is low (only 0-5%), but it has committed to higher use of renewables by 2020.

Photovoltaic potential in the EU regions provided by ReRisk project is considerable, but relatively lower than in Central and Southern European regions accounting to about 676,1 – 845,1 PV output for a 1 kWP system mounted at optimum angle. In the same time wind power potential is higher for Northern European and coastal areas, including also PURR regions. Latvia as well as other Baltic States scored above average potential in EU (487853-1031076 m/s). The potential was lower in West Wales and the Valleys and South Western Scotland (204547-487852). It was lower than average in North Yorkshire and Sør-Østlandet region (79181-204546).

Based on regional vulnerability to rising energy prices, ReRisk project has elaborated 5 typologies of energy poverty. Economically developed regions in the heart of European Pentagon with low exposure to rising energy prices, high photovoltaic or wind potential are grouped in typology "*With problems and potential*". Among these regions is South Western Scotland. More industrialized and coastal areas with lower wind potential are grouped in typology "*Well-off, with trouble ahead*." Among these regions is also North Yorkshire and Cambrian Mountain areas. Regions with higher vulnerability located mainly in Eastern Europe are grouped in typology "*Struggling, looking for jobs and brighter future*." There regions have higher energy demand for heating and cooling, they are economically lagging and lack resources to develop renewable energy systems, although potential for renewables exists. Though ReRisk does not provide results for Latvia, but one can expect it to fit into this typology. A small group of "Wealthy and commuting" regions belonging to the Pentagon with challenges regarding affordable commuting exists. Finally typology "*Cool and windy, but working*" captures situation in Nordic regions, which have higher demand for heating, but opportunities of using renewables and wind potential are considerable. Though ReRisk does not provide results for Norway, one can expect it to fit into this typology.

ReRisk has also designed 4 scenarios in relation to energy related policies including governance, new opportunities and possible threats. These scenarios are „Green High Tech," "Energy-efficient Europe", "Nuclear Energy for Big Regions", and "Business as Usual"

Green Tech Scenario will benefit regions with problems and potential, such as South Western Scotland. In regions like North Yorkshire and Cambrian Mountains this scenario will foster developing renewable resources other than solar and wind. For Latvia this scenario might have positive implications if resources for development of renewables are found. It will also have positive effect on Nordic regions with high wind potential.

Energy-efficient Europe Scenario will have negative impact for the most peripheral coastal areas including South Western Scotland. For Cambrian Mountains and North Yorkshire this scenario will have some positive impact on competitiveness of industries. For Latvia this scenario can also be positive if affordable clean energy technologies become accessible by industries. For Nordic countries this scenario will also have positive effect on the competitiveness but possibly negative impacts on increased transport costs.

Nuclear Energy for Big Regions will benefit mainly regions with problems and potentials in Pentagon regions with knowledge economy. Regions, such as North Yorkshire and Cambrian mountains will need to accelerate transition to more service oriented activities. Regions, like Latvia will face rising costs for heating and fuel purchases, but for Nordic countries this scenario will be favorable for industries with high energy consumption.

In Business as Usual scenario regions, such as South Western Scotland will experience rising poverty and overcrowding in metropolitan areas. In harbour regions this scenario will have less negative impact, but industrial regions will be struggling. Only regions with job opportunities in coal industry will not be negatively affected. If business continues as usual Nordic countries could experience risk of loosing industrial base and employment.[22]

All energy scenarios imply that regional economies are at risk of rising energy prices, especially economies that are more industrialized. Remote regions will have to prepare for higher prices for travel. This will have negative effect on price levels for tourism. Peripheral regions are especially in need for support policies. Being alone, they are unable to implement energy efficiency measures and invest enough resources for more use of renewables.

[22] *ESPON 2013 Synthesis Report*, 2010, p. 84.

Table 10. Key indicators about energy

NUTS-0

Indicator	**United Kingdom**	**Norway**	**Latvia**
Regional dependency on industries with high energy spending	High disposable income and demand for heating is lower	High disposable income and demand for heating is lower	Disadvantage in terms of transport dependence, and it has high energy demand for heating

NUTS 2

Indicator	**South Western Scotland**	**North Yorkshire**	**West Wales and the Valleys**	**Sør-Østlandet**	**Latvia**	**Year (s)**
Energy price sensibility and self sufficiency	Low price sensibility and high self sufficiency	Low price sensibility and high self sufficiency	Low price sensibility and high self sufficiency	Low price sensibility and high self sufficiency	High price sensibility. Low energy self-sufficiency	2009
Share of employees in industries with high energy purchases, %	2,31-4,07	2,31-4,07	2,31-4,07	4,07-6,22	6,22-9,72	2009
Perspectives of energy poverty based on vulnerability to rising energy prices	*With problems and potential*	*Well-off, with trouble ahead*.	*Well-off, with trouble ahead*.	*Cool and windy, but working*	*Struggling, looking for jobs and brighter future*	
Impact of scenarios of energy policy						
Green Tech	+	+	+		+ If resources for developing renewables are found)	
Energy-efficient Europe	-	+	+	+ / -	+	
Nuclear Energy for Big Regions	+/-	+/-	+/-	+ for industries with high energy consumption	+/- costs for fuel and heating still high	
Business as Usual	-	-	-	-	-	

Rural development

To avoid general stereotypes about rural regions and take into consideration diversification of rural economy, interaction with urban areas, and actual economic performance of rural areas, PURR stakeholder regions were examined by more nuanced structural typology elaborated in EDORA project. In this report EDORA data is used to describe and compare PURR regions with each other and also with other regions in respective countries.

EDORA structural typology is applied only to non-urban regions - i.e. all regions except those defined as Predominantly Urban in the Dijkstra-Poelman typology. EDORA typology then distinguishes between four types of non-urban regions: (1) agrarian economies, (2) consumption countryside, (3) diversified (with important secondary sector), (4) diversified (with important market services sector). In agrarian economies agriculture is still significant. Agrarian economies are those where % employed in primary sector, % of GVA from primary sector, and Agricultural Work Unit as share of total employment exceeds the EU27 mean for non-urban regions. Consumption countryside is defined by eight indicators relating to tourism capacity and intensity, access to natural areas, and small scale and diversified agriculture. The remaining rural regions are denominated as diversified and divided into two groups – (a) regions in which secondary economic sector activities were important to Market Services GVA (Diversified regions with strong secondary sector) and (b) regions where market services have become dominant (Diversified regions with strong private services sector). GVA by sector figures was taken from Eurostat REGIO data, the number of farm holders data was taken from the European Farm Structures Survey (Eurostat REGIO data), number of farm holders with other gainful activities from the European Farm Structures Survey. (EDORA Final Report, 2010: 15).

After dividing regions according to their structural types and their urban-rural typology, their performance is measured by composite regional performance indicator which was derived from the following variables: (a) net migration, (b) GDP per capita, (c) average annual change in GDP, (d) average annual change in total employment, (e) and unemployment rate. The individual indicators were first normalised (converted to Z-scores). The composite indicator was then calculated as the mean of the Z-scores. Accumulating regions were defined as those with a composite indicator >0.5, above average 0-+0.5, below average =-0.5, and depleting <-0.5.[23]

According to EDORA, depleting areas face demographic ageing, low economic activity rates, low human capital and structural problems. Depleting areas are usually found in remote rural areas and have a strong trend of rural-urban migration. Accumulating areas, on the other hand, show counter urbanization

[23] ESPON (2010). *EDORA. European Development Opportunities for Rural Areas*. Draft Final Report. v.1. p. 15.

trends. They have family dominated demographic structure, diversified rural economy, higher human capital, higher economic activity and lower unemployment.[24]

On European level most rural regions are intermediate accessible. Nordic regions and 12 new member states have more predominately rural and accessible regions. Most predominately rural and remote regions are found in Nordic regions, Mediterranean regions and new member states. Consumption countryside regions dominate in Nordic countries, but Agrarian type dominates in new member states. Diversified (market services) type areas dominate in Central and Western European countries. Diversified (secondary) type is prevalent in new member states.[25]

In terms of performance, the majority of regions in new member states show signs of depletion. Most rural regions in Nordic countries score above medium performance. Most accumulating regions are located in Mediterranean region, old member states and Central Western Europe. Greatest proportion of GDP (70%) in new member states is derived from non-urban regions. Similar tendencies can be observed in Nordic regions, whereas in Central Western Europe and Mediterranean countries greatest proportion of GDP is derived from urban regions.[26]

Most PURR areas, like Dumfries and Galloway, , Powys, Telemark and Vidzeme are described as predominantly rural according Dijkstra-Poelman typology with exceptions of North Yorkshire and South West Wales which are described as intermediate. Most PURR areas are described as accessible with exception of Telemark and Vidzeme which are described as remote. In UK most rural areas are described as intermediate and accessible (close to a city) by EDORA. In Norway most rural areas are described as remote according to EDORA typology. In Latvia Riga and Zemgale region are predominately rural and accessible. Kurzeme is intermediate and remote but Latgale is intermediate and accessible.

In terms of economic structure, only Vidzeme is described as agrarian among all PURR regions. Most rural areas in UK and Norway are described as consumption countryside areas. This is true also for Cambrian mountain region, and North Yorkshire which are both consumption countryside areas, whereas Dumfries and Galloway show signs of diversified rural area with strong private services sector. Similar rural areas to Dumfries and Galloway are also found in Perth & Kinross and Stirling, as well as North of Northern Ireland. Diversified rural areas with strong private services sector are also found in central England near metropolitan

[24] ESPON (2010). *EDORA. European Development Opportunities for Rural Areas*. Draft Final Report. v.1. p. 10.

[25] ESPON (2010). *EDORA. European Development Opportunities for Rural Areas*. Draft Final Report. v.1. p. 22.

[26] ESPON (2010). *EDORA. European Development Opportunities for Rural Areas*. Draft Final Report. v.1. p. 22.

areas. Most of Norway's rural territory falls into the category of consumption countryside. Telemark can also be described as consumption countryside area. In Norway only regions Sogn og Fjordane and Nord-Trøndelag are considered as agrarian. Rural areas near Oslo are described as diversified with strong private services sector.

According to Eurostat, contribution of agriculture to GVA in 2007 by NUTS 2, was higher in North Yorkshire and Latvia (1,5-3%) and lower in South Western Scotland, Cambrian mountains and Norway (0,5-1,5%). When it comes to agricultural labour productivity (value added in agriculture per annual work unit), it is the highest in Norway (>40), followed by North Yorkshire, and South Western Scotland (20-40). For Cambrian Mountain areas agricultural work productivity was lower, but higher than for Latvia (5-10). Labour productivity in rural economy is strongly influenced by farm structure. In Eastern European states, including Latvia, average farm sizes are very small and the level, mechanization is low, and significant part of production is for on-farm consumption. The share of crops in agricultural output is higher in Latvia than in other PURR regions (50-60%). In other PURR regions the share of crops was lower than 40%, which means that these regions focus more on animal production and other activities. In the same time output for crop was higher in UK and especially Norway which seems to be explained mainly by the way in which subsidies are granted. Table 11 lists PURR stakeholder regions according to their rural typology according EDORA.

Table 11. PURR stakeholder regions according EDORA rural typology

	Agrarian	**Consumption Countryside**	**Diversified (Secondary)**	**Diversified (Market Serv.)**
Intermediate Accessible		North Yorkshire		
Intermediate Remote		South West Wales		
Predom. Rural Accessible		Powys		Dumfries and Galloway
Predom. Rural Remote	Vidzeme	Telemark		

Source: EDORA data base.

In terms of performance consumption countryside regions tend to be higher performers and have a tendency to grow demographically and economically. Telemark and North Yorkshire are strong accumulating regions, South West Wales and Powys score above average performance, Dumfries and Galloway scores below average performance, but Vidzeme is the only PURR area which is depleting. In UK most rural areas are either above average or are accumulating. There are no depleting areas. In Norway most rural areas are accumulating. Severe signs of depletion can be observed in Latvia where three regions – Vidzeme, Latgale and Zemgale are depleting Kurzeme region showed below

average performance, whereas only Riga region in Latvia showed above average performance.

Table 12 PURR stakeholder regions according EDORA performance assessment

Performance	**Regions**
Accumulating	North Yorkshire Telemark
Above average	South West Wales Powys
Below average	Dumfries and Galloway
Depleting	Vidzeme

Source: EDORA data base.

Scanning of EDORA data base helped in finding similar regions. From 51 rural regions in UK about 30% (15) rural regions had identical characteristics to North Yorkshire. They were intermediate accessible with consumption countryside and accumulating. These regions were East Riding of Yorkshire, Worcestershire, Warwickshire, Cambridgeshire CC, Norfolk, East Sussex CC, Glucestershire, Wiltshire CC, Dorset CC, Somerset, Devon CC, Monmouthshire and Newport, Aberdeen City and Berdeenshire and East of Northern Ireland.

8 rural regions (16%) in UK had similar characteristics to South West Wales. They are Intermediate accessible, consumption countryside and above average in performance. These regions are Northumberland, East Cumbria, Lincolnshire, County of Herefordshire, Suffolk, Conwy and Denbigshire, Clackmannanshire and Fife.

Third largest cluster of rural regions is composed of 6 (12%) regions - Northamptonshire, Staffordshire CC, Buckinghamshire CC, Oxforshire, East Lothian and Midlothian, Perth & Kinkross and Stirling. They are characterized as intermediate accessible, diversified with important market services sector and accumulating performance.

There are 18 rural regions in Norway. 56% (10) of them had similar characteristics with Telemark region. They are predominantly rural and remote, consumption countryside with accumulating performance. These regions are Hedmark, Oppland, Østfold, Buskerud, Aust-Agder, Møre og Romsdal, Nordland, Troms and Finnmark. Second cluster of rural regions in Norway is composed of 3 regions (17%) with intermediate access, consumption countryside and accumulating performance features. These regions are Rogaland, Hordaland and Sør-Trøndelag. Two regions (11%) are predominantly rural and remote with agrarian economy and accumulating performance. These regions are Sogn og Fjordane and Nord-Trøndelag.

According to EDORA typology, Latvian rural regions show more diverse features. In Latvia only Vidzeme can be described as predominantly rural, remote region and agrarian depleting economy. Other regions in Latvia show different

characteristics. Unlike Vidzeme, the region of Latgale showed higher accessibility to urban centre, but like Vidzeme it was also suffering from depletion. Region of Kurzeme was intermediate remote, but it's performance ranking was slightly higher than for Vidzeme and Latgale. Performance in Kurzeme was below average in EDORA typology. Rīga region was described as predominately rural, but accessible with consumption countryside properties and above average performance.

Although trends of rural development can be assessed in present time, their true properties will be better seen after some time has passed. Foresight techniques can help to prepare and adapt to future challenges. EDORA project employs the three meta-narratives to map opportunities and constraints of rural regions based on their urban-rural typology and economic structure.

Agric-Centric meta-narrative which revolves around issues of agricultural competitiveness is seen in terms of opportunities in regions with diversified (secondary) and diversified (market services) economies which are more accessible. Regions which are accessible emphasize negative and positive aspects of this narrative. Agricultural competitiveness is viewed as problematic in predominately rural and remote regions with agrarian economic structure.

Rural-urban meta-narrative focuses rural-urban relations in terms of existing flows and their balance, provision of services, urbanization and counter-urbanization trends. This narrative predicted positive outcomes for most EDORA case study regions. It is discussed in light of opportunities in more accessible rural regions and regions with diversified secondary and market sector services. It is discussed in negative light in predominately rural and remote regions. In regions which are agrarian or of consumption countryside type, this narrative is discussed in terms of constraints and opportunities.

Table 13. PURR areas according EDORA structural and performance types

	Urban-rural typology	**Structural type of economy**	**Performance**	**Code in EDORA data set**	**Areas with identical characteristics in the country**
North Yorkshire	Intermediate Accessible	Consumption countryside	Accumulating	2124	15 of 51 rural regions in United Kingdom (30%). Identical regions: East Riding of Yorkshire, Worcestershire, Warwickshire, Cambridgeshire CC, Norfolk, East Sussex CC, Glucestershire, Wiltshire CC, Dorset CC, Somerset, Devon CC, Monmouthshire and Newport, Aberdeen City and Berdeenshire and East of Northern Ireland.
Dumfries and Galloway	Predominately Rural. Accessible	Diversified with important market services sector	Below average	3142	1 of 51 rural regions in United Kingdom (2%). No identical regions in the country.
Cambrian mountains					
South West Wales	Intermediate. Accessible	Consumption countryside	Above average	2123	8 of 51 rural regions in United Kingdom (16%). Identical regions: Northumberland, East Cumbria, Lincolnshire, County of Herefordshire, Suffolk, Conwy and Denbigshire, Clackmannanshire, Fife.
Powys	Predominantly Rural. Accessible	Consumption countryside	Above Average	3123	No identical regions in the country. 2% (1) of 51 rural regions in United Kingdom.
Telemark	Predominantly Rural. Remote	Consumption countryside	Accumulating	3224	10 of 18 rural regions in Norway (56%). Identical regions: Hedmark, Oppland, Østfold, Buskerud, Aust-Agder, Møre og Romsdal, Nordland, Troms and Finnmark.
Vidzeme	Predominantly Rural. Remote	Agrarian economy	Depleting	3211	No identical regions in the country. 1 of 5 rural regions in Latvia (20%). No similar regions in the country.

Source: EDORA Database. Based on Urban-Rural typology data for 2008. Economy structural type data and performance data for 2010.

Globalization meta-narrative focuses on the impacts of globalization on rural economies, including the question of local control over economic activities, regional distinctiveness, and acquisition of wider markets. Globalization meta-narrative was seen as problematic in EDORA case study areas, especially in predominately rural and remote regions, agrarian regions and regions with prevailing secondary economic sector. Consumption countryside regions viewed globalization in terms of opportunities and constraints, whereas impact of globalization was seen as positive in more accessible regions and regions with strong market services sector.

Based on representation of meta-narratives in EDORA case study regions, PURR stakeholder regions can be mapped according possible impact of meta-narratives. However, it must be emphasized that meta-narratives are generalisations and therefore they can enlighten only broad spatial patterns. Exact opportunities and challenges associated with meta-narratives depend specifically on each particular area.

In *agric-centric* meta-narrative more opportunities can be hypothesized for Dumfries and Galloway which has diversified market services economy. For other regions in UK this narrative could show opportunities and constraints. For Vidzeme and Telemark one could hypothesize that agric-centric narrative will be perceived more as constraint to regional development, since both these regions are predominately rural and remote.

In case of PURR stakeholder regions, *rural-urban* meta-narrative would predict positive outcomes for all UK regions, since they are more accessible, but it would predict more constraints for Telemark and Vidzeme that are less accessible. Rural urban narrative would also predict more positive outcomes in Dumfries and Galloway since this region has diversified market services economy. For all other regions this narrative would be discussed both in opportunities and constraints in terms of regional economy.

Globalization meta-narrative could be enabling to North Yorkshire, Dumfries and Galloway, and Powys since they are more accessible. But for Vidzeme and Telemark globalization meta-narrative would involve more constraints. In UK regions globalization meta-narrative would be predicting opportunities and constraints. However, In case of Dumfries and Galloway globalization meta-narrative would predict more opportunities.

Rural-urban and *globalization* meta narrative offer more opportunities for PURR stakeholder regions, while *agri-centric* meta-narrative involves more constraints for rural development in case of PURR stakeholder areas. All meta-narratives seem to offer more opportunities for UK regions, especially for Dumfries and Galloway and also for North Yorkshire and Cambrian Mountain areas. For

Telemark and Vidzeme meta-narratives seem to contain more challenges than opportunities.

Table 14. Hypothesized impact of rural meta-narratives on PURR stakeholder regions according to EDORA typology

		Meta-narratives		
		Agri-Centric	**Rural-Urban**	**Globalization**
Urban-rural typology	**Intermediate Accessible**	North Yorkshire	North Yorkshire	North Yorkshire
	Intermediate Remote	South West Wales	South West Wales	South West Wales
	Predom. Rural Accessible	Dumfries and Galloway Powys	Dumfries and Galloway Powys	Dumfries and Galloway Powys
	Predom. Rural Remote	Telemark Vidzeme	Telemark Vidzeme	Telemark Vidzeme
Economic structure	**Agrarian**	Vidzeme	Vidzeme	Vidzeme
	Consumption Countryside	North Yorkshire South West Wales Powys Telemark	North Yorkshire South West Wales Powys Telemark	North Yorkshire South West Wales Powys Telemark
	Diversified (Secondary)			
	Diversified (Market Serv.)	Dumfries and Galloway	Dumfries and Galloway	Dumfries and Galloway

Impact of meta-narrative:

-	+ / -	+

Main drivers that will shape European futures is acceleration of globalization, climate change, knowledge society and innovation gaps, technological breakthroughs, growing external energy, renewable energy potential, population ageing, growing number of immigrants, individualization of lifestyles, governance, differentiation of accessibility levels, environmental challenges, further evolution of urban areas, and possibly also further EU enlargement.

ESPON project 3.2 "Spatial Scenarios and Orientations in relation to the ESDP and Cohesion Policy" (2006) has created about twenty thematic scenarios which allow testing hypothesis on regional and local scale. In the context of PURR rural development scenarios should be discussed in more detail.

ESPON 3.2. scenarios for rural development focus mostly on the role of agriculture. Scenarios assume that rural areas will continue to diversity in future. It also links rural development futures with the location of rural areas in respect to urban agglomerations, their natural attractiveness and tourism industry. According to the report there is going to be continuing and possibly also growing divide between agricultural rural areas with more productive agriculture and

processing industry, and those in which economic productivity and socio-economic viability will be low. In these areas out-migration of young people will continue which will result in ageing and depopulation.[27]

All rural scenarios assume global average temperature rise by one degree Celsius until 2030, an increasing consumption, not only of (agricultural and other) products and services but also of (landscape and other) experiences. Scenarios also assume downfall of European population after 2020 which will result into increases in retirement age, and wealthier elderly population settling in more developed rural areas.

The report presents integrated policy impact scenarios for rural development. Baseline scenario shows the probable evolution of the European territory in a situation of no major changes. In *baseline scenario*, rural development will be driven by further liberalization of international trade, progressive reduction of CAP budget and rapid industrialization of agricultural production. *Cohesion-oriented scenario* presents European future with social, economic and territorial cohesion as top priority in all areas. In this scenario there is going to be a shift in CAP from pillar 1 to pillar 2 with priority given to less developed regions. Priority will also be given to environmental and animal health criteria. The policy of diversification in rural areas will be active, and opportunities for SMEs, tourism and residential functions will be encouraged. Competitiveness-oriented scenario places competition as the key objective of all policies. In this scenario there will be rapid liberalization of CAP which will reduce tariffs, benefits and export subsidies. This scenario seems least beneficial to remote rural areas because the support for their development is likely to decline.

According to rural scenarios, open market approaches will emphasize further intensification and scaling-up of agriculture. This will cause a fall in the number of small farms in CEECs and a substantial rise in the average farm size. Large scale farming in dairy farming will increase especially in CEECs, including Latvia, where land prices will be lower. Self-subsistence farming will also continue to play an important role. In open market scenario agrarian nature and landscape management will become more limited. Rural areas near more urbanized regions will became more and more urbanized. The same will be to true for rural areas that are now attractive for tourism and diversified rural areas. In open market scenario rural areas which are more remote, will not be very successful in commodifying their local resources. As a result, out-migration of young people will continue. These trends will undermine cohesion on various levels. On local scale, competitiveness scenario will increase dualisation of rural areas. In some areas large scale industrial agriculture will dominate. These areas will be densely

[27] ESPON (2006) *Spatial Scenarios and Orientations in relation to the ESDP and Cohesion Policy, 3.2. Final Report*, p. 20.

populated and socio-economically viable. However other areas will be abandoned, eroded or naturally forested.[28]

In sustainable rurality approach there is more concern for ecology and economic sustainability. Most importantly there is closer integration of agricultural, regional, and different sectoral policies. Therefore spatial development policies will be important reference for integration and coordination policies in rural areas. Economic diversification of rural areas will be actively promoted in this scenario. Sustainable rurality scenario also includes some protectionist elements of the CAP. As in the open market scenario, the number of farms will decrease and average farm-size will increase, but more gradually. Consumers will prefer organic and regional products and services, thus encouraging farmers to specialize and professionalize. There is going to be growing demand for cultural landscapes. Rural areas attractive for tourism will flourish. Rural areas where agriculture dominates will become diversified and some remote rural areas will become successful in commodifying and marketing local resources. However, there are still going to be rural areas that lag behind due to low institutional capacity. In cohesiveness scenario rural and urban areas will became more economically, socially and culturally interlinked with one another than in the open market scenario. However, in some rural areas with low accessibility, particularly those which were not successful in mobilising enough institutional capacity, territorial cohesion will decrease.[29]

It is expected that developments in transportation, economy and shift to alternative energy paradigm will shape exact scenario paths. It seems that institutional capacity and governance will be critical factors for stimulating cohesion in regional and local scale.

Scenarios elaborated in EDORA project provide insight into future development of rural areas in the context of climate change and transforming energy producing paradigm. They can be a useful starting point for mapping regional potentials in future perspective. Two drivers of fundamental importance, such as the *climate change* and *economic governance* determine four possible scenarios.[30]

In scenario "*Gradual climate change + highly deregulated market economy*" there is going to be growing economic and social differentiation among rural regions. Inaccessible rural regions will loose population, but accessible and urban regions will experience population increases. Regions with strong primary sector will develop energy sector using their own internal resources. Regions with limited human and financial capital will have to attract external investments to develop

[28] ESPON (2006) *Spatial Scenarios and Orientations in relation to the ESDP and Cohesion Policy, 3.2. Final Report*, pp. 167-170.

[29] ESPON (2006) *Spatial Scenarios and Orientations in relation to the ESDP and Cohesion Policy, 3.2. Final Report*, pp. 171-177.

[30] ESPON (2010). *EDORA. European Development Opportunities for Rural Areas*. Draft Final Report. v.1. pp. 37-42.

renewable energy sector. Agriculture will undergo profound changes as prices for fossil fuels will increase. In those regions with para-productivist agricultural structures there is going to be further industrialisation of food production. Demand for genetically modified crops is likely to increase. Regions dominated with periproductivist agricultural structures will undergo considerable consolidation of land ownership. Manufacturing activities will decline as corporations will relocate their labour intensive activities to lower cost labour markets. Much of development therefore will depend on highly skilled and educated labour in accessible regions. Advances in telecommunications will play important role in ensuring development of these sectors outside of urban regions.[31]

The outcome of scenario "*Gradual climate change + highly regulated market economy*" is going to be much greater regulation of capital and commodity markets and prospective emergence of framework governing social and economic development. Relative lack of capital and decreasing public spending will make coping with consequences of climate change more difficult. Development of renewable energy sources will be hindered by the lack of capital. Therefore regions might prefer investing into nuclear power generation instead. The lack of of capital will hinder economic diversification of rural regions. Migration flows from rural to urban regions will continue. In response to variation of commodity prices due to weather conditions, agricultural sector will consolidate. Food supply chains will become more integrated. Manufacturing activities will increase in response to changing comparative advantages, but economy as a whole will not grow fast, due to decline in public and consumer spending[32].

Scenario "*Rapid climate change + highly deregulated market economy*" assumes that rapid climate change will contribute to significant changes in economy, economic resources and key activities. Land will become key resource in mitigating the impacts of extreme weather events. Costs of energy and food will increase, giving rise to large scale public and private investments in renewable energy and bio-technology. While economic activities in rural areas will increase, the wealth will be concentrated in large enterprises who will own land and production technologies. R&D, financial services and "experience economy" are going to be most important growth areas. They will be concentrated in accessible rural regions.[33]

In "*Rapid climate change + highly regulated market economy"* scenario responses to climate change will be better thought out. There will be more collective policy responses to support the transition to a low-carbon society through sustainable

[31] ESPON (2010). *EDORA. European Development Opportunities for Rural Areas*. Draft Final Report. v.1. pp. 37-42.
[32] ESPON (2010). *EDORA. European Development Opportunities for Rural Areas*. Draft Final Report. v.1. pp. 37-42.
[33] ESPON (2010). *EDORA. European Development Opportunities for Rural Areas*. Draft Final Report. v.1. pp. 37-42.

production and consumption. Nuclear power will continue to be dominant energy alternative, because renewable sources will not be able to meet demand in the short to medium term. The state will regulate land-use more than in previous scenarios. Rural settlement will be concentrated into existing towns and villages. Transition to low carbon economy is going to be supported through public investment in public transportation, energy-efficiency. Fossil fuel use, in the short-term will be prioritized to support food production, particularly tillage crops. One of key objectives of the EU will be greater self-sufficiency in food, energy and water, which will be achieved through public policies supporting local and regional food systems, support package for sustainable production and consumption. Import substitution will reinvigorate domestic economy. The tertiary sector will grow but not at the same pace as the primary and secondary sectors.[34]

According expert assessment about the impact of these scenarios carried out by EDORA agrarian economies, such as Vidzeme could benefit more from scenario "*Rapid climate change + highly regulated market economy",* and less from deregulated market scenario.

Consumption countryside areas, such as North Yorkshire, Cambrian Mountain areas and Telemark could also benefit more from scenario *Rapid climate change + highly deregulated market economy,* and less from scenarios "*Gradual climate change + highly regulated market economy*", and *Rapid climate change + highly deregulated market economy."*

Rural economies with diversified economy and important services sector, such as Dumfries and Galloway, could potentially benefit from scenario of deregulated economy - "*Rapid climate change + highly deregulated market economy*" and "G*radual climate change + highly deregulated market economy"* Dumfries and Galloway could benefit less from scenarios in which economic policy is more regulated.

[34] ESPON (2010). *EDORA. European Development Opportunities for Rural Areas*. Draft Final Report. v.1. pp. 37-42.

Table 15. Potential impact of EDORA climate change and economy scenarios in PURR areas

	Gradual climate change + highly deregulated market economy	Gradual climate change + highly regulated market economy"	Rapid climate change + highly deregulated market economy	Rapid climate change + highly regulated market economy
North Yorkshire	+/-	+/-	+	-
Dumfries and Galloway	+	-	+	-
Cambrian mountains	+/-	+/-	+	-
South West Wales	+/-	+/-	+	-
Powys	+/-	+/-	+	-
Telemark	+/-	+/-	+	-
Vidzeme	+/-	+/-	-	+

Cultural heritage

Cultural heritage can be significant development asset in post-industrial economy. It encourages social and economic development opportunities and is basis for creative industry tourist industry. Cultural heritage is also relevant in the context of globalized economy, since cultural assets and traditions are attraction not only for local population but also for people from other regions and other countries.

ESPON project 1.3.3 project on "The Role and Spatial Effects of Cultural Heritage and Identity (2004-2006) offers measures of PURR areas according the set of indicators about different categories of cultural heritage in relation to spatial indicators, supply and demand. In addition, it also offers assessment of cultural infrastructure, intellectual capital and cultural diversity. Some of cultural heritage indicators were also used to describe PURR areas, since the significance of cultural heritage was stressed as important by local stakeholders. Cultural heritage is strongly affected by diversity of population with foreign nationality. This diversity can have deep historical roots, but it is also increasing because of temporary workers, students, retired people, refugees, migrants and also global elites of transient urban dwellers.

Survey of European territories undertaken in ESPON 1.3.3. show that national diversity of cultural heritage in post-communist countries, including Latvia, is high. Also in Wales and Scotland national complexity is described as very high. In North Yorkshire national complexity is high, but in Telemark it is described as average. Data from the areas was acquired between 2000 and 2005. The share of active population engaging in cultural professions is also mapped in ESPON 1.3.3. project. The data from the most recent Labour Force Surveys of 2005 and is for NUTS 2 level only. Among PURR areas culture related jobs took the highest share in the UK - North Yorkshire, Powys, Dumfries and Galloway. In Southern Norway

this level is described as average, whereas in Latvia, compared also to Estonia and Lithuania the number of culture related jobs is still low compared to ESPON average.

When regions are compared regarding supply and demand of culture, in most PURR areas supply meets demand. However, in case of most of Norway (except for Southern Regions) there is lower density of cultural resources, and low potential use pressure from local residents for these resources. In this typology cultural resources were measured according to heritage areas, protected landscapes, museums and events.35 Thus, according to the density of monuments in PURR areas (2004-2006) North Yorkshire scored higher than other regions. The density of monuments was lower in Cambrian mountain areas, Dumfries and Galloway and Vidzeme. It was the lowest in Telemark.

Cultural heritage can also analyzed according to it's functional aspects. In North Yorkshire and most of Norway, except for coastal areas there was strong culture orientation towards conservation. In South West Wales the culture also has high level of orientation to conservation, but valorisation aspect is also important. In Latvia and Powys orientation of culture seems to be more oriented toward production and valorisation. In case of Dumfries and Galloway and surrounding regions cultural orientation has multiple functions. Culture there has high level of conservation, production and valorisation.36 According to report, culture can be described having conservation orientation if culture is an ethic value and carrier of local identity, which needs to be defended against territorial and market trends which compromise the stability. In production orientation of culture, culture is seen as a "commodity" which needs to be (re)produced not only to reconstitute the cultural capital but also as a source of economic development. The valorisation of culture implies a set of social norms and capacities which enrich the local communities and that may be used by the latter to "make themselves known" to the other communities in order to establish good relations for social and economic exchange.37

Governance

Few would question the importance of governance for territorial development in local, regional and global scale. For analysis of governance in PURR areas key findings of ESPON project 2.3.2 "Governance of Territorial and Urban Policies from EU to Local Level" (2006) were used. This project focuses on territorial concept governance which is a process of „territorial organisation of the multiplicity of relations that characterize interactions among actors and different,

[35] ESPON (2006). *The Role and Spatial Effects of Cultural Heritage and Identity*, *1.3.3. Final Report*, p. 24.

[36] ESPON (2006). *The Role and Spatial Effects of Cultural Heritage and Identity*, *1.3.3. Final Report*, p. 27.

[37] ESPON (2006). *The Role and Spatial Effects of Cultural Heritage and Identity*, *1.3.3. Final Report*, p. 25.

but non-conflictual, interests."[38] The report links good governance with cohesion policy which aims at achieving more balanced development. Therefore it defines territorial governance as „process of the organization and co-ordination of actors to develop territorial capital in a non-destructive way in order to improve territorial cohesion at different levels." [39]

When describing state structures, countries are typically dividend into two groups - unitary or federal. Unitary states in turn can be divided into categories of centralised (Greece, Latvia, Estonia, Lithuania) decentralised (The Netherlands, Norway, Sweden, Finland), regionalised (France, UK, Italy) and composite (Spain). The report of ESPON 2.3.2. characterizes England as "regionalised unitary" state, however recent dismantling regions in UK can change this state. State structure in Norway can be described as "decentralized unitary", and in Latvia as "centralized unitary." Territories of Wales and Scotland both have special constitutional status.

The functioning of government is determined not only by structures but also by their performance. World Governance Indicators (WGI) developed by World Bank help in assessing such governance qualities as Voice and Accountability, Political Stability, Government Effectiveness, Regulatory Quality, The Rule of Law, and Control of Corruption.

According to WGI Norway ranked in the highest after all indicators (in top 90^{th}-100^{th} percentile). The scores for UK were similar with exception of political stability which was assessed lower (50^{th}-75^{th} percentile) with relative decline in 2009. Latvia scored in 50^{th}-75^{th} percentile range for all governance indicators with decline in the Rule of Law, and Control of Corruption but with an increase in Regulatory Quality and Government Effectiveness.

Low trust to political institutions can have negative impact in all levels of governance. Some symptoms of the lack of trust are observed by falling participation rates in elections. While for Europe as whole there is a clear tendency towards decreasing participation rates (from approx. 77% in 1990 to 67% in 2010), some countries like Belgium, Finland or Spain experience more or less stable participation rates, whereas other countries, like Slovakia, Latvia and Greece, experience decline of voter participation. In Latvia there has been about 20 percentage point decline in electoral participation from 1990. Electoral participation rate for last national elections was between 61-70 % for Latvia and UK, while it was a little bit higher in Norway (71-80%).

Understanding territorial governance in detail is a complex task. ESPON 2.3.2 provides typology of territorial governance systems based on two dimensions –

[38] ESPON (2006). *Governance of Territorial and Urban Policies from EU to Local Level*, 2.3.2. Final Report, p. 12.

[39] ESPON (2006). *Governance of Territorial and Urban Policies from EU to Local Level*, 2.3.2. Final Report, p. 13.

structural dimension, which describes governance structures in different government levels (multi-level structure), and *relationship dimension*, which describes cooperation and coordination between government structures (multi-level relationship). Data is available for national level only (NUTS-0)

There are several indicators of multi multi-level dimension of territorial government. These indicators relate to type of political system, spatial planning powers, powers of sub national governments. Three categories of indicators are used to assess multi-level relationships - the extent and forms of cooperation between agencies, departments and authorities, extent for vertical cooperation and coordination, and the extent of integrated spatial planning. States of PURR regions were ranked according to these indicators in structural and relationship domains.

Latvia ranked significantly lower than average in structural dimension and below average on relationship dimension. Norway scored about the same level in structural dimension, but significantly above average on relationship dimension. This implies that the level of centralization in both countries could be about the same, but there is more cooperation and integration between different levels and sectors of government in Norway. Among three PURR countries, UK had the highest score for structures, but it was below Norway for multi-level relationships.

In ESPON 2.3.2 countries were also analyzed regarding their horizontal co-ordination and relationships between policies, territories and actors. For analysing these relations, horizontal relationships have been divided into four categories: (1) pre-conditions to horizontal coordination and cooperation, (2) multi-channel coordination, cooperation and relationships, (3) the initiatives of horizontal co-operation carried out by the different governmental levels within a country and at the trans-national level, (4) cross-sectoral co-operation.[40]

All PURR countries scored similarly ranking below average for preconditions to horizontal co-ordination and relationships. However, UK scored significantly higher than Latvia and Norway in multi-channel coordination, cooperation and relationships. Latvia and Norway surpassed UK in actual initiatives of territorial cooperation. All PURR countries showed low results for cross-sectoral cooperation.

ESPON 2.3.2 reports also mapped horizontal and vertical performance of government on one map. The results show that Latvia and Norway scored similarly below averages on horizontal and vertical performances, however Norway showed higher performance on vertical dimension. UK scored higher on both vertical and horizontal dimension and also seems to have more experience in working with partnerships in economic initiatives and state and civil society initiatives (NGOs, public cooperation).

[40] ESPON (2006). *Governance of Territorial and Urban Policies from EU to Local Level*, 2.3.2. Final Report.

The report of ESPON project 2.3.2 uses several different indicators, many of which are qualitative and derived from consultations with national level stakeholders. Therefore for PURR regions governance indicators should be selected individually and validated in regional/local scales. Tables below summarize governance structures and performance in PURR countries.

Table 16. Multi-level structure indicators in PURR countries

Category	Latvia	Norway	UK
Model of State	Centralised Unitary	Decentralised Unitary	Regionalised Unitary
Typology of regionalisation	Administrative regionalisation	Decentralisation through the existing local authorities	Administrative regionalisation Political regionalisation (Wales and Northern Ireland) Political regionalisation with special status (Scotland)
Constitutional reconnaissance of Regional and/or local levels	No	No	No written constitution, but regional and local guarantees through Parliamentary Acts
Allocation of spatial planning powers	Strong local Weak regional Strong national	Strong local Strong national	Strong local Weak regional Strong national
New spatial planning powers	No	No	Great London (directly elected Assembly) and Regional Assemblies
National territorial chambers	No	No	Senate but nor representing territories
Regular multi-level governmental meetings	No	No	No
Dependence of local governments on central government	Dependent	Fairly independent	Financially fairly dependent
Constitutional regions	No	No	Scotland, Northern Ireland and Wales
Devolution to 1st tier local authorities	Substantial powers have been allocated to local authorities	Substantial powers have been allocated to local authorities	Substantial powers have been allocated to local authorities

Source: ESPON 2.3.2 Final Report, 2006.

Table 17 PURR countries according WGI indicators (2009-2010)

WGI indicator	Latvia	Norway	UK
Voice and accountability	Above average*	High*	High
Political Stability	Above average	High	Above average (Decline) **
Government Effectiveness	Above average	High	High
Regulatory Quality	Above average	High	High
The Rule of Law	Above average	High	High
Control of Corruption	Above average (Decline)	High	High

* "Above average" - 50th-75th percentile, "High" - top 90th-100th percentile.
** Decline, compared to 2009.

Table 18 Multi-level relationships

Category	Latvia	Norway	UK
Forms of cooperation between agencies, departments and authorities	Weak	Encouraged by central governments to establish linkages between local and regional partners	Bodies that act as frameworks for the co-ordination of the relationships at different levels Problems of relationships between different government levels
Approach for vertical cooperation and coordination	Positive attitudes	Positive attitudes Priority emphasis on vertical coordination objective Progress towards vertical cooperation partnerships	Weak attitude Progress towards vertical cooperation and partnerships
Integrated spatial planning	Strong vertical and horizontal coordination	Mainly vertical coordination at all or at levels with strong planning competency and weak horizontal coordination but at levels with the main planning competency	Mainly horizontal coordination at all levels or at levels with strong planning competencies, and weak or no vertical coordination

Source: ESPON 2.3.2 Final Report, 2006.

Table 19 Horizontal cooperation

Category	Latvia	Norway	UK
Priority emphasis on horizontal coordination	Weak	Weak	Weak
Partnership formation and cooperation • Barriers • Catalysts	Weak Catalyst for cooperation has been EU funding	Weak Barriers: Limitations on powers and activity potential of partnership Catalysts: National or sub-national legislation and policy	Catalysts: EU policies and funding National or sub-national legislation and policy Pressures to gain access to EU or national funding sources and economic interests of participants
Experience in working with partnerships	Limited	Limited	Extensive
Forms of cooperation	None	None	Urban development contracts, Local development / planning agreements and / or frameworks
Direction of progress	None	None	Public – private co-operation in economic initiatives State – civil society (NGOs, public) cooperation
Constitutional reconnaissance of territorial associations	None	None	None
Participation in projects under the Community Initiative Interreg IIIB	16.84 per 100.000 inhabitants (383 in total)	11.32 per 100.000 inhabitants (522 in total)	1.27 per 100000 inhabitants (763 in total)
National and / or federal agencies / councils / committees for spatial development	None	None	None
Policy packages	Intersectoral · Economic · Spatial Planning	No Policy Packages or missing info	Intersectoral ☐☐Spatial Planning

Source: ESPON 2.3.2 Final Report, 2006.

Table 20 Horizontal co-operation and relationships

	Latvia	**Norway**	**UK**
Territorial cooperation	Below average	Below average	Low
Multi-channel coordination, cooperation and relationships	Low	Low	High
Cross sectoral cooperation	Low	Low	Low
Total score of horizontal co-ordination and relationships	Below average	Below average	Below average

Source: ESPON 2.3.2 Final Report, 2006, pp. 90-94.

Table 21 Performance of PURR countries for the multi-level structure and multilevel relationships

		Score of Multi-level relationships			
		1 Low	**2**	**3**	**4 High**
Score of Multi-level structure	**4 High**				
	3			**UK**	
	2		**Latvia**	**Norway**	
	1 Low				

Source: ESPON 2.3.2 Final Report, 2006, pp. 36.

Table 22 Performance of PURR countries for vertical and horizontal dimensions of Governance

		1 Low	**2**	**3**	**4 High**
Score of Multi-level structure	**4 High**				
	3			**UK**	
	2		**Norway Latvia**		
	1 Low				

Source: ESPON 2.3.2 Final Report.

C5. Case Studies in Five Regions

The main findings from the individual case studies follow below:

Notodden

The stakeholder region of Notodden (see Map A1 in Annex 1) is a municipality located in the eastern part of Telemark county. Telemark is a NUTS 3 region and is also a part of the NUTS 2 region Sør-Østlandet. Notodden is, in other words, categorised below NUTS 3, but is an administrative unit (municipality) within the Norwegian three-tier government structure (which consists of the state, 19 counties, and 430 municipalities). It is located within all of an hour's drive from Oslo (using standard travelling speed, 60 km/h, the distance is estimated at 115 minutes).

Notodden is a part of the Kongsberg region. Kongsberg is a city region, located in Buskerud county east of Notodden, on the way to Oslo. Notodden's neighbour, Tinn, is also a part of the Kongsberg region. Notodden and Tinn share many similarities, both regarding economic structure and regional development, and the two municipalities cooperate on many levels. Although Tinn is not a stakeholder in PURR, the development perspectives of Tinn are also touched upon below.

Step 1: Benchmarking the region

If we accept that all PURR regions are rural by definition, then Notodden of course is also a rural region. The EDORA project uses several typologies for classifying European NUTS III regions (section C4). The following table presents these for Telemark:

Table 23: Regional Typologies for Telemark

Code	Label	Value
DTP Type no	Urban-rural typology (Dijstra Poelmans types)	Predominantly rural remote
Stype	Structural typology for non-urban regions	Consumption countryside
A-Dtype	Performance typology for non-urban regions	Accumulating
Comptype	Combining urban-rural typology	PRR consumption accumulating

Source: ESPON database

The table shows that Telemark is *a rural and remote, countryside* region when we look at the population density and distance to a centre of more than 45,000 inhabitants (DTP Type). Telemark is at the same time structurally classified as a *"consumption countryside" region* (Stype) which is defined by eight indicators relating to tourism capacity and intensity, access to natural areas, and small scale and diversified agriculture. This implies that the economic structure is nature based and not very diversified, but it is not an agrarian economy. One might argue that this structural typology is coherent with the fact that Telemark is a rural region where

agricultural domination is relatively low. Based on indicators on net migration, GDP per capita, change in GDP per capita, unemployment and change in unemployment, Telemark's performance is good. Telemark is defined as an *accumulating region*. The classifications for Telemark in the table are the same as the classifications of 10 (out of 18) regions (counties) in Norway.

Benchmarking Notodden and Tinn using national statistics reveals that these two municipalities' scores are quite similar to Telemark's (detailed data can be found in annex 1). This implies that both Notodden and Tinn can be categorised within the same typology as Telemark (see table above). However, in a national context, Tinn would be categorised as more of a rural region than Notodden. This is mainly due to lower accessibility, as the distance to a major centre is significantly higher. The lower accessibility of Tinn also reflects that the distance to Oslo is greater (160 minutes using standard travelling speed) than from Notodden. The accessibility is also weighted together with other indicators in the national Periphery Index (PI), reflecting that Notodden is ranked 169 and Tinn 323 on a centre-periphery scale out of ca 430 Norwegian municipalities (Johansen et al 2006).

Step 2: The Regional Context and Stakeholder Perspective

Notodden and Tinn are by definition rural municipalities, Tinn more than Notodden. However, the settlement structure in both municipalities is centralised to Notodden and Rjukan, respectively, and regional development in these municipalities is centralised. This fact also dominates the stakeholders' perspective on regional development. The discussion below focuses on the municipalities as a whole, although many of the comments relate more to the central than to the rural parts of them.

Both Notodden and Tinn are energy and water producing communities. The access to water was imperial when these municipalities developed from agrarian to industrial economies in the early 20th century. Hydro electric power was used for developing high-energy consuming industrial plants located close to the energy source. Intermediates, as well as the finished products, were transported from and to the coast on inland waterways. Later, roads and railroads were used for transporting the goods. During the 1900s, both Notodden and Tinn were prosperous municipalities, and their economic base was these large plants. In the 1980s, the large plants were shut down with a following economic recession (especially in Notodden) and re-structuring of the local economy in both municipalities. Since the 1990s, restructuring contributed to growing economies in both municipalities, although the recession of the late 1980s and the early 1990s hit them more severely than the rest of Telemark and Norway as a whole. Today (2009), the number of employed people is about the same in both municipalities as it was in 1986 (in the same period, the number of employed people grew by more than 30 per cent in Norway as a whole

and around 15 per cent in Telemark). In this sense, the re-structuring process in Notodden and Tinn was not enough to prevent these municipalities' economy to be hit harder than the national and Telemark averages, probably due to the one-sidedness of the economy.

Today, both municipalities emerge with a re-structured economy which still is dominated by the secondary sector, but which is much more diverse than before. This implies that future development will not depend as much on the development of one company as before. The secondary sector is a relatively larger part of the economy in Tinn (12 % of employment) than in Notodden (10 % of employment), see table A1 in Annex 1. Energy and water is still an important sector, relative to its importance in Norway as a whole. In addition, building and construction is important in Tinn. The public sector is very important in Notodden (45 per cent of employment) and Tinn (40 per cent of employment, equal to the Telemark average), well above the national average of 38.4 per cent. This might be explained by the fact that a hospital as well as an institution of higher education are located to Notodden, and that Notodden is regarded a regional centre for East Telemark. Both municipalities seem underdeveloped within more advanced (or specialised), for instance financial and business, services. The same applies to hotels and restaurants.

Notodden is twice the size of Tinn (12,000 vs 6,000 inhabitants). Both municipalities have seen the population decrease since 1980, more in Tinn (15 % decrease) than in Notodden (a couple of per cent decrease). The population of Tinn has decreased continuously during this period, while the population figure of Notodden has been relatively stable. Both municipalities show an ageing population, with relatively few people up to the age of 45 compared to the national average. The share of population above 50 is, on the contrary, high. This means that population projections are negative in both municipalities, unless in-migration among younger age groups commences. In Notodden, there has been an excess in-migration for three years leading up to 2009, but we cannot observe the same change in Tinn.

In the 1990s, in- and out-commuting was quite balanced. This has changed. Today, both municipalities provide other areas with labour. At the same time, unemployment was reduced from well above the national average in the 1980s to about the national average and is today around 2 per cent (Notodden) and even less in Tinn.

In other words, the population of Notodden and Tinn has adapted to the changing conditions following the de-industrialisation in many ways. Today, almost everyone (who wants it) has a job, although some parts of the labour force commute to other areas.

The supply of public services is good in both municipalities. The local authorities claim that there is excess capacity in the schools and in the kindergartens, and that they therefore are ready to receive more families with children. There is an access to relatively inexpensive houses and to areas for building new houses.

Norwegian regional policy aims are to preserve the settlement pattern (population) and to develop viable regions (economy) all over the country. Although these aims are national, they are also important within the regions. The financing of the local (and regional) public sector depends partly on taxes and thus on income levels locally. In addition, there is a national system for re-distributing income between municipalities. Demographics are very important in this system. Therefore, demographic development influences municipal income both via local taxes and via the income distribution system. Municipalities loosing people will also loose income, which will have impacts on the supply of services. Therefore, it is very important for the local authorities that the number of inhabitants does not decrease.

Generally, the responsibilities for carrying out development policies are divided between three tiers of government. *The state level* is responsible for the overall provision of welfare services, for legislation, for infrastructure development and for policies in general. One ministry has the overall responsibility for regional development policies, although many ministries' policies influence regional development. Some of the responsibilities for regional (industrial) development have been delegated to *the county level*, which is encouraged to establish regional partnerships to promote development. The county level also has some money to do this. *The local (municipal) level* is responsible for local development. Local authorities normally control only limited funds allocated for business development. These funds are normally allocated via the regional (county) level directly to projects, after applications. Local authorities are responsible for producing local welfare services (child care, primary education, primary health care, old people's care, technical infrastructure, culture and so on). The three-tier system of governance implies that there are many government agencies involved in regional development. Although the division of labour between the tiers is relatively clear, regional development is influenced by decisions taken at all three tiers, and sometimes there will be conflicts of interests between them. In addition, there are different agencies, public, semi-public and private, that have formal and informal sayings in these processes. Therefore, and especially within the area of regional development, the system of governance might contribute to the situation being a bit blur.

If we turn to the stakeholders' views (see also the SWOT results in Annex 1), there is an agreement between different actors in both communities that the *industrial heritage* is an important part of their past and also will be of their future. There are, however, disagreements about how this asset should be used. Some feel that

developing more industry should be the way to go, while others think that tourism based on the industrial heritage is more modern and directed towards the future. Therefore, and because of the natural beauty of the area, developing *tourism* is thought to be an important strategy to follow. Notodden and Tinn have applied to become listed at the World Heritage List (WHL) as pioneer industrial areas. The industry fraction also thinks that local networks of SMEs can continue to provide the Kongsberg area with *sub-deliveries*, which might be an important future development perspective for Notodden. Both Notodden and Tinn want to develop more *knowledge-based* industries in the future, and think that it is important to utilise also informal knowledge, or the industrial traditions of the area, in this. Finally, Notodden wants to continue developing as *the regional centre* for Eastern Telemark. Secondary and tertiary education, as well as a regional hospital, have been important factors so far. Developing the town centre and the outskirts of the town with shops, shopping centres and warehouses are examples of ongoing and planned activities to strengthen this. In addition, Notodden is a hub in the *regional transport infrastructure*, which they try to contribute to develop further.

Generally, there are two main challenges for the region, which can be elaborated deeply and in many directions. First, the challenge of demographics, the age structure and (future) de-population, and second, the challenge of industrial development, economic and labour market growth in the area. Notodden wants to develop in a positive direction regarding both these factors.

First, the provision of local public services is good in Notodden (and Tinn). They "produce what they need", and the capacity of adding the demand for such services from potential new inhabitants is good. In addition, the housing market is good, with a good supply of houses as well as of land to build houses. One might on the other hand argue that there is a lack of smaller flats, aimed at new single-person households. Notodden is located quite centrally, in the middle of Eastern Norway and close to Kongsberg and Oslo, which might contribute to making the town attractive for commuters. They also have a couple of large, public employers (schools, hospital). However, the "reputation" of the town is probably not so good, connected to both industrial decline and some social issues.

In this sense, it is important to develop the town further. To do this, several *local networks* have been established under the guidance of the local authorities. There is an incubator and a local fund (with some money, but restricted access) for industrial development. A semi-public company (PPP) works with industrial and place development. There are several local organisations interested in local development.

There is, on the other hand, a *lack of financial capital* in the region. This is an important factor when local politicians try to increase access to national capital and funds for rural development. National means are not directed towards large

enterprises, but towards SMEs, which might be restrictive in a town used to large companies.

Locally, there is a great deal of optimism towards the future. Notodden is an active municipality, with many active citizens, and they are more than aware of the challenges lying ahead of them. They have organised many formal and informal activities aimed at planning the future, and this territorial capital might substitute some of the lacking financial capital in the region.

Step 3: Assessing the Region's Territorial Potential

The territorial potentials of Notodden and Tinn are tightly connected to the industrial heritage. Their potentials lie first in developing tourism connected to the industrial heritage, and they have already taken steps towards becoming listed on the WHL. This involves the waterways as well as the old factory buildings and areas. Second, the industrial heritage has been an important part of the re-structuring of the local economies. Today, the manufacturing sector is still very important, but now each company is smaller and less dominating. This means that the economic development of the region to a lesser degree depends on the development of one company. The proximity to the Kongsberg milieu is also an important factor in developing the manufacturing sector further. The knowledge connected to the industrial heritage might be utilised for developing knowledge-based industries further in the future.

Both towns of Notodden and Rjukan are tightly connected to the industrial heritage. The municipalities are also areas of natural beauty outside the towns. Therefore, tourism's second "foot" in these municipalities is the natural beauty for forest and mountain hikes, both at winter and summer time. There are many holiday homes of different sizes and qualities, where the relative proximity to the densely populated areas around Oslo, Drammen and Kongsberg makes the area accessible for many people.

One important potential for Notodden is to develop the function as a centre for East Telemark further, serving the population in neighbouring municipalities with public (especially public offices, the hospital, secondary and tertiary education, and transport infrastructure) as well as private services. There is clearly room for developing especially specialised private services further, although the market for some specialised services is limited.

There is clearly a potential for increasing the population in both municipalities. Young families need a house, two jobs and good public services. We have already pointed at the relatively affordable houses and areas for building new houses that are accessible today. The provision of public services is also good, and so is the capacity for admitting new children into both kindergartens and primary schools. At the same time, Notodden and Tinn can offer clean air and natural beauty. Therefore, the main

challenge for attracting new families is probably connected to the labour market. Although unemployment is low, the employment growth has been lower than the Telemark, and much lower than the Norwegian, average, resulting in moderate population decline in Notodden and strong population decline in Tinn, and increased out-commuting from both municipalities. Further population decline will via income reductions influence the ability to produce good public services, which again might lead to reducing the area's attractiveness to new families. There is, in other words, a potential for increasing the speed of the negative population spiral. Whether the "bad reputation" that Notodden has, really matters when it comes to attractiveness, is a question of dispute. According to the attractiveness barometer developed at Telemark Research Institute, the "bad reputation" doesn't matter. Whether they are right or wrong is one question, but it is probably better with a good reputation than a bad reputation.

To conclude, there are potentials for developing Notodden and Tinn further. We do think it is important that the industrial development perspectives discussed above result in new jobs. If there is demand for labour, people will probably follow. Therefore, priority should be given to job creation in the sectors above.

Step 4: Policy Options and Future Development

There are several directions Notodden and Tinn might take in the future. We have discussed the potential for further population decline. There are many places potential new inhabitants can move to in Norway and in Telemark. Therefore, it is important what Notodden and Tinn can offer. Our view is that the area has natural beauty and fresh air, it has affordable housing and areas to build new houses, and it can offer potential inhabitants good public and private services. The (interesting) jobs are missing, and they should be developed to try to attract new inhabitants. Before discussing how this can be done, we will discuss *who* the new inhabitants might be.

In our view, there are two main categories of new inhabitants. One is the category of people that has some sort of connection to the area (they have a family there, they have grown up there and taken work or education elsewhere, or they have other ties). Experience shows that some municipalities have succeeded in promoting their region to this category of people. This can be done for instance by inviting them back to see what the region has to offer or in other ways telling them why they should come back. A positive growing up environment is important in the longer run, as they will rather have their children grow up grow up there if their memory of the place is good. The other category is the people who have no connection to the area. They are probably more difficult to attract in competition with other regions. The question is what Notodden and Tinn have to offer, which of course has to meet the

taste of the potential newcomers. Notodden and Tinn have plenty to offer, but not so much work.

Therefore, we think that the steps that already have been taken towards developing the region along the industrial heritage, tourism, and the manufacturing sectors, and as a centre for East Telemark, are important steps in the right direction. However, more has to be done.

First and foremost, infrastructure development is very important. Here, we think especially about infrastructure connected to tourism. As previously noted, there is a lack of hotel and restaurant services. Although an important hotel (Bolkesjø) was shut down due to economic problems in the near past, there should be a market for more hotels if the tourism industry is developed further. In addition, the things people come to experience could be developed further. Being listed in the WHL will help, but Notodden and Tinn should cooperate to develop this into a tourism product. Similarly, and probably more in Notodden than in Tinn, one could develop the experience of being a nature seeker further by developing infrastructure to increase this experience. This might actually involve the construction of skiing slopes and so on.

Other infrastructures could also be developed. Although Notodden is a transport hub, the infrastructure is not satisfactory. Especially the road to Oslo is underdeveloped, the railroad is in danger of being closed (too few passengers) and the airport, which recently was upgraded, needs more traffic.

When it comes to developing Notodden town further as a centre for East Telemark, to attract visitors for shopping and utilising public services, the question is what strategy to choose. There is a dispute in Notodden whether to develop the town centre or to develop shopping centres outside the city centre. To create jobs, it is important to choose a strategy that will attract people to spend money in Notodden.

Notodden and Tinn are aware of the challenges they face in developing the regions further. They have, though, pointed in some directions. The lack of financial capital is a draw-back. However, there is a development fund in Notodden, which has some money, but restricted assets. An incubator also exists, which offers some services to small enterprises. In addition, local networks under the guidance of the local authorities have been established. They work with development issues. All these resources should be mobilised together under the guidance of the local authorities. Local resources can, to a certain extent, replace the lacking financial capital in developing the region further. Focus should be on job-creation within the areas proposed by the local stakeholders. This will contribute to attracting more people, and to creating more optimism in the region more generally.

Dumfries and Galloway

Step 1: Benchmarking in a European Perspective

The stakeholder region of Dumfries and Galloway is local government administrative area in the South West of Scotland which has had unitary powers since 1996.

The classifications of the stakeholder region according to various typologies developed from the ESPON database given in the table below. Though such typologies tend to be static rather than dynamic, they do provide an insight into some of the characteristics of a region at a particular point in time.

Table 24: Dumfries and Galloway (Code UKE 22) set against Edora Classifications using Nuts 3 data

Code	Label	Value
DTP Type no	Urban-rural typology (Dijstra Poelmans types)	Predominantly rural accessible
Stype	Structural typology for non-urban regions	Diversified (with important market sector)
A-Dtype	Performance typology for non-urban regions	Above average
Comptype	Combining urban-rural typology	PRA diversified above average

Dumfries and Galloway is classified as predominantly rural accessible (PRA) area according to the Dijstra Poelmans typology (as opposed to predominantly urban, intermediate remote / accessible or predominantly rural remote). PRA regions are generally sparsely populated but the majority of the regional population live within a 45 minute drive of a major city. Such regions generally tend to be losing population and economic activity though not to the same extent as predominantly rural remote regions. According to the structural typology for non-urban regions Dumfries and Galloway is classified as diversified with important market sector (as opposed to agrarian or consumption countryside). The ratio of secondary sector to market services GVA is used to distinguish between those where the secondary sector is dominant and those where the market services have become dominant. According to the performance typology Dumfries and Galloway is characterised as above average in terms of economic activities and demographic trends.

Rural typologies are considered by the Scottish Executive to be valuable in informing policy development and development control and to communicate the diversity of different types of rural areas for which diverse policy responses are required. Within

the UK context it is often argued that Scotland and Wales are 'more rural' than England and clearly rurality and extensive rural areas are among the key characteristics of Scotland. The Scottish Government's (2010) *Urban/Rural Classification 2009-20013* uses population and accessibility criteria to distinguish between urban and rural areas to generate a 6-fold classification which distinguishes between urban, rural, and remote areas through six categories, and an 8-fold classification which further distinguishes between remote and very remote regions. According the 6-fold classification most of Dumfries and Galloway (in-fact most of Scotland) is classified as 'remote rural', with areas of 'accessible rural' around the towns of Dumfries and Stranraer. The 8-fold classification further distinguishes the more remote areas between 'very remote' (primarily in the vicinity of the New Galloway Forest and the highland areas in the north of the region) and 'remote'.

The *South of Scotland – Economic Review 2009* (Scottish Enterprise, 2009) compared the performance of the South of Scotland (an economic planning region which includes Dumfries and Galloway) against a number of other rural benchmark areas in the UK including the Scottish Highlands and Islands, Cornwall and the Isles of Scilly, Cumbria and Northumberland. It used headline data in the areas of GVA Growth, Productivity, Labour Market Participation, Population, Wage Levels and CO^2 Emissions to conclude that the South of Scotland in terms of the key indicators in the National Performance Framework for Scotland:

> "…has underperformed relative to the national averages across the key economic indicators of GVA growth and productivity. However, the region compares favourably on these measures relative to other rural areas within the UK that have similar industrial structures. Similarly, despite being lower than across both Scotland and the UK, wage levels in the South of Scotland are around average for a predominantly rural economy." (p.54)

Step 2: The Regional context and stakeholder perspective

A wealth of data is available to provide more microscopic and forensic description of the stakeholder region. Key sources include the labour market and economic profiles produced by the Office for National Statistics and the Scottish Government, the General Registrar Office for Scotland's *Council Demographic Fact Sheets,* in addition to local studies by organisations such as the Dumfries and Galloway Employability Partnership and Scottish Enterprise.

Setting the region within the context of the UK and Scotland a number of features are revealed by key statistics drawn from these data. In 2009 its population was estimated at 148,510, which accounts for 2.9 per cent of the total population of Scotland. Across a total area of 6,426 sq km it has a dispersed settlement structure with only two towns with a population over 10,000: Dumfries, 31,600; and Stranraer, 10,380. Average population density is 23 persons per sq km. It has a stable but aging population. Distance and travel times to Scotland's major urban

centres from Dumfries, the largest urban centre, are Glasgow (124 km, 1hr 28mins) and Edinburgh (127kms, 1hr 57mins).

The region has an above average retired population, projected to increase on current trends still further by 2033. People aged 16-64 account for 61% of all people in Dumfries & Galloway which is lower than for Scotland as a whole.

The economy of the region generally lags behind that of the UK and of Scotland. Whilst data from 2010 shows unemployment across the region is relatively low at 3.6% (compared to the national average of 4.8%) the region has below average wage and household income levels. The area has a relatively low GDP per head, 73% of the Scottish average in 2001. The economic structure has a number of distinctive features. Compared to Scotland, there are a higher per cent of jobs in the primary sectors of agriculture, forestry and fishing (15.0% compared to 5.5% Scottish average), with significant specialisation in a number of key sectors including food and drink, tourism and forestry industries. However, business and financial services employment is much lower, accounting for only 8.2% (Scotland 17.9%).

SMEs in Dumfries & Galloway employ a significantly greater proportion of all workers compared to Scotland as a whole. Small businesses account for 93% of businesses and 53% of business employment (Scotland is 96% and 35% respectively) and 27.5% of employees are in workplaces under 10 people (Scotland is 18.8%). Self employment at 15.8% of the economically active population is also above the Scottish average of 10.6%. Only 17.1% of employees are in businesses of over 200 staff (Scotland 33.6%). Public sector employment is an important element of the local economy with 31.2% (approx. 18,400 people) of employees accounted for by public administration, education and health care, compared to 24% for Scotland as a whole.

Economic strategy and policy development in Dumfries and Galloway sits within an extensive and nested hierarchy of policy advice and tiers of government and associated agencies and networks. These establish important policy discourses and development objectives which in turn have important consequences for local stakeholders and their access to funding streams. At the Scottish government level these include the: *Scotland Rural Development Programme (SRDP) 2007-13*; the 2007 *Economic Strategy*, which embodies five strategic priorities for economic growth; and the 2008 *National Planning Framework (2)*. The latter of the above, for example, suggests that a 'positive sense of place' is an important part of rural areas and that as the rural economy changes:

> "…a high quality environment and a strong cultural identity will be key assets in promoting sustainable growth, economic diversification and community development. Key attributes of a competitive rural area include a diverse employment base and high activity rates; good physical and digital

connectivity; high quality higher and further education provision; good public and private services; and strong, outward-looking communities with confidence in the future." (2009, p.?)

The Scotland National Rural Network at http://www.ruralgateway.org.uk/ aims to promote co-operation and best practice between schemes and programmes operating under the Scotland Rural Development Programme. Scottish Enterprise, Scotland's national business development agency, acts through its regional offices as an intermediary to the efforts of more localized economic development agencies and strategies. For Dumfries and Galloway this includes the 'South of Scotland Alliance' and its 2006 South of Scotland Competitiveness Strategy.

The input of local community planning partners into local rural development strategies is to be found in the 2008 Dumfries and Galloway Regional Economic Strategy approved by Dumfries and Galloway Local Economic Forum and seeking to provide a six year strategy to create an innovative and sustainable rural economy. Leader Programme Projects 2007-2013 in the region are also an important and innovative source of community participation and development (see Building Resilient Communities, Leader Good Practice Guide, Dumfries and Galloway 2008-2010). The strength of multi-partner organisational cooperation is shown through the Dumfries and Galloway Regional Tourism Strategy 2011-2016 which involved the work of Dumfries and Galloway Council, 'destinationdumfriesandgalloway' (DD&G) and Visit Scotland.

The above policies detail not just broad policy ambitions but comments on a range of specific projects, delivery mechanisms and monitoring strategies. Drawing upon these, in combination with the qualitative outputs of stakeholder engagement workshops, the SWOT analysis below signals some key features of local territorial capital, important governace features and on-going processes, initiatives and networks in the region that are important to regional development and future potential.

Table 25: SWOT analysis of the challenges and opportunities influencing the territorial potentials of the region

Strengths	Weaknesses
Considerable territorial capital and natural asset base. High quality highland and coastal landscapes, heritage and cultural assets. Extensive renewable energy capacity. 30% of the Scottish dairy industry is concentrated in the region.	Economy of the region lags behind that of the UK and of Scotland. An aging and geographically dispersed workforce, with low average earnings, low skill levels and low productivity. Low-wage economy characterised by part-time and seasonal work.
Growing presence in a number of developing markets such as	Lack of diversity, critical mass and capacity in private sector (94% employ below 50

renewable energy.	employees). Relatively low value added companies with GVA per head below the national average across almost all industry sectors.
Industrial land and business premises are relatively cheap. Dominance of small and micro-businesses provides flexibility and adaptability in labour market.	Economy reliant than on traditional manufacturing and land-based industries such as agriculture, forestry food processing, retailing and tourism. Few jobs in knowledge intensive companies and new growth sectors.
Much of the region is strategically well placed on major road and rail routes between Scotland and England.	Shortfalls in physical infrastructure, such as road and transport links and need for rapid in water and sewerage capacity inhibit development and potential barrier to growth and competitiveness.
Private housing stock attractive to retirement, second home and holiday let investment.	Shortages and need for better quality affordable and social housing.
Public sector employment has provided secure work and its income multipliers have helped stabilize the regional economy. Past record of public sector office re-locations to the region (e.g. NHS Central Registrar to Dumfries).	Ageing population places pressure on public services and contributes little to regional economic output. Dispersed settlement structure of the region a challenge for service provision.
Good track record in early and in secondary education and developing track record in local Further Education and Higher Education provision.	Declining numbers of young people affect viability of schools and children's services.
Diverse tourist product: passive and active recreation, natural beauty, culture and event based tourism.	Seasonal nature of tourist product.
Opportunities	Threats
High quality environment and territorial capital offering good opportunities to attract skilled people to the area for living and work-life balance.	Need to ensure existing residents benefit from economic development and are supported to ensure that their contributions are made effectively.
Further development of the new rural economy. Common Agricultural Policy reforms in Scotland now provide more clarity and confidence to farmers to progress diversification and adjustment strategies.	Diversification initiatives so far had limited impact despite extensive resources. Farmers arguably should take relatively small step into food processing and local food chains rather than diversifying into completely new areas.
Agriculture, forestry and food processing industries will remain an important economic and	Vulnerability of public sector to spending cuts could have a serious impact on regional employment, wages, local supply chains and

employment driver for the region if value can be captured and added locally. Many sectors have a strong reputation for excellence. May capture large employers.	income multipliers.
Further develop diversity of tourism sector, including new 'creative tourism initiative' and capitalise on specific regional qualities.	Lack of coherent branded tourist identity compared to key UK tourist competitors such as Lake District in England and the Highlands and Islands in Scotland.
Roll out of broadband infrastructure and technology through a range of initiatives including South of Scotland Broadband Pathfinder project	Potential closure of more 'marginal' service provision in geographically peripheral areas a threat to low density regions such as Dumfries and Galloway.
Further development further and higher education at Crichton Campus to (which houses parts of the University of Glasgow, the University of the West of Scotland and Dumfries and Galloway College) to increase local skills base and knowledge transfer partnerships with local industry.	Student recruitment totals subject to capping and new student borne financing arrangements
Further transport infrastructure, service improvements and major projects (Prestwick airport and Loch Ryan port development) as identified in national planning documents.	Tensions between retaining the integrity of place whilst also developing the necessary infrastructure for tourists and economic development.
Further development of renewable energy technologies and associated support industries. Important to capture local value and employment growth.	Potential tensions between the development of externally controlled and driven renewable energy initiatives and the natural heritage of the region.
Capture local benefits of Scottish 'City Region' agenda through relieving cost pressures in the urban economy and offering quality of life benefits.	National economic development policy currently prioritises City Regions and other non-local priority industries as the main drivers of growth. Likely to be reflected in Scottish Executive funding decisions.
Strategic "City Axis" position offers potential re-location of Small and Medium Sized Enterprises (SMEs) and "back room" services for larger companies. Potential cross-border co-operation with neighbouring rural economies of the north Northumberland and Cumbria and Carlisle and Belfast urban centres.	Economic dependence on small businesses with only a limited number of large employers limits potential to make 'step-changes' to the regional economy. Many existing large employers pursuing low wage labour and still struggle to recruit at peak periods.
Relative accessibility of devolved	Compared to other rural areas in Scotland,

powers within Scottish Executive. South of Scotland Alliance and South of Scotland Forum important role championing the needs of the area.	with more long standing policy profiles and lobbying mechanisms - such as the Highlands and Islands - rural character and associated problems less well recognised.
Track record in partnership, delivery both among public sector organisations and between the public, private and 3rd sectors.	Absence of a networked collaborative culture within and across small businesses.
High quality and innovative Leader based projects. Community organisations, voluntary sector and social enterprises may provide services where the public sector withdrew from provision. Retired population potential resource for voluntary organisations.	Region has volunteer organisations but few social enterprises. Community skills unevenly distributed.

Step 3: Assessing the region's territorial potential

The Dumfries and Galloway stakeholder region is extensive both in geographical and landscape terms as well as the diversity of its economic sectors and socio-cultural character. This diverse structure means that concepts and features of territorial potential are equally varied, with a range of perspectives on development possibilities, some of which are contradictory and generate tensions and paradoxes that call for sensitive processes of negotiation through land-use, community and related political forums.

One such tension, for example, is that between a focus on regional development of rural areas as opposed to the more specific rural development. The former involves exploring how urban centres could be developed to drive the development of the wider region, whereas the latter would focuses more specifically on rural issues such as upland farming. Traditional regional development approaches have focused on dynamic strategic (and predominantly urban) areas and infrastructure, rather than rural areas that remain as 'white spots' on strategy maps.

As the preceding Step 2 discussion has indicated, in structural terms the demography and economy of the region is problematic, presenting a challenging framework condition for future development. Contemporary structures of human and financial capital do not provide a strong basis for regional competitiveness. It has a low-wage economy characterised by part-time and seasonal work with, low skill levels and low productivity. The economy is reliant than on traditional manufacturing and land-based industries such as agriculture, forestry food processing, retailing and tourism. There are few jobs in knowledge intensive companies and new growth sectors. The region has an ageing population which places pressure on public services and contributes little to regional economic output. The dispersed settlement structure of

the region provides a challenge for service provision, with weak markets for private sector services and high costs for those provided publicly.

However, the region has a range of distinctive assets which, if not necessarily always providing outright competitive advantage to other areas, do nevertheless provide a platform for future growth and economic development. For example, it has extensive natural resource capital, with high quality highland and coastal landscapes. This offers opportunities to attract skilled people from Scotland's major conurbation as they seek better work-life balance and improved wellbeing. The tourist potential of these landscapes remains underdeveloped, despite a range of innovative recent investments and tourist attractions, such as the internationally renowned 7 Stanes mountain bike trails. It offers the potential for a diverse tourist product of passive and active recreation, natural beauty, culture and event based tourism. Natural resource capitals also underpin traditional food and drink production in the region and the areas extensive forestry sector. There are many potential synergies involving the linking of tourism to local food production, organic agriculture, sustainable forestry and leisure. Common Agricultural Policy reforms now provide more clarity and confidence to farmers to progress diversification and adjustment strategies. The region's extensive land mass and coastline also provide a potential to pioneer and develop new renewable energy technologies and associated support industries, as well as a platform for future eco-system services delivery, notably carbon sequestration.

The strategic geography and accessibility of certain parts of the region are an important territorial potential. As signalled in national economic planning and land-use strategies, expansion of port facilities at Loch Ryan and airport services at Prestwick to the west of the region, combined with improved rail and road access routes, will enable new commercial and tourist connections between Ireland, Scotland and continental Europe as well as the expansion of local freight processing and distribution industries and services.

However, as signalled above, developing a range of territorial potentials across a diverse regional socio-economic space generates tensions and paradoxes that need careful negotiation. These include, for example, the tension between retaining the environmental integrity, heritage and uniqueness of landscape and place - which underpin local identity, lifestyle and wellbeing - whilst also developing new physical infrastructures for tourism and economic development. Landscapes futures built on a new green economy and strategies of locally owned and embedded eco-system services may conflict with more traditional growth strategies premised on large scale exogenous capital investment. Similarly, a rhetorical attachment in policy discourses concerning regional territorial potential and competitiveness to attracting new 'high-road' knowledge based industries through a re-skilled population, need to confront

the intractable character of skilled out-migration and a low skilled local labour market and service based economy.

Step 4: Policy options and future developments

This region has been less successful in securing structural funds and support compared to other rural areas across the UK (such as the Scottish Highlands and Islands, West Wales and Cornwall). This has made it less more difficult for local stakeholders to establish recognition of the Dumfries and Galloway's rural problems and the necessary funding to make a 'step change' to the local economy which will more fully realise its regional potential.

Policy discourses of rural development in the Dumfries and Galloway region understand it as a dynamic process, contingent upon complex combinations of local and extra-local actors, funding streams and investment opportunities, and subject to shifting political circumstances and the vagaries of changing economic circumstances. Stakeholders understand that there is no magic blueprint to some 'modernized' rural future. Rather, rural futures and representations of community needs involve continual negotiation and contestation.

The leverage and lobbying power of local stakeholders on higher funding sources remains crucial to the region realising the ambition of a diversified and growing rural economy which adds value to the primary assets, services and other goods produced in across the area. In this respect, there remain considerable benefits from the devolved structure of UK governmental powers to the Scottish Parliament for the political and economic potentials of the Dumfries and Galloway. It has established more direct lines of communication with higher tiers of national and EU government, as well as networks of influence commercial investors. However, compared to other rural areas in Scotland, with more long standing policy profiles and lobbying mechanisms (such as the Highlands and Islands) the region will have to work continuously to project the character of its rural challenges. In this respect there are important lobbying mechanisms through which the area is projecting its concerns, notably the South of Scotland Alliance and the South of Scotland Forum, which was established in 2009 as an additional way of working and communicating with the Scottish Government and to assist the implementation of regional economic strategy.

At the Scottish Government level (end beyond) certain policy discourses have become dominant, notably the 'City Regions' construct for national planning and economic development. Whilst in regions such as Dumfries and Galloway there may be less of a local sense of ownership of these policy discourses and a concern that they underscore rural needs, they will inevitably play an important role in policy terms and the kinds of options and mechanisms through which the regions potentials will have to be negotiated.

The probability of the region realising its potentials, and the structures, assets and means of achieving this, will also need to negotiate the consequences of contemporary processes of state restructuring and fiscal austerity. Whilst the ambition of much of the spatial planning rhetoric of sustainable development emphasises the importance of localising service provision, the reality may be of increasing centralisation in service provision. The drive for cost savings is likely to lead to the closure of more 'marginal' service provision in geographically peripheral areas, and this will not benefit a low density region such as Dumfries and Galloway. As noted above, public sector employment is vital to the region. It has in the past provided secure and stable work and its income multipliers have benefited the whole region. Centralized service work takes money out of smaller centres and removes their sense of purpose, identity and function.

The extent to which the voluntary sector and social enterprises can step in and provide services where the public sector withdraws from provision remains debatable. Dumfries and Galloway has many volunteer organisations but very few social enterprises and like the structure of the private business sector these organisations tend to be small. Services will need to be provided at some kind of market rate for social enterprises to be successful, unless they take disproportionate advantage of volunteer labour, and if funding is cut then services futures become problematic, undermining quality of life and territorial potentiality.

North Yorkshire

Step 1: Benchmarking in a European Perspective

North Yorkshire comprises the area within the administrative boundaries of North Yorkshire County Council and is located in the north of England, forming the northern most part of the former Yorkshire and Humber Region. The region covers over 8000 square km making it the largest administrative county in England though it is relatively sparsely populated in the English context with a population density of 74 persons per square km and a population of 591,500 in 2007 (EUROSTAT). The area is classified as a NUTS III region. In order to benchmark the region in its European context existing data from ESPON and Eurostat have been used. A useful place to start the benchmarking is to consider the various rural typologies that have been developed in the context of the EDORA project (EDORA 2011), the Dijstra Poelmans typology, a structural typology and a performance typology. The classification of North Yorkshire according to each of the three typologies as well as the combined typology is given in the table below.

Table 26: Classification of North Yorkshire according to EDORA typologies

Code	Label	Value
DTP Type no	Urban-rural typology (Dijstra Poelmans types)	Intermediate accessible
Stype	Structural typology for non-urban regions	Consumption countryside
A-Dtype	Performance typology for non-urban regions	Accumulating
Comptype	Combining urban-rural typology	IA consumption accumulating

Source: ESPON database

Rural areas within an English context are not necessarily considered rural within a European context and this is illustrated by the fact that no part of England is classified as predominantly rural according to the Dijstra Poelmans typology. In comparison it is interesting to note that within the English context large parts of North Yorkshire (primarily corresponding with the National Parks) are classified in the most rural category according to typologies put forward by the Department for Environment, Food and Rural Affairs (DEFRA) and the FARO Project (Talbot and Thompson 2009).

Despite being perceived as one of the most rural parts of England, North Yorkshire is thus classified as an intermediate accessible (IA) area according to the Dijstra Poelmans typology (as opposed to predominantly urban, intermediate remote or predominantly rural accessible / remote). IA regions tend to be characterised as experiencing counter-urbanisation both of population and economic activities, an increasing divergence with urban areas in terms of economic structure, an influx of population putting pressure on local services and house prices, intensification of commuting patterns and declining public transport services (EDORA 2010). 32% of all NUTS III regions in Europe are classed as IA regions and this rises to 47% if the predominantly urban regions are discounted. In the UK and particularly in England the concentration if IA regions is even more pronounced with 75% of UK regions and 96% of English regions classed as IA regions if the predominantly urban regions are discounted. This implies that North Yorkshire shares similar characteristics with a large proportion of other NUTS III regions throughout Europe in terms of proximity to a city and population density. Large parts of Western Europe are classified as IA regions with the rural regions becoming more dominant in the geographical periphery. Any typology at the NUTS III level will find it difficult to capture the diverse levels of accessibility experienced by different parts of North Yorkshire. There is a significant difference between the accessibility of the lowland areas close to the north – south oriented national road and rail infrastructure and parts of the upland and coastal areas.

According to the second typology, the structural typology for non-urban regions, the region is classified as part of the consumption countryside (as opposed to an agrarian or diversified economy). The structural typology provides a more nuanced assessment of the non-urban regions of Europe taking into account of the extent and nature of diversification of the rural economy. The consumption countryside implies the commodification of the countryside (Woods, 2011), which generally means an increase in multi-functionality in the context of both traditional rural activities and more recently evolved activities often related to tourism and leisure. North Yorkshire clearly demonstrates many of the characteristics of the consumption countryside. The tourism infrastructure is well developed and the area receives a considerable number of tourists attracted by the attractive market towns and the high quality natural and cultural heritage. In addition, peri-productivist agriculture is evident as the diversification into new forms of on and off farm employment and income has become a survival strategy for many farmers. The consumption countryside is particularly dominant in the UK (69% of all non-urban regions), Ireland, Sweden, Norway, Finland and large parts of Central Europe and in total almost half of the non-urban regions in Europe fall into this category. The other categories in the classification tend to be more fragmented throughout Europe with the exception that France is dominated by regions classified as having a diversified economy with a strong private services sector and southern and eastern Europe tend to be dominated by regions with an agrarian economy.

The third typology is the performance typology for non-urban regions, according to which North Yorkshire is classified as an accumulating region (as opposed to a below average, above average or depleting region). This typology is based on a composite of five variables including net migration, GDP per capita, average annual change in GDP, annual change in total employment and unemployment rate and indicates that the region is attracting population and economic activities. Approximately 18% of the non-urban NUTS III regions in Europe are classified as accumulating regions with a concentration of such regions in the UK (where approximately 50% of the non-urban regions are classified thus), Ireland, Norway, parts of southern-central Europe and the south of France and north of Spain. The typology appears to reflect some of the characteristics of North Yorkshire, which statistically appears to be a relatively prosperous region at the NUTS III level in a European context. The typology implies that in comparison to many other non-urban regions throughout Europe that North Yorkshire is not experiencing significant problems and fails to recognise the complexity of some of the underlying processes and the negative implications of processes such as counter-urbanisation.

The combined typology for North Yorkshire is shared with sixty European NUTS III regions, fifteen of which are in the UK (12 in England and 1 each in Scotland, Wales

and Northern Ireland). The majority of the comparable European regions are situated in Germany (10), Italy (9), Spain and France (7 each).

The European data are primarily from EUROSTAT statistics. North Yorkshire County is a NUTS III region but statistics are also available at NUTS II (North Yorkshire County plus the city of York) and NUTS I (Yorkshire and Humber Region) levels. The NUTS III region had a population of 591,500 in 2007 and the population grew by 6.1% between 1997 and 2007. GDP per capita has been rising steadily at all three NUTS levels, though the figure for North Yorkshire County is lower than the other two. The Yorkshire and Humber Region is 9th out of the 12 NUTS I regions in the UK, while North Yorkshire is 18th out of 37 UK NUTS II regions and North Yorkshire County 66th out of 133 UK NUTS III regions. With a GDP per capita of 111% of the EU average North Yorkshire County ranks 422nd out of 1303 NUTS III regions in the EU. Total GVA grew by 106.5% between 1996 – 2007, well above the EU average of 66% but below the UK average of 112.1%. North Yorkshire County has experienced a growth rate in employment of 1.1%, below the UK average and well below the average for Yorkshire and Humber (5.8%). In absolute terms, the County is in the top 1% of all NUTS III regions in the EU for the number of campsites and the number of hotels and the top 10% and top 2% respectively for the number of hotel beds and campsite beds and this clearly indicates the importance of the tourism sector.

Step 2: The Regional context and stakeholder perspective

There is considerable data available relating to the stakeholder region to be able to apply the magnifying glass method as outlined in the methodology. A wide range of socio-economic data is available from the Office for National Statistics and North Yorkshire County Council as well as data in the context of the Indices of Multiple Deprivation for England. In addition a wealth of data is available via the Yorkshire and Humber Regional Observatory (Yorkshire Futures) who were responsible for providing much of the evidence base for various regional strategies, the York and North Yorkshire Partnership Unit and various documents prepared in the context of the Rural Development Programme England and the various Leader initiatives in North Yorkshire.

In terms of economy and employment the region has a number of defining characteristics. The Annual Business Inquiry reveals that over half of the jobs in York and North Yorkshire are in either distribution, hotels and restaurants or public administration, education and health, both of which provide 27% of the sub regions jobs. Public sector employment remains central to the economy, providing approximately 95,000 jobs in total, and of these 25,000 are employed by North Yorkshire County Council, making it the largest employer in the area. The banking, finance and insurance sector is also an important employer accounting for 17% of all

jobs. Over 34,400 people are employed in manufacturing (10% of all jobs), though this analysis does not include self employment or farm based agriculture and therefore does not recognise the level of agricultural employment in the sub region, which is estimated at around 20,000. Manufacturing is generally concentrated in the larger towns in the south of the region and in Scarborough on the coast (see appendix).

York and North Yorkshire Partnership Unit (2010) identify the following structural features of the economy of York and North Yorkshire:

- Manufacturing (both food and non food);
- The service economy (economic driver services, producer services and local services);
- The visitor and cultural economy (identified as a future driver of the economy);
- The land based and agricultural sector;
- The Science, knowledge based and higher education sector; and
- The low carbon economy (another future potential driver for the sub regional economy).

As mentioned in the previous section, North Yorkshire had a population of 591,500 in 2007 and the current trend of an increasing and ageing population is expected to continue in the coming years. The spatial distribution of the expected population changes are less clear, though it appears likely that the growth will primarily be experienced in the more accessible rural areas. Much of this growth is driven by counter-urbanisation processes and older people moving into the area for reasons related to the perceived quality of life. These trends exert pressure on the existing populations in terms of housing and house prices as well as diluting what the existing population perceive to be their local identity. North Yorkshire County appears to perform fairly well in terms of employment with unemployment rates consistently below both national and regional averages and economic activity rates above these averages. However, such figures do not take full account of the type of jobs that are available and the economic structure of North Yorkshire, with a heavy reliance on agriculture and tourism in certain areas, implies that a significant proportion of jobs are low wage, part-time and seasonal.

In terms of local resources capital the region possesses a number of characteristics that provide challenges for future development but also possesses considerable assets that can potentially provide a focus for potential development. The urban structure of the region is relatively weak and except for the two largest centres of Harrogate (76,000) and Scarborough (50,000), only three other urban centres have populations over 15,000 (http://www.northyorks.gov.uk/index.aspx?articleid=2874). 36 market towns have been identified (Yorkshire Forward 2007) with the rest of the

population living in small villages, hamlets and dispersed dwellings. In terms of connectivity the region is dominated by north-south oriented transport infrastructure with only limited east-west connections. The nationally important north-south oriented road and rail infrastructure located in the Vale of York, a lowland belt between two upland areas, divides the County. The upland areas contain two national parks, the Yorkshire Dales in the west and the North Yorkshire Moors in the east. Both of these areas are sparsely populated with numerous dispersed small market towns and villages located within and on the perimeter of the two national parks. The majority of the region falls within the Remote Rural, Vales and Tees Link and Coast sub-regions identified in the now rescinded Regional Spatial Strategy. Local stakeholders emphasised the importance of strategic documents prepared at the level of the former Yorkshire and Humber Region as potential knowledge resources despite the fact that they have been rescinded.

Despite the dispersed settlement structure and limited size of the urban centres, there are a number of major urban centres located in close proximity that have a significant impact on the spatial development of the region. Newcastle and Middlesbrough to the north, Leeds and Bradford to the south-west and York and Kingston upon Hull to the south-east have populations ranging between 138,000 (Middlesbrough) and 777,000 (Leeds). The characteristics of North Yorkshire mean that a variety of designations cover different parts of the region (including two national parks, heritage coast, areas of outstanding natural beauty, sites of special scientific interest....), making it one of the most densely designated areas in England.

The final aspect of territorial capital discussed here is institutional landscape and governance structure and this is of particular relevance for North Yorkshire given the recent dramatic changes to the institutional landscape in England following the election of the Conservative-Liberal democrat Coalition Government. In order to place the recent changes into context a brief explanation of how the governance structure emerged is provided. The UK has a complex governance structure, referred to as a regionalised unitary state (ESPON 2.3.2). Power was devolved to a new Scottish Government and new assemblies in Wales and Northern Ireland as well as an elected Assembly for London shortly after Labour Government came to power in 1997. Despite elected regional assemblies being proposed for the eight English regions outside London, these bodies were never established. Regional development agencies (RDAs) and regional assemblies made up of representatives appointed by central and local government were established and the RDAs were responsible for developing regional economic strategies while the regional assemblies were responsible for preparing regional spatial strategies.

North Yorkshire formed part of the Yorkshire and Humber Region, within which 24 planning authorities were located including a complex diversity of unitary authorities41 (both metropolitan and district) and the seven districts (Craven, Harrogate, Selby, Ryedale, Scarborough, Hambleton and Richmondshire) and two national park authorities (Yorkshire Dales and North Yorkshire Moors) within the boundaries of North Yorkshire County Council. The County Council has a variety of functions, invariably in partnership with other tiers or organisations, in relation to education, health, social services, leisure and culture and transport and highways. The Council also has some planning powers (primarily for minerals planning), though planning is predominantly the responsibility of the district councils and national park authorities. This complex governance landscape was under review just prior to the last UK General Election in 2010.

The new Coalition Government came to power amongst rhetoric of localism and decentralisation and the governance landscape in England has become highly fluid due to the dissolution of the regional tier and a number of thematic QUANGOs with power being passed down to the local level or more often back up to the central level. This has had a significant impact on North Yorkshire due to the associated disintegration of governance and knowledge networks and the uncertainty surrounding the new funding and governance arrangements. The regional stakeholders felt that despite being primarily urban focused the former RDA provided a useful focal point for rural development in terms of knowledge and funding.

The Government has introduced proposals for the regional development agencies to be replaced by voluntary partnerships called local enterprise partnerships (LEPs). The new LEPs will have an economic development agenda but will not have strategic planning powers or responsibilities. The new arrangements for Local Enterprise Partnerships (LEPs) have been criticised for being profoundly anti-regionalist and centralist (Bentley et al 2010) and despite feeling that the new arrangements potentially offered some opportunities for North Yorkshire, regional stakeholders seem concerned that the abolition of the regional tier will reduce the potential to plan and act strategically and also to utilise EU funding effectively. There is also a danger that the new LEPs will favour the parts of North Yorkshire that form part of the Leeds and Tees Valley city regions to the detriment of the more remote parts of the region.

The overarching strategy and funding arrangements for rural areas in England are uncertain due to the fluid governance arrangements and the lack of clarity about

[41] Traditionally England had a two tier system of local government with county councils being the upper level. Since the 1980s, a series of re-organisations have resulted in the abolition of many county councils, which have been replaced by single tier unitary authorities. County Councils have survived in certain areas, such as North Yorkshire, which last survived such a Central Government proposal to abolish it and replace the County and district structure with a unitary authority in 2007.

future funding arrangements particularly in the context of the climate of austerity that is likely to remain a dominant force for the foreseeable future. The Rural Development Programme for England is currently the primary implementation instrument for rural development initiatives and provides a framework to integrate EU and domestic funding regimes. The Leader Programme remains influential in terms of promoting rural governance and initiatives in North Yorkshire. There are three Leader local action groups active within the region: Yorkshire Dales, North York Moors, Coast & Hills and the Coast, Wolds, Wetlands & Waterways. The implementation of Leader in England has been varied due to different operational cultures between the various RDAs after they took over responsibility for management of the Leader Programme. This potentially offers opportunities for North Yorkshire to learn from experiences in other parts of England as well as from experiences in Wales and Scotland.

As a consequence of the abolition of the regional tier in England the UK Coalition Government has also rescinded the various regional spatial strategies and abandoned plans to elaborate integrated regional strategies incorporating the regional spatial and regional economic strategies and this has resulted in something of a policy vacuum. It remains unclear the impact that this will have on local spatial policy, which by definition is fragmented due to the division of responsibilities between seven district authorities and two national park authorities. There seems to be a general consensus amongst regional stakeholders that many of the levers of power influencing rural development are located outside the direct control of the local level.

The challenges and opportunities influencing the territorial potential of North Yorkshire are best summarised in the form of a SWOT analysis as illustrated in the table below. The SWOT is relatively strategic and has been developed on the basis of existing documents and the discussions with regional stakeholders. The key challenges require the weaknesses and threats to be addressed and the main opportunities require the strengths and opportunities to be capitalised upon.

Table 27: SWOT analysis of the challenges and opportunities influencing the territorial potential of the region

Strengths	**Weaknesses**
Positive overall population trends	Ageing population and lack of opportunities for young people (education, employment, housing...)
Strong identity / identities and extensive informal social networks	Reliance on public sector employment
Low unemployment and high economic activity rates	Limited opportunities or employment growth in key sectors (agriculture, tourism and micro-businesses / SMEs)
Extremely diverse territorial capital with	Predominantly low wage economy

lowland, upland and coastal areas	(particularly in upland areas) and existence of hidden deprivation and pockets of concentrated deprivation
High quality assets in terms of landscape, heritage and natural environment	Limited investment capacity of agricultural businesses and SME's
Attractive and traditional market towns and villages with a quintessentially English rural character	Limited east – west connectivity
Nationally important north - south transport links with good connections to Scotland and the south	Limited infrastructure in more remote areas
Well established and diverse tourism infrastructure	Limited local control over the power and means to steer rural development, potentially exacerbated due to the current further centralisation of power
Considerable knowledge and expertise within existing governance networks	Limited capacity exacerbated by dissolution of regional knowledge networks and resources
Opportunities	**Threats**
Facilitating the evolution of appropriate and dynamic knowledge networks, communities and arenas and stimulating the production of relevant knowledge resources	Increasingly unbalanced demographic structure and outmigration of young people seeking higher education or better housing and employment opportunities
Stimulating the dynamic and resilient SME sector	Counter-urbanisation processes diluting local identities
Exploitation of high quality territorial capital and increased promotion of regional identity and assets	Increasing economic and social disparities between communities in upland and lowland areas
Development of market towns as competitive economic drivers and centres for service provision	Reduction in public sector employment
Utilising the proximity to major urban centres and the good connectivity to Scotland and the south	Limited opportunities for employment growth in key sectors (agriculture, forestry, tourism, SMEs....)
Further development of the new rural economy	Overreliance on tourism and agriculture in upland areas
Further developing funding and support mechanisms for landscape and nature development, particularly in upland areas	Potentially negative influence of external factors such as commodity prices, post-oil economy
Development of rural Broadband NYNet	Increasing cost of living due to fuel and energy prices
Promoting renewable energy, energy crops and the low carbon economy	Uncertainty regarding governance and funding arrangements particularly in relation to CAP reform
Optimisation of new governance arrangements	Finances / funding support post 2014 in climate of austerity
	A potential lack of long-term strategic planning

Step 3: Assessing the regions territorial potential

There are various dimensions to the diverse characteristics of the territorial capital of North Yorkshire. The population is growing but ageing primarily due to migration trends, the outmigration of young people in search of better opportunities relating to education, housing and employment and the in-migration of older people approaching retirement age or people of working age who then commute into the larger urban centres outside the County for work. There is a tendency for many of the in-migrants to retain close contacts with urban areas outside the County, particularly those commuting outside the area for work. Trips to work can often be combined with trips to shops or other services which do little or nothing to support local businesses and services in North Yorkshire. In addition the in-migrants have a significant impact on house prices so that young local people are often priced out of the housing market. There is a danger that the loss of young people will undermine the pursuit of regional competitiveness if allowed to continues. The potential of the County will be enhanced if, on the one hand benefit can be gained from the influx of older and often wealthier people and on the other hand more opportunities can be created for young people to retain them in the area. The latter will require effective targeted policies to provide education, housing, employment and other personal development opportunities.

Potential future employment strategies are unclear. The existence of two distinct types of agriculture in the County (lowland and upland) provides particular challenges for North Yorkshire. Employment in agriculture remains important but is in long-term decline, the tourism sector is approaching saturation, micro-businesses and SMEs are unlikely to have potential for significant employment growth and employment in the public sector is also under significant threat. However, possible redundancies in the public sector are likely to create a pool of people with funds to invest and there may be potential for some employment creation as a result.

The characteristics of the area with high quality landscapes and natural areas, an attractive coastline and picturesque villages and market towns offer significant potential for tourism. The importance of tourism to the local economy cannot be underestimated, particularly in more remote rural areas where tourism and agriculture dominate the economy. Such a narrow economic base in these areas emphasises the fragility of the local economy and steps to reinforce and / or broaden this economic base would be beneficial. A combination of funding and support mechanisms to support diverse forms of land management and activities as well as infrastructure development in relation to broadband will help to facilitate diversification opportunities. Both tourism infrastructure and the tourism product are well developed. Evidence suggests that the vast majority of tourists visiting North Yorkshire come from within the wider Yorkshire and Humber region or from the rest

of Northern England, implying that there may be potential to attract visitors from further afield both from other parts of the UK and international visitors. Both the characteristics of the region mentioned above and the relative accessibility due to the proximity to Leeds-Bradford Airport and to the nationally important north-south rail and road corridors are important competitive advantages that can potentially underpin this potential.

One of the key themes to emerge from the workshop and other discussions with regional stakeholders is that the character of the rurality of North Yorkshire and its problems is not made visible by current statistical categorization, both in the European and the UK / English contexts. As mentioned previously this is primarily due to the fact that none of England is categorised as predominantly rural according to the OECD classification employed by the EU and the allocation of funds according to high concentrations of deprivation in England. In other words the core challenge from a policy point of view is combating this view and making the interstices of rural socio-economic problems visible. In areas which might otherwise look quite affluent such interstices and how they are negotiated by disadvantaged social groups should not be neglected.

The currently fluid and rapidly evolving governance context in England mean that new and emerging geographies and spatial scales of governance are highly complex and it is unclear where power and influence lies and what impact that this will have on North Yorkshire. The abolition of the regional level, and the RDA in particular, has left a gap and it is as yet unclear what impact that this and the new LEPs will have on the County. Effective regional development requires not just ideas, but also requires funding, structures, organisation and management. The physical and epistemic distance between North Yorkshire and the UK Parliament in London contrasts with the relative proximity of the Purr partners in Scotland and Wales to their respective governments in Edinburgh and Cardiff.

The question of power and influence is crucial here and this has a variety of dimensions. At one level, much rural policy is decided at the EU or national level leaving local authorities little scope for influencing development in rural areas. External factors such as commodity prices and CAP payments have a huge influence in ultimately determining prosperity levels in rural areas. In this context, the reform of CAP is crucial to the future of North Yorkshire. Another element of this external dimension relates to the influence of larger urban centres outside the County on different parts of the County (Leeds / Bradford, Middlesbrough / Teeside, York). One challenge is to ensure that the rural areas of the County are not left behind by the increased focus (over emphasis?) on large urban centres and the city region agenda. Understanding both the inter- and intra- urban – rural interactions at different spatial

scales (from the metropolitan areas outside the County to the market towns within) is clearly an important challenge.

North Yorkshire clearly possesses a diversity of potentials, underpinned primarily by the high quality environment and landscape. A number of challenges remain however, if the competitive advantages of the region are to be optimised and the various constraints to a competitive regional economy are to be addressed.

Step 4: Policy options and future developments

A key issue for North Yorkshire will be to find means of demonstrating its rurality in order to be able to lobby and attract funding to address some of the issues identified in the SWOT above. Enabling North Yorkshire to achieve its regional potential will be particularly challenging within a context of uncertainty and continuous change in terms of governance and funding arrangements, a situation which is exacerbated by the era of austerity that is likely to endure for the foreseeable future.

Despite the uncertainty regarding governance structures and funding, regional stakeholders recognise the importance of capitalising on the opportunities that new arrangements will offer. A proactive and strategic approach to emerging formal governance structures such as the LEPs will need to coincide with an equally proactive and strategic facilitation of existing and emerging knowledge communities and knowledge arenas (Adams et al 2011). This will be particularly important in the context of the abolition of regional structures such as the RDA and the Regional Observatory and national independent bodies such as the Commission for Rural Communities and the resulting recentralisation of power and potential marginalisation of rural issues in light of the climate of austerity. Any lack of long-term strategic planning will potentially hamper the ability of rural areas to face long-term challenges relating to, for example, climate change and the post-oil economy.

One of the key issues for North Yorkshire appears to be the character of the rurality of the region and its problems and the fact that these do not seem to be made visible by current statistical categorization, both in the European and the UK / English contexts. A second key issue relates to the currently fluid and rapidly evolving governance context in England, which means that new and emerging geographies and spatial scales of governance are highly complex and it is unclear where power and influence lies and what impact that this will have on North Yorkshire. In such a rapidly evolving landscape it is essential that both formal and informal governance structures are proactive and dynamic in terms of learning (from others both within and outside the region) and in terms of capitalising on opportunities as they arise.

Cambrian Mountains

Step 1: Benchmarking in a European Perspective

The Cambrian Mountains is a functional area situated in the western part of Mid-Wales and does not correspond to any administrative or statistical area, posing challenges for data collection. There are two areas identified as comprising the Cambrian Mountains, one based on the classification of the Landscape Character Map for Wales and a smaller area identified as the Core Area by the Cambrian Mountains society. The discussion here focuses primarily on the larger area. The population of the region was approximately 16,700 in 2001 and the highly dispersed settlement structure is reflected in an extremely low population density of approximately 7 persons per square km compared to an average of 140 per square km for Wales and approximately 100 per square km for Europe. The population of the core area is approximately 7000. Discussing the region in the context of the EDORA typologies is complex due to the fact that the area is situated within two different NUTS 3 regions, South-west Wales and Powys.

Table 28: Classification of Welsh NUTS 3 regions according to EDORA typologies

Typology	South-west Wales UKL14	Powys UKL 24
Urban-rural typology (Dijstra Poelmans types)	Intermediate accessible	Predominantly rural accessible
Structural typology for non-urban regions	Consumption countryside	Consumption countryside
Performance typology for non-urban regions	Below average	Below average
Combining urban-rural typology	IA Consumption Below average	PRA Consumption Below average

Source: ESPON / EDORA database

The high proportion of these areas located outside the study area means that care must be taken when using these typologies to identify the characteristics of the Cambrian Mountains. The main value of the Dijstra Poelmans typology is that the classification of part of the area as Predominantly Rural emphasises the rural nature of the area in a UK context. The vast majority of the UK is classified as predominantly urban or intermediate and predominantly rural areas are only found in parts of Wales and Scotland. However, despite both of the NUTS 3 regions being classed as accessible, the study area is arguably the least accessible and most isolated part of Powys and South-West Wales in terms of proximity to urban centres and sparsity of population.

Care must also be taken when considering the other two rural typologies adopted in the EDORA project. According to the structural typology for nun-urban regions both NUTS 3 regions are categorised as consumption countryside. The consumption

countryside implies multi-functionality combining traditional rural activities and land uses with more recent activities particularly in relation to recreation and leisure. The relevance of this classification to the study area is again debatable as even though there are some tourism related activities they are not as well developed as they are in other parts of the wider region such as the Brecon Beacons National Park in Powys. Multi-functionality is limited in the Cambrian Mountains and the area is dominated by upland farming. According to the Performance Typology both Powys and South-West Wales are classed as below average. Due to the scale of the EDORA typologies, the rural typology at the level of Wales is more relevant in terms of describing the characteristics of the region. The Welsh Assembly Government have adopted the Office of National Statistics classification of rural areas that applies a combination of sparsity measurements and settlement size to distinguish between town and fringe (less sparse / sparse), urban less than 10,000 (less sparse / sparse) and village, hamlet and isolated dwellings (less sparse / sparse). The vast majority of the Cambrian Mountains area is classified in the most rural category village, hamlet and isolated dwellings sparse.

The nature of the Cambrian Mountains as a functional region or soft space rather than an administrative or statistical region means that any attempt to benchmark the region in quantitative terms in a European context will encounter difficulties in relation to data availability and data comparability.

Step 2: The Regional context and stakeholder perspective

The Cambrian Mountains is an upland area that has often been described as the backbone or heartland of Wales (Land Use Consultants 2007). The area runs from the Brechfa Forest in the south to the Snowdonia National Park in the north and is characterised by sparsely populated upland farming areas with a high quality landscape comprising extensive undulating hills rather than a harsh mountainous area. Connectivity is generally very low by UK norms due mainly to the limited extent and quality of transport infrastructure. The settlement structure consists primarily of dispersed hamlets and individual dwellings within the area with a necklace of market towns and villages along or just beyond the boundary of the region (Land Use Consultants 2007). The populations of these settlements are small, ranging from a few hundred up to 2,000 with an associated low level of service provision. For higher level services the population of the region rely on an outer ring of larger settlements (such as Aberystwyth, Welshpool, Newtown, Llandrindod Wells, Llandovery, Builth Wells, Carmarthen, and Lampeter), which have populations ranging between 2,500 and 15,000.

The nature of the region means that similar problems of data availability and comparability are encountered when assessing the region within a UK and Welsh context. Data from the Welsh Assembly Government is predominantly available at

the local authority level and what data there is published by the Wales Rural Observatory, while providing useful insights, is rarely available at the level of the Cambrian Mountains. Some data is available based on statistics that are aggregated up from small area statistics from the 2001 census and the Welsh Index of Multiple Deprivation. Compared to the averages for Wales and the counties of Powys, Ceredigion and Carmarthenshire, the region is characterised by an ageing population with a high proportion (19%) employed in agriculture and forestry. Employment rates in sectors such as retailing, manufacturing and the public sector is lower than the average for Wales and the three counties. Another significant characteristic of the region is the high levels of second homes and empty properties (5.1 and 4.4% respectively) which are double the rates for the three counties. According to the Welsh Indices of Multiple Deprivation 2008, some sections of the community in the Cambrian Mountains suffer severe deprivation in terms of the quality of housing and access to services. Employment and business data suggest a higher level of independence from larger urban centres compared to more accessible parts of the UK. Agriculture remains central for many of the communities in the region with the majority of farms focusing on sheep or beef cattle.

A significant amount of useful data on the Cambrian Mountains is contained within the Pilot Project Report undertaken by Land Use Consultants in 2007. According to this data, the population is ageing and is characterised by a smaller proportion of young adults and higher proportion of older people of working age (45-65 years old) than the averages for Powys, Ceredigion and Carmarthenshire. Similar to other rural areas in the UK this is likely to be partly due to young people leaving the area in search of better opportunities in terms of education, employment and housing. In addition, a much higher proportion of the population are employed in agriculture and forestry (19%) than the averages for the surrounding areas (11% in Powys, 9% in Ceredigion, and 5% in Carmarthenshire), for Wales and for the UK as a whole. A total of 49% of the working population living in the study area also work in the area, partly reflecting the limited accessibility and transport infrastructure in the area. However, this represents a high degree of self-containment compared to the average of 17% for rural villages in England. Another 30% of the population commute daily to the necklace settlements for work with the remainder commuting further afield. Main road connections within the area are limited though some areas are accessible by train on the east-west Shrewsbury to Aberystwyth line.

Agriculture and particularly sheep farming are central to the economy as well as to the culture of the communities living in the Cambrian Mountains. However, numbers of sheep have been in decline in recent years while numbers of cattle have been rising, partly due to the availability of subsidies available via the Welsh Assembly Governments Agri-environment scheme to promote landscape conservation through

cattle grazing. Tourism is not as central to the economy of the Cambrian Mountains as it is in other parts of Wales. Land Use Consultant estimate that approximately 870,000 tourists visit the Region annually and that the tourism sector directly employs 770 full-time equivalent jobs. In terms of environmental resources the Cambrian Mountains have substantial resources in terms of landscape, water (the sources of the seven main rivers in Wales are located in the study area), wind and forests which cover 26% of the area. The area is also rich in terms of cultural heritage.

Wales forms part of the asymmetrical devolution of the UK that followed the election of the New Labour Government in 1997. Wales is divided into 22 unitary authorities for the purposes of local government and the Cambrian Mountains study area is primarily located within Powys, Ceredigion and Carmarthenshire. There are also two national parks in Wales, Brecon Beacons to the south and Snowdonia to the north and despite discussions in the 1970s it was decided not to award this status to the Cambrian Mountains. The governance landscape relevant to the Cambrian Mountains is therefore highly fragmented. Statutory functions are divided between the three county councils and the Welsh Assembly Government. There are a number of other structures and networks that to greater or lesser degree have an influence on the Cambrian Mountains including the Wales Rural Network, the Campaign for the Protection of Rural Wales, the Countryside Council for Wales, the Welsh Local Government Association (and its associated Rural Forum), the Central Wales Regional Partnership Board. More specifically focused on the study area is the Cambrian Mountains Initiative (CMI) and the associated Cambrian Mountains Company Limited, who are charged with strengthening the identity of the region and promoting sustainable rural communities throughout the Cambrian Mountains. A partnership was formed in 2007 between the county councils of Powys, Ceredigion and Carmarthenshire, the Countryside Council for Wales, the Welsh Assembly Government and the Prince of Wales Charities. A steering group and a limited company have been formed and these offer potential delivery vehicles for a variety of development initiatives. CMI are developing actions in relation to four thematic sub programme groups that have been established focusing on:

1. Ecosystem Goods and Services
2. Product Marketing and Branding
3. Tourism / visitor development
4. Sustainable Communities

In terms of the policy context there are a number of documents developed by the Welsh Assembly Government including Starting to Live Differently – *the Sustainable Development Scheme* (2000), and the Sustainable Development Action Plan 2004 – 2007,

Farming for the Future (2001), People, Places, Futures: the Wales Spatial Plan (2004), Environment Strategy for Wales (2006), Making the Connections: Delivering Better Services for Wales (2004) and Delivering Beyond Boundaries – Transforming Public Services in Wales (2006). The key delivery and implementation instrument is the Rural Development Plan for Wales 2007-2013 and there are 18 Leader local action groups in Wales, corresponding to the 18 counties, with four of these active within the study area.

The challenges and opportunities influencing the territorial potential of the Cambrian Mountains are best summarised in the form of a SWOT analysis as illustrated in the table below. The SWOT is relatively strategic and has been developed on the basis of an analysis of existing documents and data and discussions with regional stakeholders. The key challenges require the weaknesses and threats to be addressed and the main opportunities require the strengths and opportunities to be capitalised upon.

Table 29: SWOT analysis of the challenges and opportunities influencing the territorial potential of the region

Strengths	**Weaknesses**
High quality landscapes and rich cultural heritage assets	Ageing population exacerbated by out-migration of young people
Strong sense of community and strong social networks	Economic and employment structure dominated by primary sector
High quality ecosystems and environmental assets and abundant natural resources	Many marginal farms and other businesses
Established market towns and villages in necklace around the area	Lack of coherent branding and marketing
Relatively high level of self-containment in terms of employment	Limited opportunities in relation to education, housing (affordability) and employment
Strong culture of local produce and local food and drink	Resource deficit due to difficulties calculating a value for ecosystem goods and services from which other areas benefit and lack of effective transfer mechanism
Diverse tourism product for passive and active recreation and established niches and activities in certain areas and towns	Low skills levels and professionalism and lack of business support
Proximity of different universities and research bodies	Lack of critical mass in terms of population and businesses
Perceived high quality of life	Limited access to services
Numerous projects and initiatives including the Cambrian Mountains Initiative and associated knowledge and governance networks	Poorly developed tourism infrastructure
	Limited accessibility due to limited

	transport infrastructure and limited integration between transport modes and between provision and needs of public transport
	The geography and fragmented administrative structure of the area
Opportunities	**Threats**
Strengthen marketing and branding and develop Cambrian Mountains brand based on quality and local supply chains	Further weakening of human resource base due to ageing population and particularly out-migration of young people
Developing the environment as a product linked to farming and land management and as an economic driver	Ageing structure in agricultural industry and loss of the knowledge of place as families stop farming
Provision of ecosystem goods and services for a wide catchment area	Loss of agricultural support services
Promotion of area as laboratory for environmentally sustainable rural initiatives	Uncertainty relating to CAP reforms
Promote small-scale and community led renewable energy initiatives	Fluctuating external commodity prices and increased cost of farm inputs and increased cost of living due to increased fuel costs
Developing tourism niches that are appropriate to the specific characteristics of the area (active recreation, food, healthy living, heritage, local storylines....)	Impacts of agricultural under and over grazing on the landscape
Re-establishment of link between rural areas and necklace market towns and villages and develop them as gateways to the region	Conflicts between different types of land-use
Funding opportunities for new forms of land and environmental management as a result of CAP reforms and WAG's Agri-environment initiatives	Added value from potentially beneficial activities (renewable, ecosystem goods and services) flowing out of the region rather than being captured and retained for local communities
Creation of innovative and flexible territorial governance and implementation arrangements	Centralisation of local services of general interest
Establishing links to towns and activities in the surrounding area	Loss of the Welsh language and local community roots being eroded
Establishment of appropriate designation to facilitate and stimulate initiatives	Loss of land to external institutional investors
Promotion of sustainable construction techniques and a low carbon economy	Establishment of grant dependent culture particularly in agriculture
Capitalising on cultural heritage assets	Competition from other well established areas such as the Brecon Beacons and Snowdonia National Parks)

	Insular attitudes hampering co-operation and urban-urban and urban-rural interactions

Step 3: Assessing the regions territorial potential

The characteristics of the Cambrian Mountains are highly diverse in terms of landscapes, though less so in terms of economic structures and employment with the primary sector (particularly agriculture), the public sector and to a lesser extent tourism dominant. The potential of the Cambrian Mountains is linked strongly to the natural environment and landscape of the area. The diversification of activities in the area will lead to tensions between alternative and potentially conflicting land-uses as the competitiveness and profitability of traditionally dominant land based industries come under further pressure. The importance of agriculture to the area is emphasised by the strength of the economic links but also the socio-cultural links with local communities.

The territorial potential of the Cambrian Mountains is intertwined with the importance of a clean environment, renewable energy, tourism, local sustainable food production, wood futures, landscape aesthetics and management and the adaptation and mitigation of climate change. Whatever the actual mix of such opportunities, the challenge remains to specify and deliver a 'best' economic value and employment impact that is consistent with community well being and landscape protection. A clean environment is essential to the future of the Cambrian Mountains and forms a central element in the identity and image for the area. Renewable energy is frequently identified as a sector with significant development potential in rural areas, though the reality is more complex. The negative impacts of wind farms in terms of the landscape have received an increasing amount of attention though potentially of more concern is the limited local employment opportunities and the tendency for host regions to be passive recipients of wind farms with the benefits flowing out of the region. The key challenge therefore is to harness the benefits for local communities and there are an increasing number of community companies that generate renewable energy and reinvest the profits into the local area and community. Initiatives undertaken in Powys where the County Council has supported schemes by paying initial capital costs (risk capital), which is later paid back, can offer some inspiration. The isolation of many areas from the necessary grid connections is another significant constraint that will need to be addressed. The characteristics of the area also determine that the forestry and timber sectors have promising development perspectives that offer a number of potential benefits. Careful management will provide wood for a variety of uses including local fuel, construction (local and export) and carbon abatement and careful consideration is required to develop systems to create maximum local benefits. The provision of high

quality timber for sustainable construction also offers potential for the development of expertise in the region and the strengthening of regional identity.

Landscape is another essential element of the territorial potential of the region. If the landscape strategy can be linked to the needs of local communities then it has potential to deliver socio-economic benefits and help to strengthen community cohesion. When activities and interventions can demonstrably be seen to add value to such communities then consensus formation and decision making can become easier. Stronger local communities can better be positioned to engage in the work of landscape management alongside existing farming and forestry interest. A major task will be to define and justify the kinds of work that can be done in the Cambrian Mountains. Much however, will depend on the development of widely applicable mechanisms for calculating an appropriate value for things that cannot necessarily be sold at market prices, and landscape is one of a variety of issues for which this is relevant.

Like many rural areas the Cambrian Mountains benefits from public sector work. It has traditionally provided durable incomes and therefore has in many ways anchored the well being of local communities and economies. Moreover, the viability of farming is largely dependent upon incomes from farm payment subsidies and transfer systems. It is likely that many without work in rural communities will continue to rely on social benefits and welfare payments. Processes of state restructuring and financial austerity will present considerable challenges to these mainstays of the rural economy. However, whilst the rhetoric of rural subsidy cultures and dependencies will loom large over this period, opportunities for self sustaining growth and new markets will be limited and slow to develop. It will be important to reposition discussion towards how public money is best spent and the environmental and socio-economic benefits that arise from such financial flows and valuations. In addition, it will be more important than ever to ensure that community initiatives are given a context within which they can flourish and that the various communities in the area buy into the vision adopted to pursue the desired regional future.

Step 4: Policy options and future developments

Eligibility for structural funds is an issue due to the way that funding is allocated according to the NUTS II level statistical regions. At the NUTS II level, Wales is divided into two distinct regions West Wales and the Valleys, and East Wales. The former is qualifies for convergence funding (formerly objective 1) whereas East Wales is eligible for funding under the regional competitiveness and employment priority. The boundary between the two areas divides the Cambrian Mountains thus creating problems for attracting EU funding for projects over the whole area. This situation appears to further reinforce the sense of the Cambrian Mountains being a

so called soft space that does not correspond to administrative areas and therefore requiring innovative territorial governance and funding approaches.

Though a significant proportion of the Cambrian Mountains are covered by diverse national and international designations, the area is potentially at a disadvantage compared to the neighbouring national parks due to the lack of a unified designation to reinforce the identity of the entire area. Discussions are ongoing about the nature of such a designation and the potential benefits in terms of providing focus, attracting and justifying funding and other resources and strengthening identity. In relation to the latter point about identity the national park designations in Snowdonia and the Brecon Beacons have become tourism development drivers in their own right. However, the suitability of existing designations such as National Park or Area of Outstanding Natural Beauty may not be appropriate to the contemporary issues being faced and the identity that the CMI wished to promote. The national park designation process is extremely complex and the designation is restrictive in terms of the activities that are permitted. There is also a potential conflict between establishing a landscape designation and the renewable energy targets promoted by the Welsh Assembly Government. Two options are currently being discussed and considered:

1. Explore whether there were any internationally recognised designations that were appropriate (such as the UNESCO designation awarded to Biosphere)
2. Discuss with WAG the possibility of creating a new designation, which would require the identification of a list of transferable criteria.

A new designation could be designed that was appropriate to the contemporary sustainability agenda just as the national parks designation had been appropriate to the conservation agenda at the time. There are potential models for inspiration in the German Naturparken, the French Parcs Naturels Régionaux and the Flemish Regionaal Landschappen. All of these models seek to combine ecology and nature with economic development and embed environmental sustainability principles into the ethos for a working landscape and the desirability of the bottom up and process oriented approach. A Cambrian Mountains variant of this model could involve a voluntary scheme whereby community councils each made a five year plan outlining vision and possible actions. Such an approach could be useful in providing the necklace towns with a shopping list of priorities and they could then choose what they considered to be appropriate for them. The Cambrian Mountains Trust, as a bottom-up grant giving charity, could play an important co-ordinating role in terms of delivery. As mentioned previously however, one of the key challenges will be to establish an economic value and transfer mechanisms for ecosystem goods and services.

The work being done by the Cambrian Mountains Initiative and the discussions raised at the PURR workshop point to a range of key issues relevant to regional strategists in other locations. In many ways the Cambrian Mountains can be seen as a pioneering laboratory for environmentally sustainable rural initiatives and it is clear that a rural environment needs to be far more than simply an agricultural economy. Perhaps the foremost of these is the concept of Ecosystem Goods and Services (EGS) and what it might offer in terms of the well being of landscapes, economies and communities of rural areas. The Convention of Biological Diversity defines an eco-systems approach as '…a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way'. DEFRA, however, argue the need to move beyond biodiversity perspectives and to put emphasis on maintaining the health of ecosystems as well as the sustainable human use of the environment, for present and future generations (see Parliamentary Office of Science and Technology 2007). In many ways the EGS approach is broad and philosophical, concerned with defining society as part of nature and elaborating how all social actions effect natural ecosystems, which in turn impact back upon those societies. Land use, landscape and ecosystem are interrelated and a better understanding of the natural consequences of social actions, and how social systems benefit from the natural world, can mean that a truer picture of the value of nature and the goods and services it provides can be achieved.

The CMI, however, moves this understanding on to identifying practical interventions involved with the EGS approach. For example, the Adaptive Landscapes Project seeks to develop a tool for identifying areas where landscape-scale adaptation measures, such as tree planting or re-wetting of blanket bog, can be most effective, whilst taking into account existing agricultural uses. It should help pinpoint areas that deliver environmental benefit and value for money and help define and create a market place for EGS by demonstrating the tangible benefits that can be secured by such land management measures. In addition it will provide insights into the opportunity costs that result from specific land management choices and it is important that these are more clearly understood. More generally, the CMI's EGS approach raises the issue of how to extract, capture and retain the value and benefits of EGS within local communities. Partly this relates to the incomes of those that might be involved in managing the special landscape features of the area, but also through the value of services provided to others by the area, for example in the form of water storage and improved water quality, carbon sequestration and storage and so on. Not only designing but spreading understanding of such integrated environmental markets remains an important role for policy practitioners. An understanding of the inter-connectedness of economy, community, landscape and ecology is essential if the potential of the area is to be achieved.

In addition to having the potential to act as a pioneering laboratory for environmentally sustainable rural initiatives, the Cambrian Mountains area also raises some interesting issues concerning structures and spaces of governance and spatial planning. In this sense it also has potential to act as a laboratory for new governance arrangements and implementation mechanisms. Convincing actors of the added value of working together towards shared goals in such a soft governance space is extremely challenging. Actors need to be convinced to buy into a shared vision by identifying and mapping synergies, interactions and interdependencies, both spatially and thematically. In spatial terms this would help convince actors in different parts of the Cambrian Mountains of the benefit of rural – urban, urban – urban and rural –rural co-operation. In thematic terms the potential synergies between different cross-cutting themes need to be demonstrated, such as how local food contributes to tourism, healthy image, identity and economy in the area. The key challenge here will be to translate the ability of the CMI to act as an arena for debate into an ability to influence policy and achieve action and this could be a useful test of the value of the increased proximity of the devolved Government in Cardiff.

Amata and Vidzeme

Step 1: Benchmarking in a European Perspective

PURR case study region - Amata municipality and six surrounding municipalities are located in Northern Part of Latvia in Vidzeme region which is one of five planning regions being also a statistical unit at NUTS III level. The area of PURR case study area in Latvia (further referred to as PURR sub region) encompasses seven municipalities[42] (*novads*) located in Southern-Western part of Vidzeme region. Rural areas of PURR sub region in Latvia covers area about 2802 square km and has a population of about 45,000. Together with town of Cesis PURR sub-region takes 2975 square km and has a population of about 56,000. Population density is about 16 persons per square km (28 persons per square km if Cesis is included).

To provide initial benchmarking of this PURR region in European perspective, statistical information collected in the NUTS III level for Vidzeme planning region is used, since most comparable data is available at this level. Subsequently, national, regional and local data is used to provide more detailed assessment of PURR sub region area in steps 2 and 3.

Vidzeme region is located in the East of the EU and in the Northeastern part of Latvia. The region has borders with Estonia in the North and Russia in the East.

[42] Municipalities included in PURR case study with the exception of Cesis were selected for study. Until July 1, 2009 these municipalities were all part of one of 26 district local governments – *rajons.* The administrative criteria for selecting PURR regions was maintained because Amata municipality and 6 other municipalities (Rauna, Jaunpiebalga, Vecpiebalga, Ligatne, Priekuli, Pargauja) continued cooperation within PURR project after reorganization of Cesis District. Before the administrative reform considerable amount of statistical information was collected in the level of district local governments.

Inside borders of Vidzeme include the region of Latgale in the South-East, Zemgale in South and Riga region in the West. Tangible capital assets in Vidzeme are it's forests, vacant territories for manufacturing industries, free agricultural areas for introducing energy crops, diversity of natural resources, scenic landscape. Vidzeme also has developed network of transport infrastructure - two international motorways and railway cross the region. It's key industries are: forestry, wood processing industry, milk processing, tourism. Important knowledge based development capital in the region is Vidzeme University of Applied Sciences. Vidzeme also has active cultural and historical traditions and cultural heritage that can be transformed into asset for development. There are 2 larger, and several smaller towns in Vidzeme. Largest town is Valmiera with population of 27,323 followed by Cesis with population of 19,861.[43] Most economic activity in the region is concentrated in these towns and within two functional networks highlighted in *Vidzeme Spatial Development Plan (2007).* Northern functional network encompasses Valmiera, Valka, Smiltene, Cēsis. Southern functional network encompasses Alūksne, Gulbene and Madona. These are also towns of important regional significance.

On European scale landscape of Vidzeme is characterized by low percentage of built-up, and high the area cover for semi-natural areas is higher than in other PURR areas. CORINE land cover survey shows, Latvia has highest percentage of forest coverage among all PURR areas. In Vidzeme 57% of territory of Vidzeme is covered by forests, but 34% of land can be used for agriculture.[44] Although Vidzeme is the largest planning region in Latvia, it also least populated. Vidzeme covers 15,246 square km (23,6% from the territory of Latvia), and has about 234,000 inhabitants (10,4% from the population of Latvia).[45] Density of population is low compared to European average – only 15 people per square km. If one excludes the largest city Valmiera with 27,323 inhabitants, density decreases even more and becomes only 13,6 people per square km[46] In comparison, average population density of EU countries in 2009 was more than three times higher – 115 square km. 58% of Vidzeme population is living in rural areas, and 42% are living in towns.

According to EDORA typology whole Vidzeme is described as predominantly rural and remote, agrarian and depleting.

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[43] Data from Latvian Central Bureau of Statistics for the beginning of 2010.

[44] Data from data base of Latvian State Land Service. VZD (2009). Zemes lietošanas veidu struktūra Vidzemes plānošanas reģionā 2009. gadā, %. Retrieved: 04.09.2010. Available: http://www.vzd.gov.lv/sakums/publikacijas-un-statistika/statistika-par-vzd-registros-uzkrato-informaciju/.

[45] Data as of the beginning of 2010. VRAA (2010). *Reģionu attīstība Latvijā 2009*. Rīga: Valsts reģionālās attīstības aģentūra. 17. lpp.

[46] VRAA (2010). *Reģionu attīstība Latvijā 2009*. Rīga: Valsts reģionālās attīstības aģentūra. 18. lpp.

Table 30: Classification of Vidzeme according to EDORA typologies

Code	Label	Value
DTP Type no	Urban-rural typology (Dijstra Poelmans types)	Predominantly Rural. Remote
Stype	Structural typology for non-urban regions	Agrarian economy
A-Dtype	Performance typology for no-urban regions	Depleting
Comptype	Combining urban-rural typology	Predominantly Rural. Remote. Agrarian. Depleting.

Source: ESPON database.

Vidzeme is described as predominantly rural and remote region because more than half of it's population is living in rural local units and less than a half of it's population can reach a city with at least 50,000 inhabitants within 45 minutes. This is because there are no cities of this size in Vidzeme. Some areas in the Western part of Vidzeme near central roads can be reached in 45 from Riga. Among these areas are some pockets from the PURR sub region, such as the municipality of Ligatne, yet most of PURR sub region is located outside 45 minutes reach. Similar rural regions are found in Nordic countries (Finland, Sweden and Norway) as well as in parts of Ireland, Austria, rural areas of France, Central Spain, Portugal, and Greece. There are several predominantly rural regions also in Bulgaria and Romania. Overall 161 (11,2%) predominantly rural and remote regions have been identified by EDORA The analysis of urban-rural relations in ESPON 1.1.2. show that territory of Vidzeme has low degree of urban influence and low degree of human intervention which is common in Nordic regions, Norther Scotland, Greece, Northern parts of Spain and Portugal. It shares similar characteristics also with other PURR regions, such Dumfries and Galloway, Gwynedd, and Telemark regions. Peripheral areas with low population density are common in Nordic countries, Scotland, parts of Ireland, most of rural areas of central Spain and Greece (ESPON 1.1.1) Vidzeme is different from PURR areas in UK which have stronger agglomeration tendencies, especially - North Yorkshire. Regional remoteness is directly linked to lower accessibility. Potential accessibility of Vidzeme by air was the lowest among PURR territories. This is similar to most rural regions outside agglomerations in Eastern Europe. Highest level of accessibility by air and combined accessibility was in North Yorkshire (75,1-100), followed by Dumfries and Galloway, Cambrian mountain areas and Telemark in Norway. Although Vidzeme shows significant improvement in combined accessibility, it still, like most rural areas in Eastern Europe, lags behind the average European accessibility.

Economic structure of Vidzeme is agrarian according to EDORA typology. This means that relative importance of it's agriculture (% employment in the primary sector, % of GVA from primary sector, and agricultural work units as a percentage of total employment) exceed the EU27 mean for non-urban regions. Overall, there were 278 agrarian regions in EDORA data set which make up 19,4% of all mapped rural regions in ESPON space. Agrarian regions occupy an arc on the Eastern border of Europe, from Finland, South through the Baltic States, Poland, Slovakia, Romania, Bulgaria and Greece, and then through Southern Italy, South West France, and into the Southern and Western half of the Iberian peninsula. Among PURR areas Vidzeme is the only agrarian region. According to EDORA methodology, no agrarian regions exist in the UK. Only two agrarian regions exist in Norway. Although in Latvia GVA in agriculture is higher than it is in other PURR countries, agricultural labour productivity is lower. Labor productivity is strongly influenced by farm structure. In Eastern Europe, including Latvia, average farm sizes are typically smaller and the level of mechanization is lower. Therefore significant part of production is for on-farm consumption.

Depletion of Vidzeme economy is reinforced by substantial decline of economy during economic recession. Among EU member states Latvia experienced sharp drop of GDP and large growth in unemployment. Therefore Vidzeme is the only PURR region which is showing signs of economic and demographic depletion. Depleting areas are characterized by negative net migration, negative trends in total employment and increasing unemployment rate.[47] There are total of 248 (17.3%) depleting regions in EDORA data set They are found in Eastern New Member States, the New German Lander and Turkey. Areas with scores below average performance are also found in Southern Italy, Western Spain, Portugal, Central and Northeastern France, the Northern parts of the Nordic Member States and UK. Population development trends in Europe between 2001 and 2005 show that all PURR areas experience negative natural balance though population decline is compensated by positive migratory balance. Vidzeme, on the other hand, shows annual population decline by 1% since 2005 including negative migratory balance and negative natural balance. Territories with a challenge of demographic decline are found in Eastern Germany, most of Bulgaria and Greece. DEMIFER estimates that by 2050 Latvia's population will decrease by 20%-50% whereas other PURR areas will either gain population or lose a bit less depending on scenario. Overall, 23 regions (1.6% from EDORA data set) share similar combined characteristics with Vidzeme. 7 of them are in Romania, 6 in

[47] In EDORA data about these trends is combined to construct synthetic indicator, which is converted in four ranges - "depleting", "below average performance", "above average performance", and "accumulating". The range is defined by the mean, and 0.5 standard deviations above/below the mean in EDORA data set.

Bulgaria, 5 in Greece. Single rural regions similar to Vidzeme are located also in Hungary, Italy, Lithuania and Poland.[48]

The future of Vidzeme and PURR sub region in European perspective will be shaped by global drivers, including globalization, technological breakthroughs, European and national territorial policies, energy policy and climate change. Vidzeme and Norway belong to a group of Northern European territories in which climate change is likely to bring increase in annual temperature, and mean precipitation. In future there are going to be more days with heavy rainfall, more evaporation, but decrease in frost and snow cover days (ESPON Climate) This will increase the risk of river flooding. Rising sea levels and erosion of coastal areas is also a serious risk brought by climate change in Vidzeme. The appearance of new invasive species of weeds may have negative effects. In terms of natural and man caused hazards the hazard level in Vidzeme is rather low. Among all PURR areas, future energy challenges are more relevant for Latvia since it is one of the countries with low energy self-sufficiency and high price sensibility. Lithuania, most of France, Bulgaria, Hungary, Cyprus share similar context. In Latvia and other two Baltic states – Estonia and Lithuania large share of employees (6,22-9,72%) are employed in industries with high energy purchases. In the same time Latvia has significant portion of electricity generated from renewable sources and it has significant unused potential of renewable energy including biomass and wind potential (ESPON 2.1.4).

Step 2: The Regional Context and Stakeholder Perspective

PURR sub region is located in central part of Vidzeme region between two main motorways: Rīga – Pskov (Russia) and Rīga – Valka (Estonia) – Saint-Petersburg (Russia). The region is also crossed by the international railroad Riga (Latvia) – Valga (Estonia). PURR subregion is located approximately 87 kilometers from Latvia's capital Rīga within the driving time which exceeds 45 minutes. There is a small regional airfield. In terms of territory PURR sub region constitutes about 20% of Vidzeme's territory. Most of PURR sub region is located in the uplands of Vidzeme. The topography of the region is uneven with mosaic landscape which is attractive for tourism. Forests take about 57% of the territory. 34% of land can be used for agriculture. In agriculture it is and more suitable for growing grassland than for crop farming and cultivation. Due to uneven terrain dairy cattle farming has historically been important in this area. Northern part of PURR sub region is more suited for crop farming and vegetable farming. Due to short vegetation period, frequent rainfalls and early frost, growing of fruit is less widespread. There are 2 larger towns

[48] According to EDORA data base, regions which share similar combined characteristics with Vidzeme are located in Romania (Maramureş, Sălaj, Harghita, Botoşani, Tulcea, Teleorman, Caraş-Severin), Bulgaria (Монтана, Враца, Силистра, Търговище, Смолян, Кърджали), Greece (Καστοριά, Θεσπρωτία, Πρέβεζα, Λασίθι , Ρεθύμνη), Hungary (Bekes), Italy (Enna), Lithuania (Tauragės apskritis) and Poland (Bialski).

in PURR sub region – Cesis and Ligatne. The region consists of 7 municipalities - Amata, Cesis, Jaunpiebalga, Ligatne, Priekuli, Pargauja, Rauna and Vecpiebalga and 25 rural municipalities (*pagasts*). The region has polycentric structure although the economic importance of Cesis town is growing. About 40% of residents are living in two and three largest towns (Cesis, Ligatne, Priekuli) whereas remaining population has settled in larger and smaller villages, many of which are rural administrative and economic centers of former collective farms created in the Soviet era. The area is also known for many single homesteads, of which several have disappeared over the years. In territory of Amata new village "Amatciems" has been developed by private investors. This village is enclosed by forest and several manmade lakes and ponds. It was built for people with particular lifestyle who are looking for places of natural beauty and eco-friendly living. Wooden houses with or two floors are connected to electrical, sewage, water and internet supplies. This kind village is unique in the region and in the Baltic States[49]

According *Vidzeme Region Territorial Plan 2005-2025* areas of PURR sub region are designated for mixed use. Valuable landscape areas include territories around Ligatne, Cesis and Rauna, as well as rural municipalities of Priekuli, Vecpiebalga, Dzerbene, Taurene, Drusi, Jaunpiebalga and Inesi. PURR sub region is also crossed by river "Gauja" which is favorite river tourism route and popular among fisherman. Other natural and tourist attractions include Cesis old town complex with castle, Ligatne nature trails and many other tourism attractions. The territory of the national park covers about 20% of all PURR sub region. Large scale farming industry and other economic activities including tourism are restricted in several areas of the park which is considered problematic by some local entrepreneurs. Natural deposits in PURR sub region are found in Priekuli municipality near Bale. Clay is also found in Priekuli municipality. Clay is used locally for producing finishing bricks and other ceramic articles. Sand is excavation is practiced in Rauna municipality.

According to EDORA typology Latvian regions show different degrees of remoteness and economic structure. Among Latvian regions only Vidzeme can be described as predominantly rural, remote region and agrarian depleting economy. Other regions in Latvia show slightly different characteristics. In Latvia measure of infrastructure accessibility is used, according to which about one third of PURR sub region including largest part of Amata municipality, parts of Jaunpiebalga, Rauna and pockets in Pargauja municipality are located more than 5 km away from paved roads.

Vidzeme region is experiencing higher population decline than national average From 2005-10 Latvia experienced -2.1% population decline whereas in Vidzeme it was -4.6%, which was the second largest decline after Latgale region which experienced

[49] Amatciems, http://www.amatciems.lv/eng/ . Retrieved: 05.05.2011.

high -6.4%. Areas with severe population decline are located in Northern and South Eastern part of Vidzeme region. Vidzeme also has lowest population density, which is 15.3 people/km2 (13.6 if not including city of Valmiera). All regions in Latvia also experience signs of ageing population. Since 2005 average age in Vidzeme has increased from 39.3 to 40.3 which is slightly below the national average 40.7.[50]

PURR sub region historically has experienced stable level of population. From 1946-2004 it was one of few rural area which experienced population growth, whereas after 1990 the population decline was smaller than in other areas (Grīne, 2008:133). Since 2000 region is experience higher population decline. In 2010 population decline was more than national average (-1.6%) in three municipalities (Ligatne, Rauna and Jaunpiebalga) which lost more than 5% of population from 2005-2010. Small decline is observed in Amata and Cesis rural municipalities. PURR sub region scores significantly lower than national average of population density for rural municipalities – 17.3. Highest population is in areas with larger towns such as Cesis, Priekuli and Ligatne. Lower population density is in Amata, Vecpiebalga and Pargauja (1-5 people per square km). Municipalities of Rauna and Jaunpiebalga rank in the middle (5-10 people per square km). Though there are significant internal differences in population size and density in these territories, they are all experiencing population decline at different rate.

In general, GDP / capita regional differences in Latvia are considerable between Riga and the regions. Although latest regional GDP figures are not yet available, Vidzeme regional GDP / capita in pre-recession economy was below the national average. Higher regional GDP / capita levels were in Riga region, Kurzeme and Zemgale region. Only Latgale region lagged behind Vidzeme. Note, however, that these were per-recession assessments. Infrastructure and the network of roads has been important for development levels of rural areas in Vidzeme and PURR sub region. Main industries in Vidzeme region are concentrated near the infrastructure – main roads, railway and gas line. Most people who are employed by industry work in triangle area between Valmiera, Cēsis and Smiltene. In 2009 most people in Vidzeme were employed in education, following by downstream sectors, wholesale and retail health care, and in public administration, agriculture and forestry.[51] Construction also used to be a booming sector with substantial impact on economic situation in times of growth during 2004 to 2007. However, during economic recession many people who worked in this sector became unemployed, and the sector went into steep decline. Largest share of GVA in Vidzeme was accumulated in manufacturing industry, wholesale and retail, agricultural production, huntsmanship and forestry. In

[50] VRAA (2010). *Reģionu attīstība Latvijā 2009*. Rīga: Valsts reģionālās attīstības aģentūra.

[51] Central Statistical Bureau of Latvia. CSP. (2009). Nodarbinātības struktūra pēc NACE iedalījuma Vidzemes plānošanas reģionā. Retrieved: 05.11.2010. Available: http://data.csb.gov.lv.

agriculture leading industry in Vidzeme is dairy cattle farming. About one quarter of total milk volume in Latvia is produced in Vidzeme region. There are several large timber producing companies. Two companies which produce non-metallic mineral goods (glass fiber products and ceramic building materials) are among Latvia's top exporting enterprises. Over the years these companies have accumulated large capital investments, and expanded their export markets. Another important exporting company located in PURR sub region is one of oldest paper producing factories in the Baltic States.

Vidzeme region was hit hard by the unemployment during economic recession. Beginning of 2010 unemployment level in Vidzeme (12.6%) was higher than national average (12%). Highest unemployment level was observed in Latgale region. Average unemployment level in municipalities was 13.4% In Northern Vidzeme it was higher (15-20%), whereas in Southern part of Vidzeme where PURR sub region is located, the unemployment levels were lower. In PURR sub region lower unemployment was registered in Rauna (7.5-10%) but higher in Amata and Ligatne (10-12.5%). Other municipalities ranked in the middle (10-12.5%).[52]

To summarize performance of the PURR sub region areas, Regional Development Index (RDI) data can be used. RDI synthesizes several performance indicators, and it is widely used in Latvia as criteria in policy making.[53] According to RDI data PURR subregion can be divided into two groups. Rural areas closer to larger towns, such as Pargauja, Priekuli, Ceis, Rauna show slightly positive RDI scores whereas areas in Southern part of PURR subregion, such as Ligatne, Amata, Vecpiebalga and Jaunpiebalga show negative scores. Overall there seems to be a strong positive relationship between better developed transport infrastructure and economic activity in PURR subregion. This explains differences between rural municipalities near Cesis, such as Rauna and and Priekuli with higher performance and areas in the Southern and Southern Eastern part of the subregion.

Stakeholder perspective about challenges and opportunities influencing territorial potential of the region are summarized in form of a SWOT analysis as illustrated in Table below. Original SWOT for Vidzeme was performed in 2007 as part of Vidzeme Development Strategy drafting process. Since then key strengths, challenges and opportunities of the region have generally remained the same. After SWOT analysis, additional insights into more recent challenges and means of territorial development for PURR sub region are provided. These insights are based on analysis of planning

[52] VRAA (2010). *Reģionu attīstība Latvijā 2009*. Rīga: Valsts reģionālās attīstības aģentūra.

[53] Regional development index used in Latvia is composed using performance indicators, such as GDP/capita, unemployment level, the share of income tax per capita in municipality budgets, non-financial investments per capita, demographic load, the number of economically active individuals and enterprises per 1000 inhabitants, population density, and changes in population.

documents, preliminary conclusions of *Vidzeme Economic Profile* draft document (2010-2011)[54], outcomes of regional workshop in Amata (15.10.2010) and informal consultations with local stakeholders. Subsequent assessment of region's territorial potential and development options is done by synthesizing key findings.

It is first necessary to list several external drivers that influence region's development in general. These are:

- Proximity of Estonian and Russian border
- Proximity of the Sea - small ports and beaches
- Interest of foreign investors who are willing to cooperate and increase their investment;
- Growing international tourism in Baltic States
- EU support for territorial and sectoral development
- Growing demand for eco-products and locally grown and produced products
- The use of ICTs for remote work and communication

Table 31: SWOT analysis of the challenges and opportunities influencing the territorial potentials of the region

Strengths	Weaknesses
• Developed milk and meat processing industry • Some farms have long experience in traditional agriculture • Developed logging and wood processing industry. High capacity of lumber mills • Tourism potential which stimulates rural entrepreneurship • Growing use of ICTs in education and governance • Growing availability of education opportunities • Improving quality of professional education • Vidzeme University of Applied Sciences • Balanced poly centric habitation structure • Extended network of roads that can stimulate development of remote areas • Vidzeme Region is crossed by important transit infrastructure (motorways, railway, gas pipe) • Territories available for industrial	• Small number of private enterprises per population • Lack of knowledge-based industries (lack of technological centers, innovation centers) • Insufficient cooperation between entrepreneurs • Infrastructure and services of tourism insufficiently developed • Depleting demographic situation. • Lack of qualified workers. • Outer migration of qualified workers and active people to urban centers and capital • Insufficient use of ICTs • Uninhabited and economically undeveloped border area • Poor quality of roads • Potential of railway not used • Ageing material infrastructure of social, health, education and sport services • Ageing water infrastructure in small towns • Agricultural lands not used enough • Poor housing management system

[54] Vidzemes plānošanas reģions. (2010-11) *Vidzemes ekonomiskā profila projekts.* Retrieved: 13.01.2011. Available: www.vidzeme.lv

production, including former soviet military bases • Diversity of natural resources (forests, habitats, renewable natural resources, recreation resources) • Protected natural sanctuaries • Natural landscape not transformed. • Picturesque landscape • Rich traditions of cultural history memorials of cultural history	• Ineffective use of energy resources in heat supply
Opportunities	Threats
• Development of industries that use scientific potential • Cooperation among larger Latvian and foreign companies • State supported business clusters • Creating joint companies to attract investments • Growing demand for organic farming products • Development of tourism in Baltic Sea Region • Development of businesses which use ICTs while people can stay and work in rural areas • Good opportunities to develop cross border cooperation with Russia and Estonia • Seaside ports and beaches are close • Using existing transit infrastructure to boost business development • Using EU financing for regional development	• Unfair competition in agriculture. No market for locally produced goods. • Unclear division of functions between the State and local municipalities • Small economy which is very dependent on world economic fluctuations • Decline in quality of roads • Flight of human and intellectual capital (youth, qualified workers) to other regions and abroad. • Rise in alcoholism and drug habits • Dependency on external energy sources • Mismanagement of housing can lead to further depreciation of it's value

Based on: Vidzeme Planning Region. (2007) *Vidzeme Development Strategy.*

Step 3: Assessing the region's territorial potential

Territorial potential in case of Amata and surrounding rural regions can be assessed by convergence of three important components of the territorial capital, such as natural resources and territorial positioning, human capital, institutional context & governance structures. Such approach has been suggested by ESPON TedDi project which examines comparative advantages and development capacities of different regions with different geographic characteristics (ESPON TeDi, 2010: 21-22).

Natural resources are important tangible capital assets of the PURR sub region in Latvia. Scenic landscape and rivers are important for developing tourism. There are vacant territories for development of manufacturing industries and agriculture. The area has developed network of transport infrastructure - two international motorways and a railway. Shorter travel times and physical distances to and from larger towns are considered important for development opportunities also by local stakeholders. Key industries of the region are forestry, wood processing industry, milk processing, and tourism. Low fertility of soil in the region does not promise to

yield high returns from lucrative cultures, like cereals, canola, potatoes and vegetables.

Though region has several assets for territorial development, it does not always have means of transforming these assets into development opportunities. Depletion of human capital in region will have negative impact on all components region's territorial capital. Population decline due to negative natural growth, ageing and out-migration are perceived as the most important challenge in the region. It is very likely that population decline will have to be compensated by immigration if current level of economic well being is to be maintained. Important to improving the quality of human capital in the region is Vidzeme University of Applied Sciences. Vidzeme also has active cultural and historical traditions and cultural heritage that can be also be transformed into asset for development. Key cultural assets of the region are castles, manors, protected cultural landscapes, museums and galleries, events, cultural diversity, cultural professionals, intellectual capital and various forms of non-material cultural capital. This suggest the centrality of knowledge and identity platforms of territorial development in the region.

Essential component of territorial capital is that of governance. The role of the governance is essential not only in administration of territories but also in providing the services of general interest, coordinating different initiatives, and harnessing territorial potential in strategic way. The context of territorial governance in Latvia has been shaped by conclusion of territorial reform of municipalities and economic recession which severely affected Latvia. Formal structures of government are centralized in Latvia and therefore local governments are highly dependent on central government, especially for financing which is drying out because of central government's austerity measures. In these circumstances smaller local governments are more concerned with immediate survival strategies such as providing critical services to remaining population and are less capable of planning ahead.

The interaction between urban and rural networks is very weak in the region. Rural and urban business networks do not overlap. Although some political cooperation exists among rural municipalities, cooperation between rural municipalities and more urban Cesis area is limited mostly to service delivery. For historical and cultural reasons horizontal networks are weak also among businesses who perceive each other as rivals and fear competition. For historical and cultural reasons entrepreneurship clusters have not taken root. There is little awareness about the clusters and their usefulness among entrepreneurs. Many entrepreneurs lack administrative capacity and skills to organize such networks.

In regional level, the projects carried out by Vidzeme planning region are focused on current regional development priorities, due to limited powers and capacity of planning regions in Latvia, their efforts are not sufficient to bring critical mass for

region's development. Since institutional capacity of smaller rural municipalities is insufficient for steering development, an alternative could be to increase coordinating capacity and authority of Vidzeme planning region. However, in the light of declining government financing, it is difficult to predict what turn regional administration structures will take. In addition to regional administration structures, EU funding is seen as important catalyst for development. Local actors stress the importance of lowering application and financial reporting requirements for European funds and urge to strengthen regional principle in awarding these funds.

Step 4: Policy options and future development

Variety of strategies can be formulated for PURR sub region in Latvia so that it can better come with challenges of decline. In addition to strategies which aim at stimulating material forms of territorial capital, such as productive use of natural and human resources, parallel strategies aimed at increasing place attractiveness, building social capital and cultural capital, also have to be pursued. It should be emphasized that integral rural development in Latvian case is not possible without renewing the trust to government institutions and local and national policy makers.

In regional economy two complementing strategies can be identified. First strategy focuses on developing of territories and economic sectors who already have potential for development. The structure of region's local economy suggest that several key industries, such as forestry, wood-processing and dairy farming need to achieve necessary resource combination to develop further. Wood-processing industry already has significant impact on regional economy, but it requires access to knowledge and expertise to develop higher value added products. Currently this knowledge is lacking in the region and has to be developed. Second strategy place focuses on supporting newly emerging potential industries, such as extraction of non-metallic mineral materials (clay, sand, gravel peat etc). Development of corresponding secondary sector industries, like chemical industry are necessary to support these newly emerging industries.

One of general development strategies for small economies is specialization and niche-based development. In case of PURR sub region this strategy could result into specialization in secondary economic sector with small businesses specializing in processing locally grown products. Minimization of mismatch in labor market, incremental innovation strategies, involving local companies and educational sector are important supporting elements for this strategy to be effective. In addition, economic clusters supporting production and processing of agricultural products, extraction and processing of mineral deposits, and processing of forestry products should be developed. Both formal and informal business services and networks are very important for promoting cooperation among different stakeholders. Informal

networks, such as local woman's clubs are emerging as perspective alternatives to formal cooperation networks in the region.

In agricultural sector one can observe polarization in rhetoric between larger and smaller farms and different types of agricultural activities. In some instances agriculture has become a bad bargain for small sized farms. Because of increasing influence of large agricultural firms, disadvantageous deals offered by foreign-owned supermarket chains, rising energy costs, lack of qualified workers, high production quality standards, and lower EU subsidies, many small scale farmers abandon agricultural activities and hand over their lands to larger agricultural companies which in many cases are foreign owned. Many former farmers have also became couch-farmers who rely on EU subsidies instead of using their land productively. In the same time home based production and self-subsistence farming become popular survival alternatives survival for many small farm owners. In addition the introduction of energy crops, alternative energy production infrastructure, farmer cooperation, diversification of agriculture, and improving quality of cattle can be identified as opportunities for agriculture.

Discussion about regional scenarios for governance is focusing around narrative of decentralization Local actors support decentralization of power to regions and local governments. With declining central government subsidies, local actors feel that central government should provide more autonomy. Therefore principle of *more autonomy, and less regulation* is advocated. If central government provides less financing, it's agencies should also impose less control, and lower accountability requirements. In addition to administrative decentralization, financial decentralization incentives in tax policy are advocated. Currently there is single income tax rate for individuals and companies. But due to considerable inequalities between the center and periphery, lower personal and business income tax rates for rural and urban municipalities can be introduced, because start-up and operation of businesses in Latvian rural areas is more difficult. General consensus seems to be that spatial planning has to aim at creating balanced poly centric development and positive rural-urban interactions with smaller towns as important secondary development centres.

Policy options supporting horizontal cooperation and coordination in governance and business are also relevant for the region. In some instances cooperation and coordination patterns between local actors are already present. These cooperation initiatives involved municipalities, schools and NGOs. Cooperation between PURR sub region municipalities is common in attracting EU funding and working on tourism products. However, it is suggested that local businesses should be more involved in these cooperation opportunities. Since population in rural areas is declining, rural municipalities have to cooperate more in providing access to better quality services.

Rural development centers should improve physical infrastructure and concentrate resources. There is a support for concentration and coordination of service provision and combine several types of services in one location/facility. Municipalities should support increased transport mobility to access services in other locations. Mobile service buses could be useful alternatives. Accessibility of services can also be increased through investments in telecommunications infrastructure.

The role or local governments are also important through smart utilization of procurement of goods and services to simulate demand in local economies. In the same time local entrepreneurs also have to work harder to deliver better deals that win tenders.

C6. Comparing the Stakeholder Regions

The methodology that was developed in section C3 rests on scientific evidence which implies that the *stakeholder perspective* is very important when it comes to identifying the intangible assets of territorial capital. Identifying this is crucial when it comes to identifying the development potentials of a region. This implies that the stakeholders have been very important sources of information for the individual case studies. At the same time, the dialogue between the stakeholders and the TPG has been very important for developing the four-step methodology in general, but especially when it comes to the contents of each of the four steps. Although the case studies (section C5) primarily represent studies of each of the five regions, they also represent a first test of the proposed methodology. The methodology itself relies on the dialogue between the experts (the TPG) and the stakeholders. In this sense, the methodology is dynamic and intensive, rather than static and extensive. Without the dialogue, it would have been impossible to arrive at reliable conclusions about territorial potentials. We would like to repeat that the conclusions (especially step 3, about potentials) also are based on dialogue, and that the methodology is meant to be generating processes rather than provide one (and only one) "black box" based answer. The individual case studies are discussed in section C5. Here, we try to look at the main conclusions from the five studies together.

The workshops generated a considerable amount of qualitative data, and the fact that the workshops in all five stakeholder regions were organised according to the same structure means that commonalities and differences can be discussed. It became apparent that there is some diversity in terms of the specific emphasis between the different regions. To a certain degree the emphasis is influenced by the roles and agendas of the people that participated in the workshops, but it also reflects the diversity of the regions. The diversity of the PURR regions is confirmed by the diversity of the rural typologies that illustrate the differences in terms of accessibility, economic performance, demographics and a variety of other characteristics. Such diversity is useful in the sense that one of the aims of PURR is

to develop a methodology (section B2/C3) that can be applied to a variety of different regions. Applying the methodology to the PURR regions has been a useful learning process.

The TPG found that the territorial capital of the five stakeholder regions is highly diverse. The emphasis in Notodden and Dumfries and Galloway appears to be on the role that *the towns can play in driving regional development*. There was considerable discussion with the regional stakeholders in Dumfries and Galloway about the differences between such regional development strategies that focus on towns as motors of development compared to rural development strategies that focus more specifically on rural issues such as upland farming. The stakeholders in Notodden (and Tinn) emphasised the fact that both the past and the future for the town and wider region are intrinsically linked to the industrial heritage.

Stakeholders in all of the case study regions are understandably concerned about the impact of the economic situation, though the situation in Latvia seems to be considerably more serious than in the other regions. The situation is likely to exacerbate the current challenging economic and demographic situation. In case of Vidzeme decline in population will have considerable effects in rural areas. One of such effects will be the unemployment risk in the education sector, in which currently considerable amount of people are employed.

Another impact of challenging economic and demographic situation appears to be that *stakeholders are focusing much more on short-term survival rather than long-term strategic planning*. The nature of the problems in Vidzeme contrasts with the challenges in North Yorkshire where stakeholders are concerned about their ability to be able to make their rural issues and challenges more visible. There is also considerable uncertainty in relation to the rapidly evolving governance landscape in England, though there is a clear desire to be proactive in capitalising on the opportunities offered by the new structures. The key task in the Cambrian Mountains appears to be building on the momentum of the ongoing Cambrian Mountains Initiative and to help strengthen the identity of the area as a brand.

In Latvia and the UK, the *cuts (and proposed cuts) in public spending* limit both development (employment, unemployment, population) and the local public sector's ability to be a driving force in regional development. Stakeholders in Notodden, on the other hand, are satisfied with the provision of local public services and are not to the same extent worried about future public spending. However, de-population might inflict local public sector income and the provision of public services also here, but this is not linked specifically to the general economic situation. This difference of course reflects the countries' different economic and political situations, which again have impacts on regional and local authorities' fiscal situation. It is interesting, in

this sense, to notice that the Stakeholders in Latvia propose income tax cuts as a means for achieving more competitiveness and production in the region.

More generally, though, *the governance structures seem to be in focus* in all Stakeholder regions, but in different ways. The Governance structure is changing dramatically in England, and the extent to which this represents a re-centralisation or de-centralisation of power and the type of opportunities that the new governance landscape offers to local authorities is still unclear. Stakeholders in Scotland and Wales appear to feel that the devolved governments have increased their proximity to the levers of power, though significant challenges remain, with strengthening identity being a key issue in each region. In Latvia, there is a centralised system of governance, which, together with declining public financing limits local public sector's ability to contribute in developing the region. In Norway, the local public sector is an active participant in local economic development, through both formal and informal networks. The municipality of Notodden also has (limited) financial capabilities aimed at private sector development and, of course, is a very important provider of public services directed towards the population.

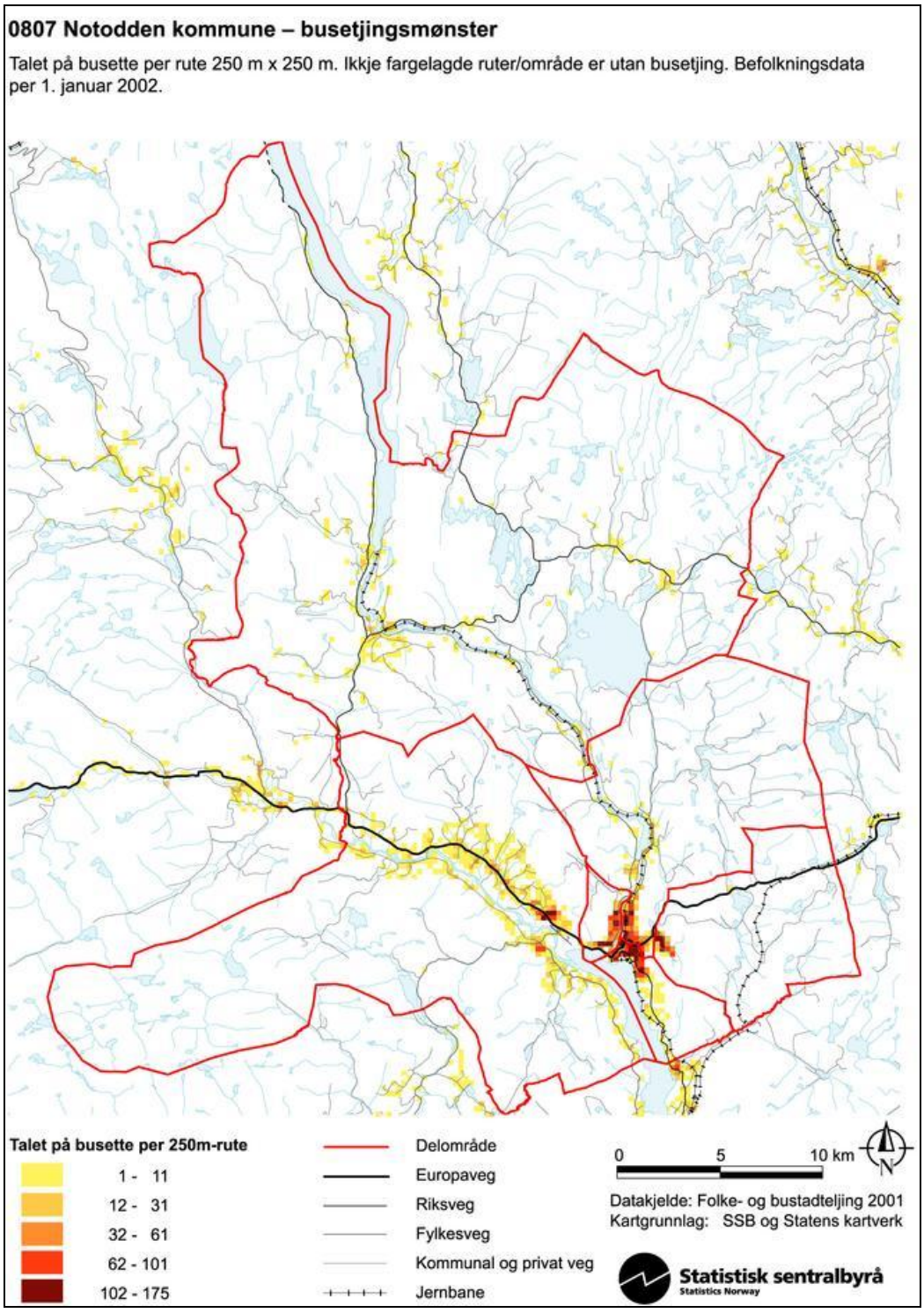
Although endogenous economic development, or what the regional actor can do themselves, are in focus in our analysis, *exogenous conditions have also been discussed among the Stakeholders*. Their preoccupation with exogenous conditions correlates in a sense with the governance structure, where the Latvian Stakeholders seem to focus more on these than the others. However, certain Stakeholders in the Norwegian and UK regions also emphasised the importance of finding a balance between capitalising on endogenous assets and attracting and utilising exogenous resources.

Economic structures vary between the different Stakeholder regions, as does the focus on future development potential. All regions, on the other hand, have their economic base, which is also viewed an important part of their territorial potential. More specialisation of production, trying to capitalise from the regions' competitive advantages, is considered one direction to choose for the future, as is the interest for instance in developing tourism further. Stakeholders in all regions have discussed agriculture's role in rural development, but the importance of agriculture varies and its future potential in terms of employment remains limited in all regions. Infrastructure development is also regarded an important factor in developing the territorial potential. In addition to improving infrastructure, additional strategies for improving business competitiveness, such as promoting rural business partnerships, public-private partnerships and clusters, were seen as important opportunities for development in Vidzeme. Need for cooperation and coordination between business, education and public sector was also emphasised. It seems like economic recession has induced more active search for available options.

D. Annexes

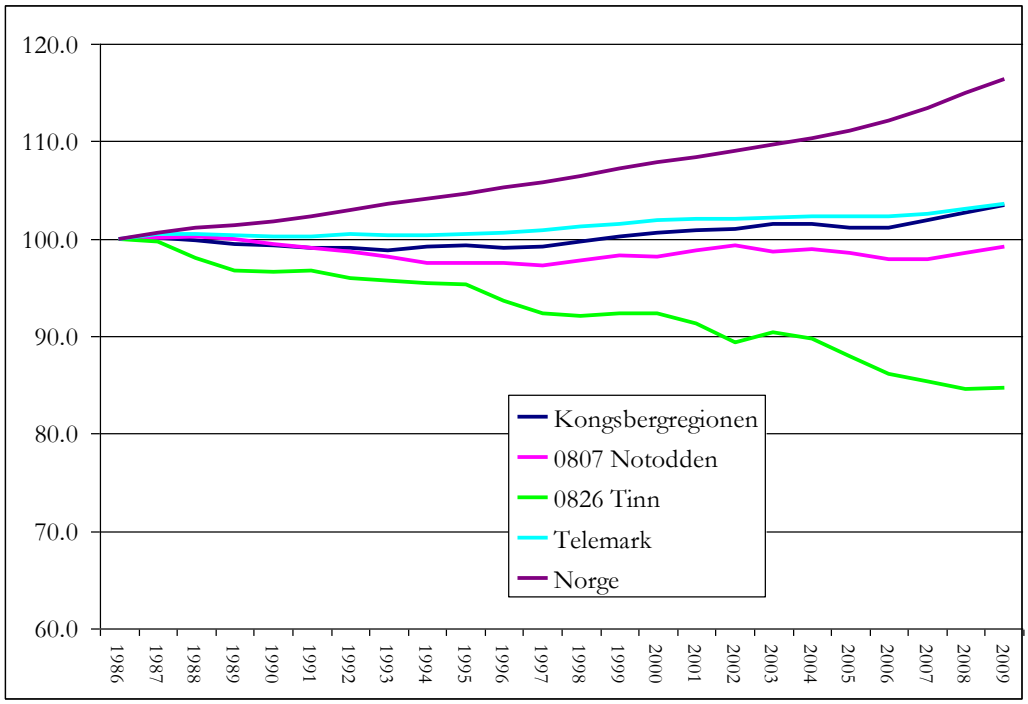
D1. Annex 1 Maps and More

Map A1: The Settlement Pattern of Notodden Municipality



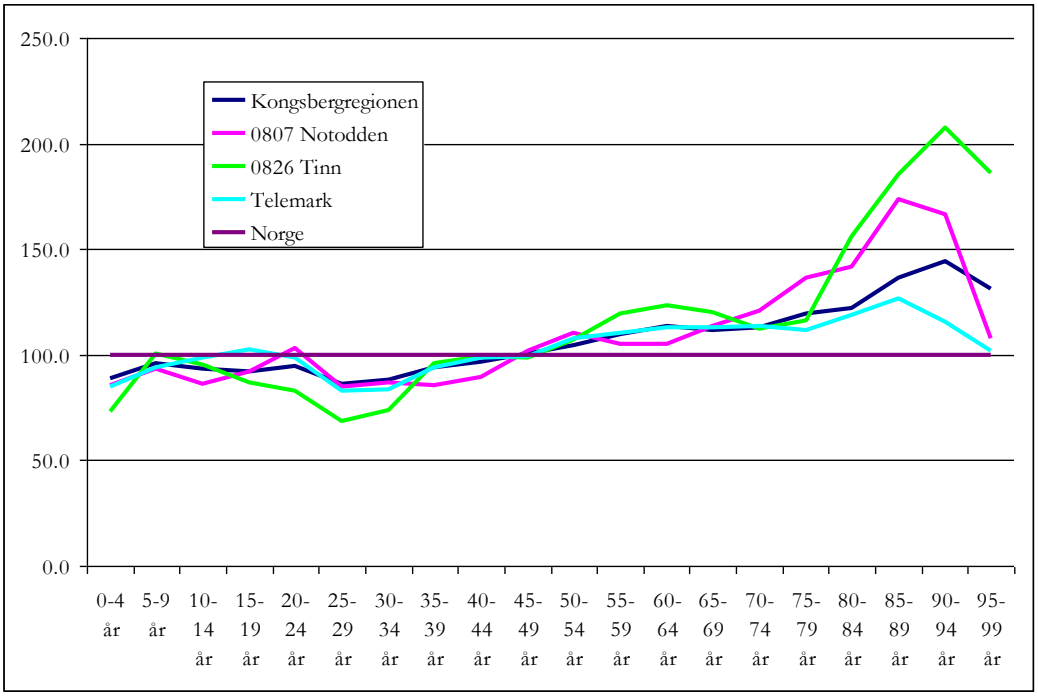
Source: Statistics Norway

Figure A1: Number of People in Notodden and Tinn, and Surrounding Areas. 1986=100



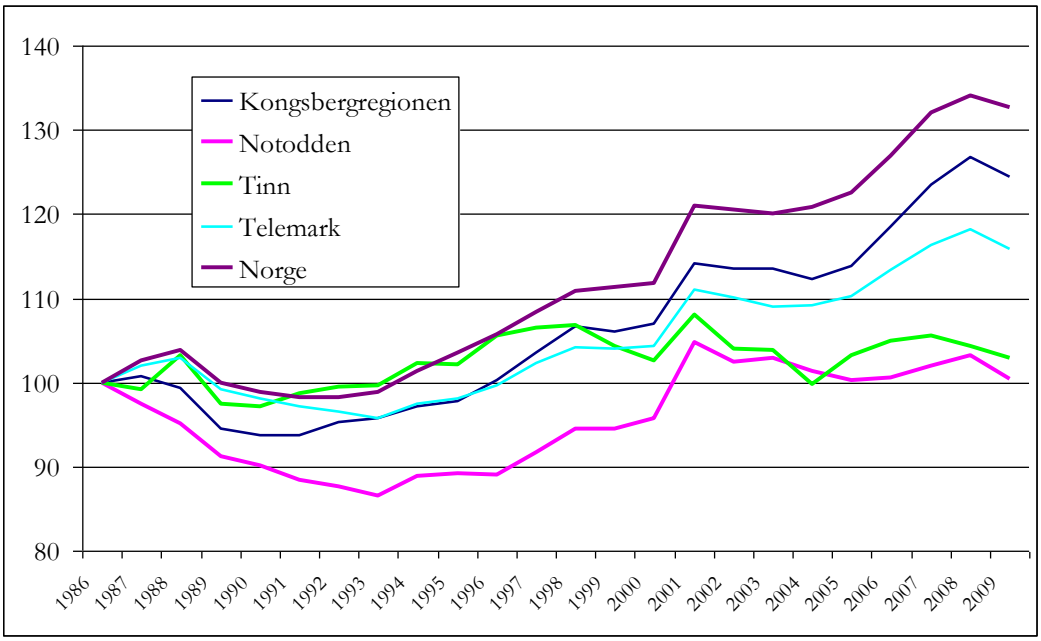
Source: Statistics Norway

Figure A2: The Age Structure in Notodden, Tinn and Surrounding Areas 1989. Five Year Age Groups. Norway = 100 for Each Age Group.



Source: Statistics Norway

Figure A3: Total Employment in Notodden, Tinn and Surrounding Area. 1986=100



Source: Information from Panda

Table A1: Economic Structure 2009 Measured by Employment Index (Localisation Index) by Sector. National Share = 100. Number of Employed 2009 by Region.

	Not-odden	Tinn	Kongs-berg region	Telemark	**Norge (per cent)**
Primary Industries	80	102	92	87	**3.2**
Oil and Gas	3	13	9	1	**1.1**
Manufacturing and Mining	102	117	247	124	**10.2**
Energy and Water Supply	215	559	176	195	**0.7**
Building and Construction	94	142	96	115	**7.4**
Trade, Hotels and Restaurants	101	88	86	97	**17.9**
Transports and Communications	76	81	55	79	**6.5**
Financial and Business Services	70	62	65	79	**14.2**
Public and Other Services	117	105	91	106	**38.4**
Unknown	128	81	102	142	**0.5**
Number of employed	**5,453**	**2,890**	**27,271**	**76,806**	**2,478,702**

Source: Information from Panda

SWOT for Notodden

Strengths

- Good living areas, variety with several smaller towns and attractive rural areas at the countryside
- Diverse business structure
- Active cultural life, many active NGO's and festivals
- Many attractive recreation areas without noise and traffic, not too crowded with people
- Easy access to wilderness, forests and waterways
- Good welfare system and public services holds a high standard
- A region with interesting history and traditions
- Good climate (compared with other Nordic regions)
- Established cooperation in the bigger Kongsberg region, that is, even if we also compete
- Good places to raise children
- Good communications to national and regional cultural scenes, opera and all services in Oslo
- Highlights: Roadmap to the roots of Norwegian industrialisation. Heddal Stave Church, Telemark Gallery, Norwegian Industrial Workers Museum. The story of "Heroes from Telemark" in WW II.

Weaknesses

- Even if public transport is good the main roads to markers and attractive locations is poor
- Train service is not reliable
- University College in Notodden is good, but threatened.
- There is still a lot to do to be better at governance
- Towns centres are not attractive enough, very much based on car transport
- Lack of accommodation services / hotel rooms
- Reputation is not very positive
- No coordinated visitor packages are developed
- Aesthetics and urban design is not very impressive, chaotic built environment
- Not so open-minded citizens, not welcoming immigrants and exploiting human resource potential
- Some key persons with power are not development oriented
- Drug abuse and violence an increasing problem
- Low educational level
- Small resources to development issues

Opportunities

- Strengthen cooperation between the municipalities, more holistic thinking and common goals at the regional level,
- Strengthen the cooperation on development issues and services
- Nature areas can become more valuable in the future
- Population growth gives more choices, positive impulses and better economy
- Be brave about what we already have
- Develop businesses which are more competence oriented
- Notodden will never be a tourist destination alone, but together with Tinn we might establish a win-win situation
- Build on entrepreneurial qualities and networks
- Develop regional meeting places, coordinate the will ”to go for the region”
- Better signposts
- Develop a more distinct/unique narrative for the region
- Variation and immigration give opportunities

Threats

- Others are more clever and smarter than us
- We keep being outside EU
- Lack on “hungry” entrepreneurs
- Housing policies can result in ”sleeping villages” and little engagement among citizens for city development
- Little will happen as for transformation and development and new urbanism
- Our region becomes unattractive for young people
- Municipality economy can be weakened from fasts immigration/growth
- Lack of actions towards immigrants can result in low identity feeling
- Lack of money and decisions
- Demographic threats – depopulation

North Yorkshire

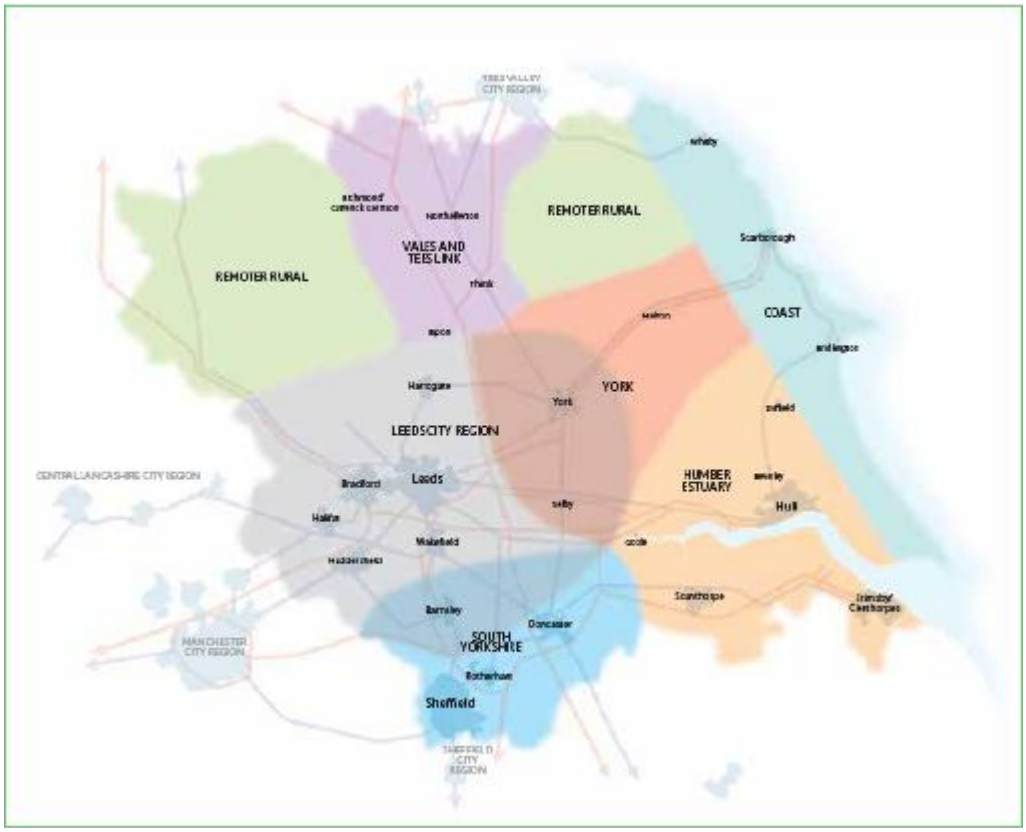
Map A2: North Yorkshire

Source: North Yorkshire County Council

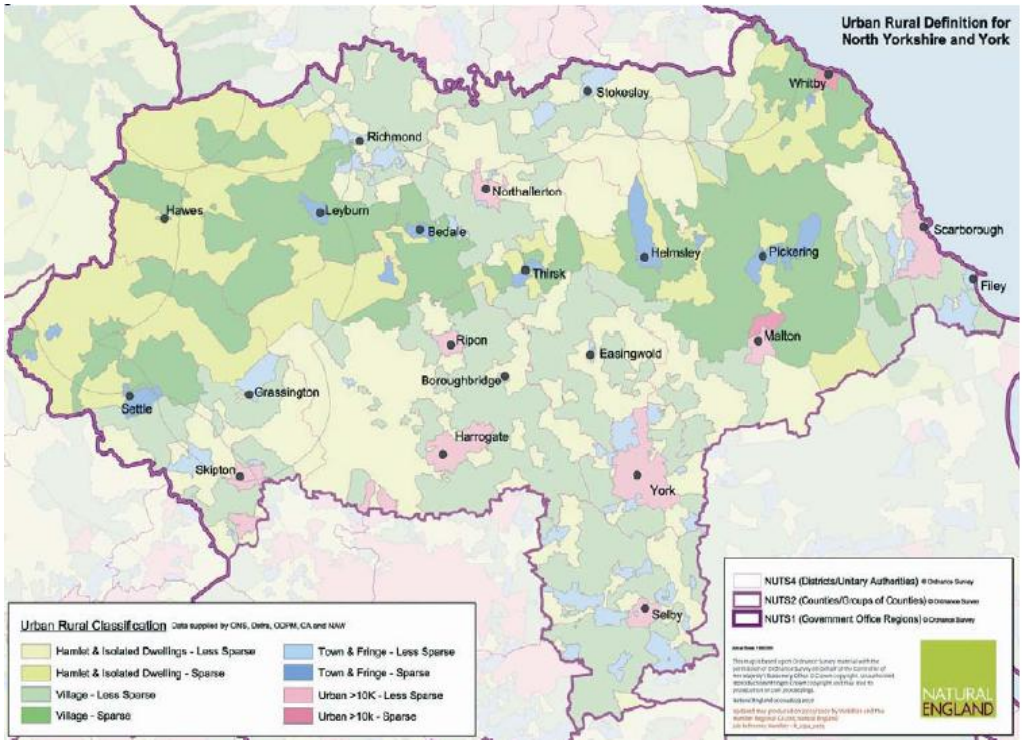
Map A3: North Yorkshire

Source: North Yorkshire County Council

Map A4: Yorkshire and Humber Sub-regions

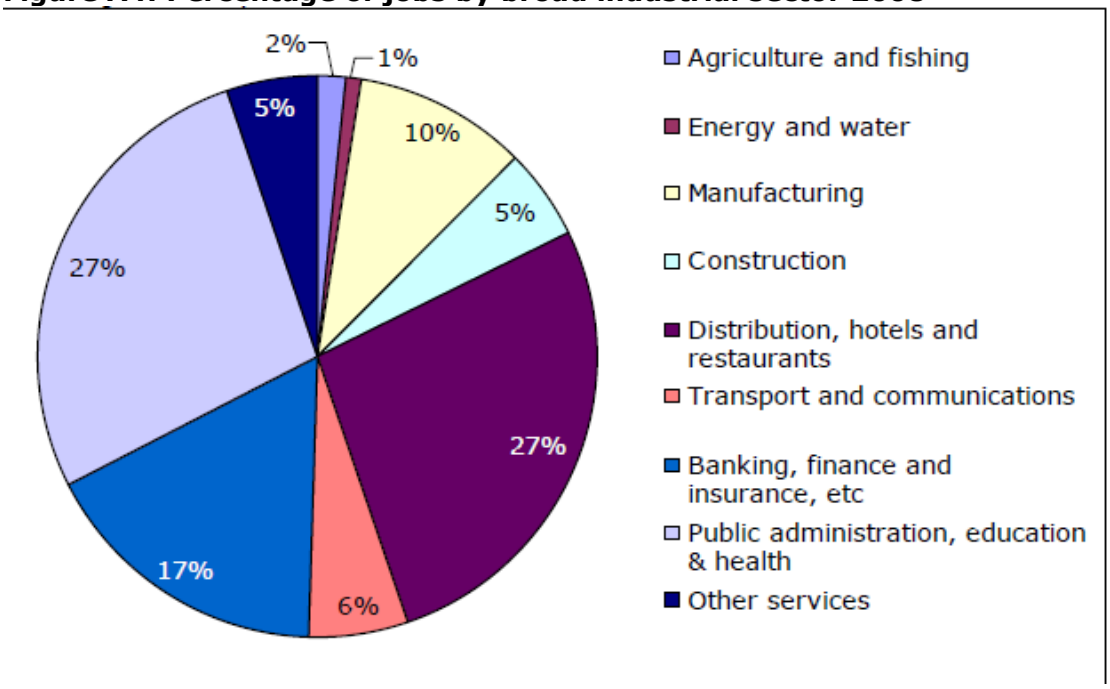


Map A5: Urban-rural classification



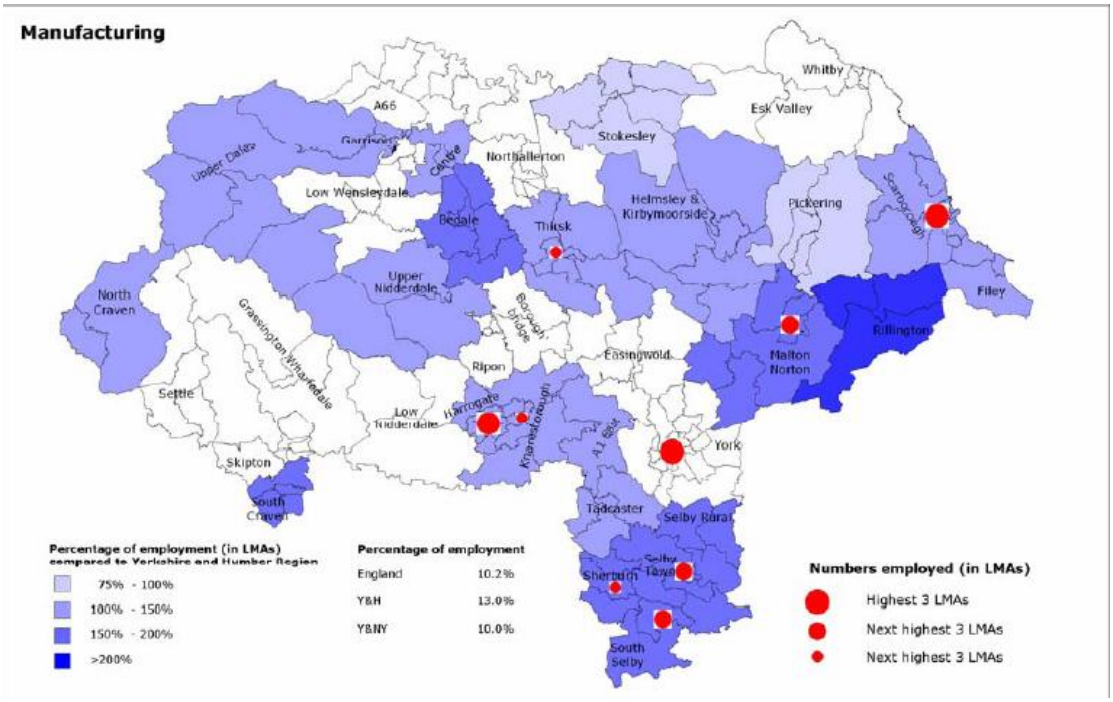
Source: Yorkshire Futures

Figure A4: Percentage of jobs by broad industrial sector 2008



Source Yorkshire Futures 2010

Map A6: Concentrations of manufacturing industry



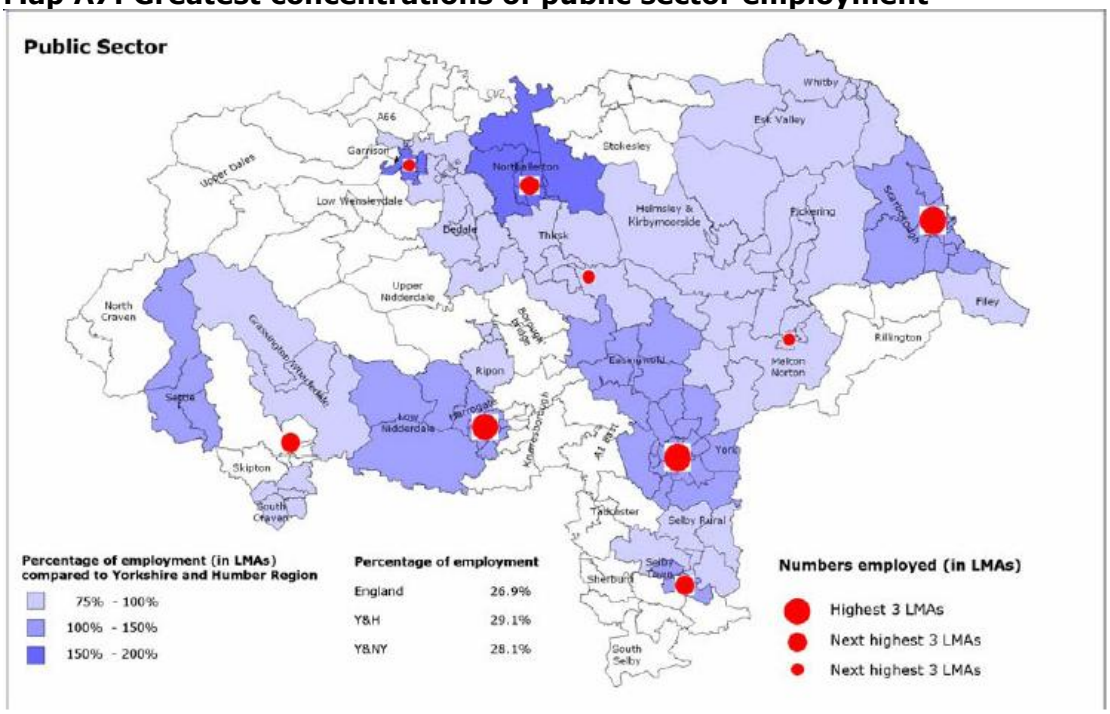
Source Yorkshire Futures 2010

Table A2: Structure of Businesses in the Service Economy

Businesses		Driver Services No.	Producer Services No.	Local Services No.	Total
York and North Yorkshire	**No.**	4,357	9,643	18,924	35,860
	%	12.2	26.9	52.8	91.8
North Yorkshire	**No.**	3,057	7,664	15,073	28,344
	%	10.8	27.0	53.2	91.0
York	**No.**	1,430	1,981	3,718	7,516
	%	19.0	26.4	49.5	94.9
Craven	**No.**	386	783	1,581	3,055
	%	12.6	25.6	51.8	90.0
Hambleton	**No.**	309	1,286	2,433	4,464
	%	6.9	28.8	54.5	90.2
Harrogate	**No.**	835	2,654	4,167	8,259
	%	10.1	32.1	50.4	92.7
Richmondshire	**No.**	222	554	1,289	2,264
	%	9.8	24.5	57.0	91.2
Ryedale	**No.**	239	656	1,555	2,780
	%	8.6	23.6	55.9	88.1
Scarborough	**No.**	870	774	2,286	4,317
	%	20.2	17.9	52.9	91.0
Selby	**No.**	167	959	1,791	3,205
	%	5.2	29.9	55.9	91.0

Source Yorkshire Futures 2010

Map A7: Greatest concentrations of public sector employment



Source Yorkshire Futures 2010

Dumfries and Galloway

Map A8: Map of Dumfries and Galloway

Map A9: Subregions

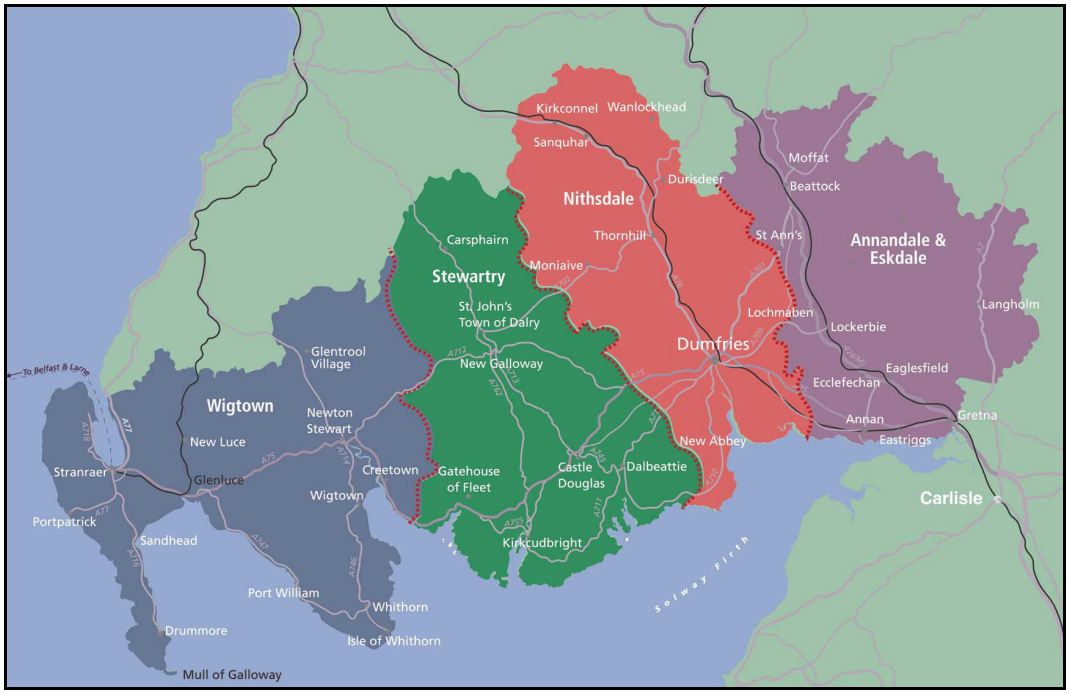


Table A3: Scottish population by age, 2009 and projected changes over time

	Dumfries & Galloway		Scotland	
	No. (000s)	%	No. (000s)	%
Total population	**149**	**100%**	**5,194**	**100%**
Below age 16	25	17%	912	18%
Age 16-64	91	61%	3,413	66%
Above age 64	32	22%	869	17%
Changes in population	diff since '01	diff to 2033*	diff since '01	diff to 2033*
Total population	**0%**	**-1%**	**3%**	**7%**
Below age 16	-10%	-7%	-6%	-1%
Age 16-64	0%	-18%	4%	-5%
Above age 64	14%	53%	8%	62%
** Takes into account change in state pension age*				

Source: General Register Office for Scotland, 2009

Table A4: Earnings April 2010. Full-time employees on adult rates (residence based)

	Dumfries & Galloway £	Scotland £	% difference from Scotland
Gross Average* weekly Earnings	449.7	486.9	-7.6%
Males	477.7	521.8	-8.5%
Females	404.5	430.1	-6.0%

* Median

Table A5: Employment July 2009 to June 2010

	Dumfries & Galloway		Scotland	
	No. (000s)	%	No. (000s)	%
In employment				
All	**68**	**71.6%**	**2,462**	**71.0%**
- full time work	47	69.6%	1,802	73.3%
- part time work	21	30.4%	657	26.7%
- employees	57	83.4%	2,178	89.1%
- self employed	11	15.5%	265	10.9%
Males	34	**73.8%**	1,275	**74.8%**
Females	34	**69.5%**	1,186	**67.4%**
Economically active				
All	**72**	**75.8%**	**2,663**	**76.9%**
Males	37	79.8%	1,401	82.3%
Females	35	71.9%	1,261	71.7%
People who want to work but are not in employment†				
All	**10**	**10.4%**	**398**	**11.7%**
Males	6	13.0%	210	12.6%
Females	4	8.0%	188	10.9%
People aged 16-64 with a degree level qualification				
With degree	15	16.4%	697	20.5%
Model Based Unemployment (Apr 2009 - Mar 2010)				
All	**4.2**	**5.7%**	**195.4**	**7.3%**

Table A6: Number and Porportion of Employee Jobs by Industry, 2008

	Dumfries & Galloway		Scotland	
Industrial group (SIC 2007)	No. (000s)	Percentage	No. (000s)	Percentage
All industries	**58.9**	**100%**	**2,420.4**	**100%**
Agriculture, forestry & fishing	**3.6**	**6%**	**36.5**	**2%**
Production & construction	**11.2**	**19%**	**407.4**	**17%**
Mining & Energy	1.3	2%	57.3	2%
Manufacturing	6.7	11%	199.0	8%
Construction	3.3	6%	151.1	6%
Services	**44.1**	**75%**	**1,976.6**	**82%**
Retail & wholesale & accomodation and food	15.6	26%	535.2	22%
Transport & comm	3.1	5%	162.0	7%
Finance and business	4.9	8%	444.9	18%
"Other" Services*	20.6	35%	834.4	34%

*Other services includes Public Admin, Education, Health and Other Services

Table A7: Corporate Sector: Scottish Employment & Enterprises by Size of Enterprises, March 2010

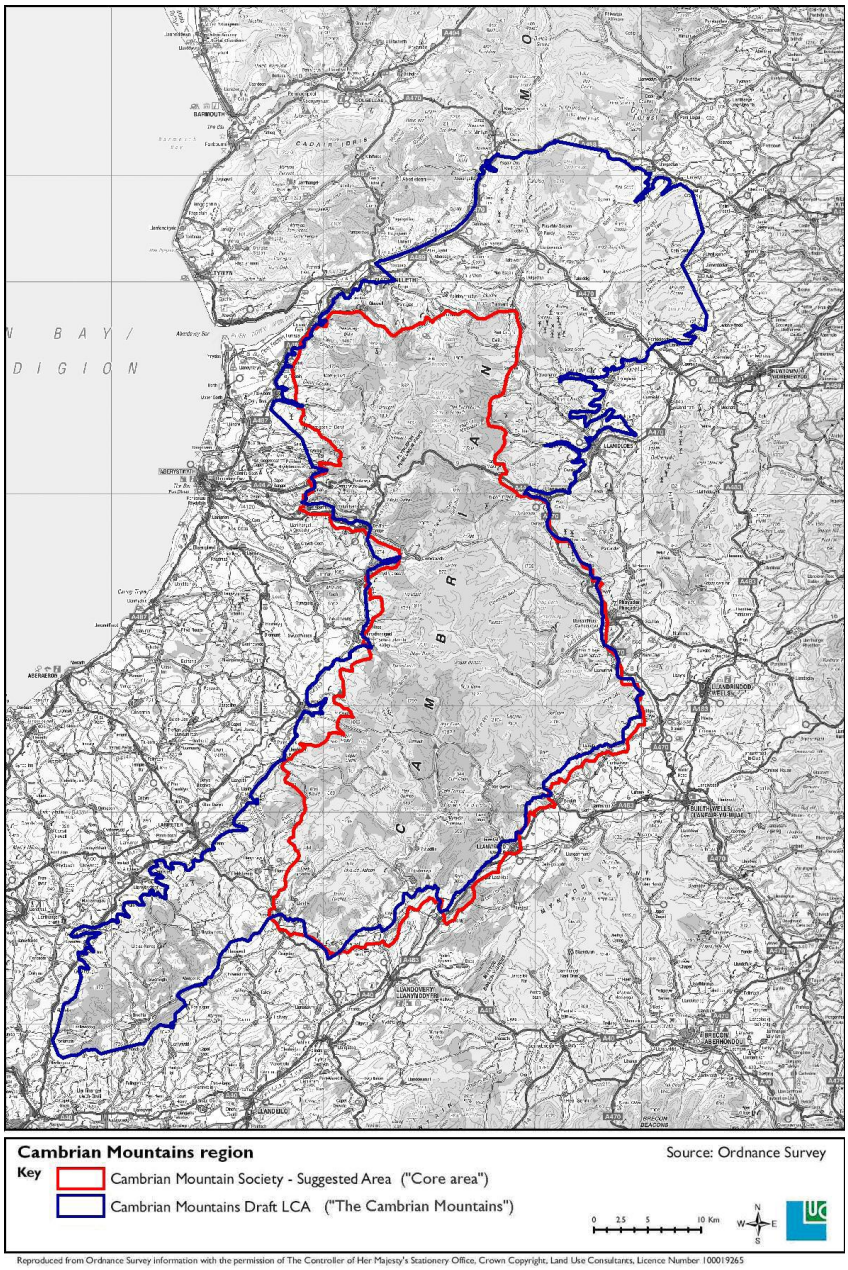
	Dumfries & Galloway		Scotland	
Size of enterprise	No. (000s)	%	No. (000s)	%
Total employment*	**48**	**100%**	**1,836**	**100%**
Small	26	55%	638	35%
Medium	6	12%	256	14%
Large	15	33%	942	51%
Size of enterprise	Number	%	Number	%
All enterprises	**6,780**	**100%**	**153,460**	**100%**
Small	6,330	93%	147,550	96%
Medium	130	2%	3,660	2%
Large	320	5%	2,260	1%

* Enterprises with geographical identity only

.. Data not available due to reliability or confidentiality

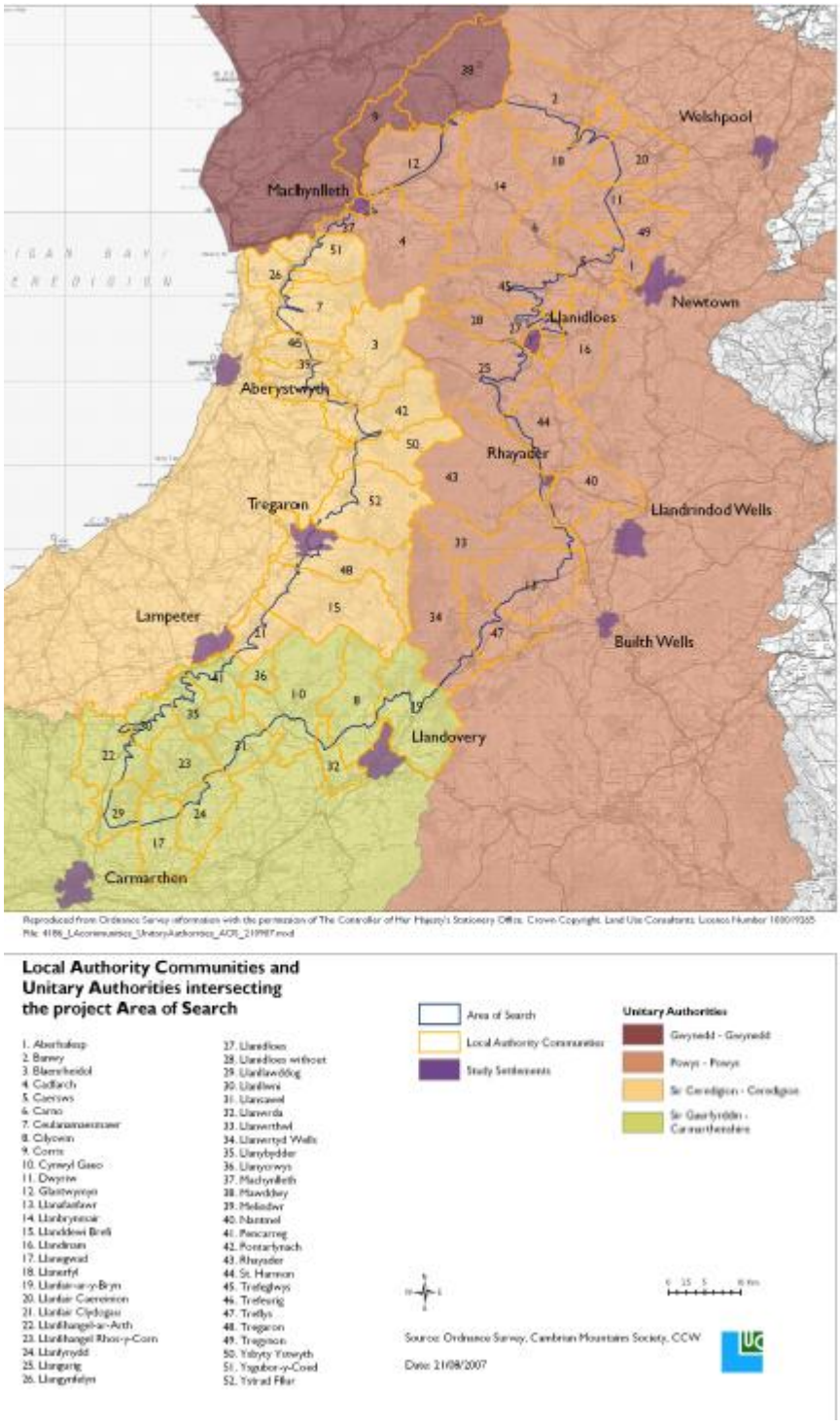
Cambrian Mountains

Map A10: Cambrian Mountains and Boundaries



Source: Land Use Consultants 2007

Map A11: Local authority boundaries



Source: Land Use Consultants 2007

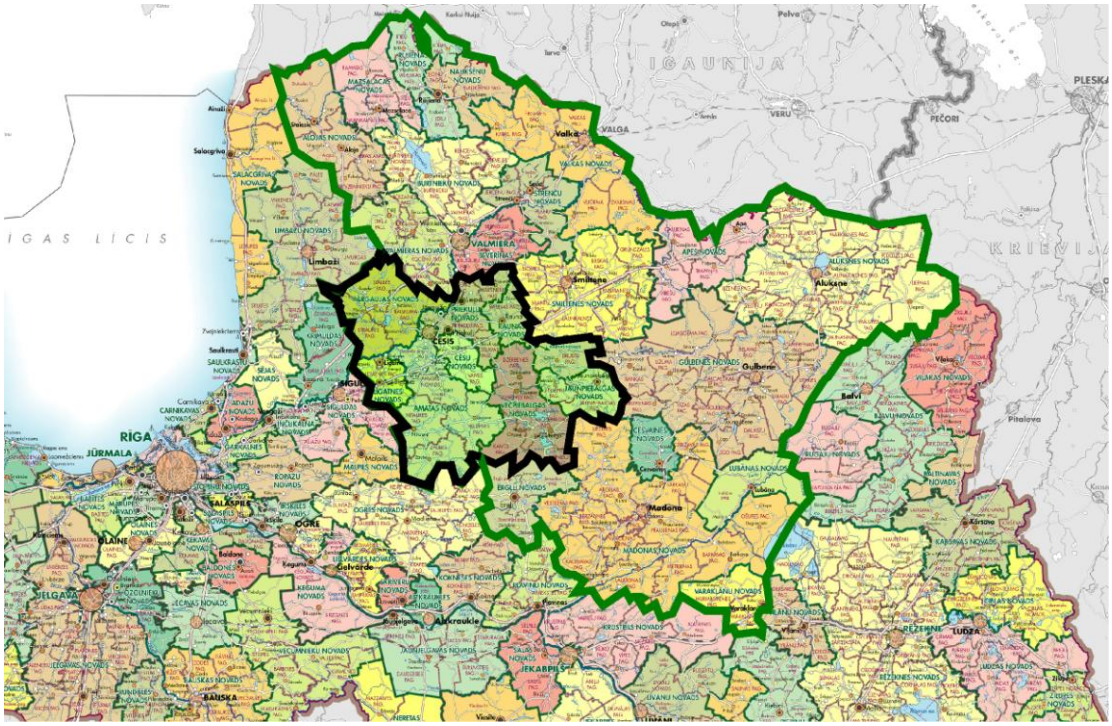
Table A8: Relative deprivation in Cambrian Mountains

Domain	Number of wards (out of 17) in the quartile	
	Most deprived 25% in Wales	Least deprived 25% in Wales
Overall IMD	0	2
Income	0	8
Employment	0	7
Health	0	8
Education	0	9
Child Poverty	0	6
Housing	12	0
Access to services	17	0

Source: Welsh Indices of Multiple Deprivation 2008

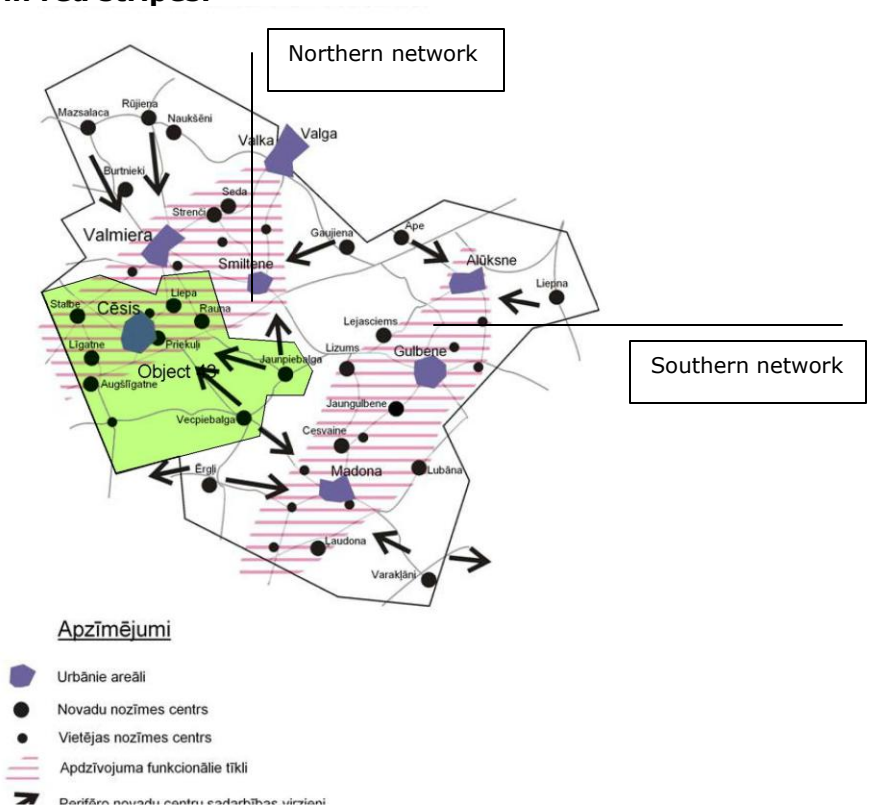
Vidzeme and Amata

Map A12: Vidzeme Planning Region. Borders of Vidzeme Planning Region (NUTS3 level) are coloured in green. PURR subregion area is marked in black.



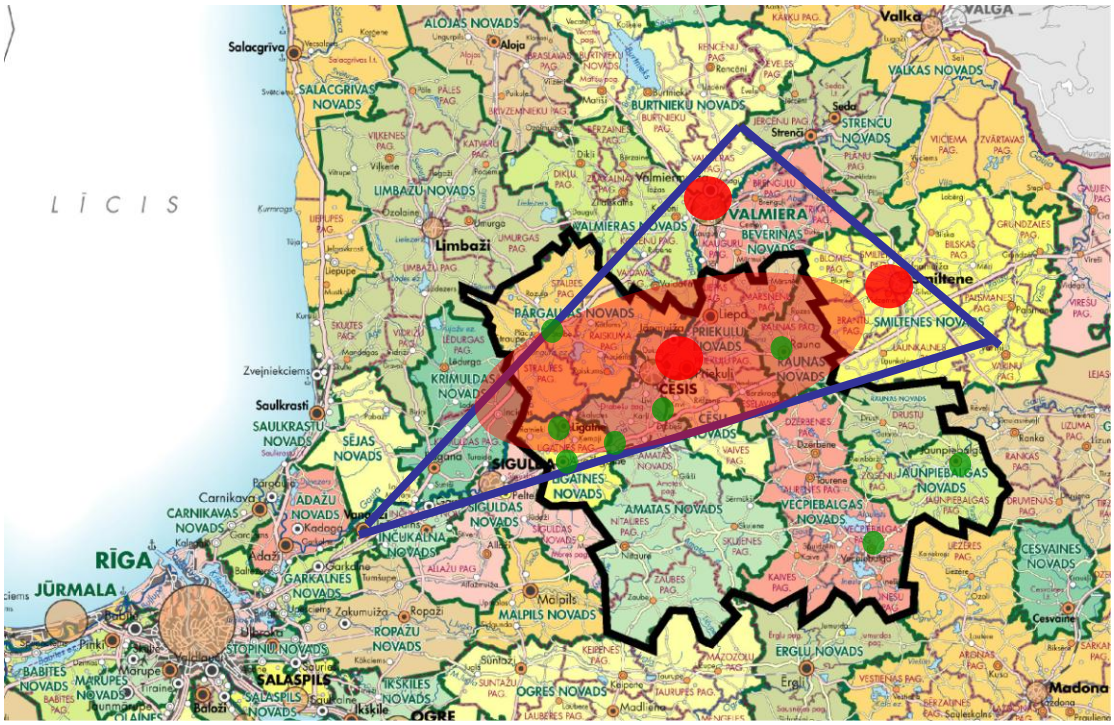
Map A13 PURR focus area. Rural municipalities around Cēsis.

Map A14: Urban areas and functional networks in Vidzeme region. PURR subregion is colored in green. Urban areas are colored in blue. Functional networks are colored in red stripes.



Source: Vidzeme Planning Region. (2007) *Vidzeme Spatial Planning Perspective.*

Map A15. Geographic area with most prospects for employment located in triangle area between Cēsis, Valmiera and Smiltene (shown as red dots). Secondary development centers marked as green dots.



Source: Assessment by regional workshop participants , Amata, Latvia, 15.10.2010.

D2. Annex 2: Regional Typologies in Brief

Urban-Rural Typology (Dijstra-Poelman Types)

This typology is a modified form of the well known OECD classification. It distinguishes regions according to both (i) the proportions of their population living in "rural" LAU2 areas (defined as those with a population density <150 persons per KM2) and (ii) the share of its population which can drive to a city of >150,000 inhabitants within 45 minutes. Five types of regions are defined:

1. Predominantly Urban (PU)

21. Intermediate Accessible (IA).

22. Intermediate Remote (IR).

31. Predominantly Rural Accessible (PRA).

32. Predominantly Rural Remote (PRA).

Structural Typology for non-urban regions

The EDORA Structural Typology is applied only to non-urban regions (i.e. all regions except those defined as Predominantly Urban (PU) in the Dijkstra-Poelman Typology).

Four types of "non-urban" region are distinguished:

1. Agrarian economies.

2. Consumption countryside.

3. Diversified (with important Secondary Sector).

4. Diversified (with important Market Services Sector).

A stepwise decision tree was used to define the types, as follows:

"Agrarian" regions were first identified, (using a composite indicator of the importance of primary sector activity).

Secondly, within the non-agrarian residual, regions in which "Consumption Countryside" development seem important were identified (using a composite indicator of access to environmental assets, tourism capacity, and farm diversification) [1].

The remaining regions were denominate as "diversified", and, (using an indicator defined as the ratio of Secondary Sector to Market Services GVA) they were subdivided into;

- those in which secondary activities are important, and
- those in which market services have become dominant.

Performance typology for non-urban regions

The EDORA Performance Typology is applied only to non-urban regions (i.e. all regions except those defined as Predominantly Urban (PU) in the Dijkstra-Poelman Typology).

Four types of "non-urban" region are distinguished:

1. Accumulating
2. Above Average
3. Below Average
4. Depleting

The methodology was based upon a composite regional performance indicator derived from the following variables;

(a) net migration,

(b) GDP per capita,

(c) average annual change in GDP,

(d) average annual change in total employment,

(e) and unemployment rate.

D3. Annex 3: Literature and References

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