



DERREG:

DEVELOPING EUROPE'S RURAL REGIONS IN THE ERA OF GLOBALIZATION



Final Publishable Summary Report February 2012

Compiled by Michael Woods

DERREG Project Coordinator, Aberystwyth University

with DERREG partners

Grant Agreement: 225204

Funded under call FP7-SSH-2007-1, Theme 8: Socio-economic Sciences and Humanities

1. EXECUTIVE SUMMARY

1.1 Background

Globalization has a pervasive influence over regional development in rural Europe, presenting both opportunities and challenges. The liberalization of markets and integration of the global economy, together with the expansion of transport and communications networks, the opening of borders and increased patterns of transnational migration, as well as growing consciousness of global perspectives on the environment and other issues, have prompted, intensified and exaggerated processes of social and economic restructuring in rural areas.

The DERREG project, funded by the European Union Seventh Framework Programme, has examined how globalization processes are impacting on rural economies and societies in practice, and why impacts and responses vary between different regions. In particular, DERREG has aimed to develop understanding of how regional development policies and initiatives can effectively respond to globalization and wider rural restructuring, shaping outcomes in specific regions.

The DERREG project has been undertaken by a consortium of nine universities and research institutes from across Europe, led by Aberystwyth University. Research has been focused on ten case study regions located in eight countries, and organized around four the global engagement and embeddeness of rural businesses; international migration and rural regions; environmental capital and sustainable rural development; and capacity building, governance and knowledge systems. Research across these themes involved a range of data collection and analysis methods, including surveys, interviews, workshops, documentary analysis and media analysis

1.2 Research Results

From the analysis undertaken in the DERREG research, an interpretative model has been proposed to understand how globalization produces particular effects and responses in different rural regions. The model shows that *globalization processes* such as market liberalization, network extension and intensification, the intensification of international mobility, acceleration of information flows and the growth of global consciousness, interact with *regional contexts and capacities* to produce differentiated potential effects, influenced by geographical location, regional resources, political-economic context and human capital.

These potential effects are converted into actual impacts through the agency of *catalysts*, which can include individual entrepreneurs, corporate executives or institutional policies. Resulting impacts identified in the case study regions are numerous and diverse, ranging from foreign direct investment in branch plants to the purchase of property by foreign amenity migrants and cross-border commuters.

From a rural development perspective the important question is how regions *respond* to these impacts and the challenges and opportunities that they bring. The detailed thematic research by DERREG has identified four key elements that are important to effective regional development strategies, and the appropriate policy interventions and mechanisms required to support them.

Firstly, resilient responses to globalization require support for endogenous business. The development of international networks by endogenous rural businesses offers greater long-term resilience than foreign direct investment. Many rural businesses are engaged in international networking, but the extent of internationalization varies between regions. Network brokers can help to build the capacity of rural enterprises and connect them to international networks.

Secondly, international migrants can make a significant contribution to rural regional development. The DERREG research reveals a high degree of mobility of international migrants to, from and through rural regions, but their potential to contribute to regional development has been largely neglected. Initiatives to promote entrepreneurship among migrants can help to harness this potential.

Thirdly, global environmental awareness has created opportunities for the sustainable development of rural environmental capital. Sustainable development projects have been built into regional development strategies, but their implementation can be contested. Eco-economy initiatives need to be appropriate to regional contexts and developed through inclusive methods to build consensus.

Fourthly, effective regional development is supported by joint regional learning and innovation. The joint working of public administration, knowledge institutes and regional groups and individuals can increase the capacity for grassroots development initiatives through exercises in reflection, learning and priority-setting. Appropriate organizational arrangements and resources are required to ensure that such interventions are effective.

2. PROJECT CONTEXT AND OBJECTIVES

2.1 Background

Globalization has a pervasive influence over regional development in rural Europe, presenting both opportunities and challenges. The liberalization of markets and integration of the global economy, together with the expansion of transport and communications networks, the opening of borders and increased patterns of transnational migration, as well as growing consciousness of global perspectives on the environment and other issues, have prompted, intensified and exaggerated processes of social and economic restructuring in rural areas.

For some commentators, globalization represents a threat to rural regions in Europe – undermining traditional industries, diluting regional cultures and eroding local autonomy. For others, globalization has diminished the historic locational disadvantages of rural localities, creating new opportunities for economic development, tourism and the repopulation of declining communities.

The DERREG project, funded by the European Union Seventh Framework Programme, has reached beyond these stereotypes to examine how globalization processes are impacting on rural economies and societies in practice, and why impacts and responses vary between different regions. In particular, DERREG has aimed to develop understanding of how regional development policies and initiatives can effectively respond to globalization and wider rural restructuring, shaping outcomes in specific regions.

2.2 Policy Context

The policy challenge presented by globalization has been recognized by the European Commission, which has stated that "globalization is seen to touch every walk of life — opening doors, creating opportunities, raising apprehensions", such that "our response to globalization has moved to the heart of the EU

policy agenda". The delicate balance of threats and opportunities presented by globalization is particularly significant for rural regions - which constitute 91% of the EU land area, are home to around 50% of its population, generate 45% of Gross Added Value and provide 53% of employment.² Traditional industries such as agriculture, forestry and textile manufacturing are vulnerable to global competition and deregulation, rural communities are exposed to the effects of transnational migration and increasingly internationalized property markets, and traditional practices of nature management are being scrutinized in the context of global environmental concerns. At the same time. globalization has reordered notions of 'core' and 'periphery' that have historically marginalized rural regions, opening up new markets for rural enterprises and attracting new investors into rural localities.

The adoption of appropriate responses to both challenges and the opportunities of globalization is critical to the future development of rural regions in Europe, and will be important to the formulation and implementation of EU policies for the 2014-2020 programming period in at least three areas. Firstly, the appropriate identification of opportunities and challenges for rural areas within the global economy will be crucial to the development of Pillar 2 of the Common Agricultural Policy, encouraging the diversification of rural economies. Since the Cork Declaration in 1996, EU rural development policy has emphasized endogenous 'bottom-up' approaches, led by regional actors and utilizing regional resources. As such, the fundamental questions for developing rural economies in the context of globalization are how to most effectively combine regional resources and global networks for economic gain, and how to best

¹ European Commission (2007) *The European Interest:* Succeeding in the Age of Globalization. Contribution to the October Meeting of Heads of State and Government. Brussels: CEC.

² European Commission (2006) *Community Strategic Guidelines for Rural Development (Programming Period* 2007 to 2013). Brussels: CEC.

equip regional actors to engage with globalization processes.

Secondly, the spatially-uneven impact globalization processes across rural presents challenges for the EU's territorial cohesion policies. Rural areas include some of Europe's wealthiest regions, but also some of its poorest regions. The majority of the territory designated as Convergence Regions in the 2007-2013 programming period was comprised by rural regions, including nearly all rural regions in the 2004 and 2007 Accession States. Yet, conventional notions of the economic geography of 'core' and 'peripheral' regions are being tested by globalization processes that have contributed to significant economic growth in peripheral regions such as the west of Ireland and northern Sweden, but have further eroded the economic position of other rural regions. An understanding of the spatial dynamics of globalization and of continuing relevance of geographical factors in shaping globalization experiences is hence important for developing effective territorial cohesion strategies.

Thirdly, the sustainable management of the abundant natural resources contained within Europe's rural regions will be pivotal to the delivery of EU environmental policies and its action to address global concerns such as climate change and biodiversity. The harnessing of natural resources to generate renewable energy and provide environmental services has the potential to produce both environmental and economic benefits. However, there is a risk that policies and initiatives championed from the topdown might be contested if they are perceived to conflict with established land management practices, economic interests cultural traditions. Engaging rural people in inclusive approaches to sustainable development is hence essential for effective environmental action, including the new expectation on the Common Agricultural Policy to support ambitious climate, energy and biodiversity targets.

2.3 Scientific Context

In spite of the opportunities and challenges for rural areas resulting from globalization described above, social science research on globalization in a rural context has until recently been overshadowed by a predominant emphasis on urban regions and systems.³ Such research that has been conducted from a rural perspective has tended to focus on specific processes or sectors within the rural economy. Thus, for example, an extensive literature has emerged over the past decade on the global agri-food system, including work on 'global value chains' that has detailed transnational networks of agricultural production and supply. Whilst some studies have examined the impact of global value chains on rural localities in the global south, there has been little comparable research on the consequences of agri-food globalization for rural areas in Europe.⁴

Similarly, research on international migration has only recently started to expand its focus beyond cities to rural areas, prompted in part by the phenomenon of labour migration from Central and Eastern Europe to Britain and Ireland after enlargement in 2004. Research subsequently documented the dynamics and experiences both of migrant workers and (to a lesser extent) of amenity migrants in rural regions of Europe, however, an emphasis on individual empirical studies has meant that this work remains relatively fragmented and disconnected from questions of rural development.5

Accordingly, as Michael Woods has observed, this analysis has been missing "the input of a substantial body of place-based studies — research that might not only adopt an integrated perspective in examining the impact of different forms and aspects of globalization in a rural locality, but that might also explore precisely how rural places are remade under globalization,

³ For an overview of this critique see M. Woods (2007) Engaging the global countryside: globalization, hybridity and the reconstitution of rural place, *Progress in Human Geography*, vol 31, pp 485-507.

⁴ For examples of this work see C. Stringer and R. Le Heron (eds) (2008) *Agri-Food Commodity Chains and Globalising Networks*. Aldershot: Ashgate.

⁵ For examples of this work see B. Jentsch and M. Simard (eds) (2009) *International Migration and Rural Areas*. Aldershot: Ashgate, and J. Bærenholdt and B. Granås (eds) (2008) *Mobility and Place: Enacting Northern European Peripheries*. Aldershot: Ashgate.

and start to account for the differential geographies of globalization across rural space."

Furthermore, the few notable exceptions to this critique – largely studies in North America or Australia – have tended to present a fairly bleak and even fatalistic picture of rural localities struggling to cope with global competition and globalization-linked industrial restructuring, with only a few privileged resort locations reaping any benefits from globalization – a contrast articulated by Epp and Whitson as being between 'global dumping grounds' and 'global playgrounds'.⁷

The DERREG research has consequently aimed to respond to Woods's challenge to develop an integrated and place-based analysis of globalization in a rural context, but also to counter the fatalism of some previous studies by examining opportunities for regional actors to make a difference and identifying examples of good practice.

In doing so, DERREG has drawn particularly on two bodies of conceptual literature. Firstly, it has adopted the 'relational approach' to globalization associated with human geographers such as Doreen Massey and Ash Amin.⁸ This approach presents globalization not as a singular, domineering force, but rather as a disparate and diverse collection of processes and tendencies that involve the stretching, multiplication, re-alignment of intensification and economic and political relations over space. It holds that places are never truly isolated, but that the distinctive character of a place comes from the unique intersection of social and economic flows and networks that connect it to other places. Globalization therefore involves not the replacement of the local with the global, but more subtle changes to place that result from the stretching or substitution of these ties. Thus, as Woods observes, "places in the emergent global countryside retain their local distinctiveness, but they are also different to how they were before". 9

As such, from a relational perspective, localities should be viewed never as the inevitable victims of globalization, nor as strongholds of resistance to globalization. Rather, the approach argues that the global is reproduced through the local, through processes of negotiation, manipulation and contestation that involve both local and non-local actors.

In this way, the relational approach has important implications for our understanding of rural development in the context of globalization. It provides a framework for explaining why similar processes produce different outcomes in different regions, including by indicating that rural entrepreneurs, policy-makers, development agents and social movements might all be engaged in shaping these outcomes.

Secondly, DERREG has drawn on the extensive academic literature on rural development, and work especially on endogenous rural development. This research has evolved concurrently with the implementation of bottomup strategies for rural development in Europe, and has not only documented the practice and outcomes of this approach, but has also analysed the dynamics and principles that underlie the approach and inform the effectiveness of different initiatives. These were summarized by the EU Framework Programme 6 project ETUDE in a diagrammatic 'web of rural development' that described the interactions between six domains: endogeneity, novelty-production, capital, institutional sustainability, social frameworks and market governance. 10 The interactions between these domains, it is suggested, shape the trajectories of rural development in different regions - noveltyproduction may be combined with market governance to create new branded products, for example, whilst social capital is identified as a critical lubricant for inter-relations.

The rural web is useful in envisaging and analysing relations between actors within regions, however, it does not directly consider how regional actors engage with globalization processes, beyond reference to market

10

⁶ Woods, ibid., p 490.

⁷ R. Epp and D. Whitson (eds) (2001) *Writing Off the Rural West*. Edmonton: University of Alberta Press.

⁸ See for example, D. Massey (2005) *For Space*. London: Sage.

⁹ Woods, ibid., p 500

¹⁰ See J. D. Van Der Ploeg and T. Marsden (eds) (2008) *Unfolding Webs: The dynamics of regional rural development*. Assen: Van Gorcum.

governance. In seeking to emphasize the regional-global interface, DERREG has therefore additionally drawn on wider literature in relational economic geography on 'network economies'. This literature has emphasized the significance of 'intangible assets' and 'organized proximity' in the global economy, supplanting the previous tendency for spatial agglomeration, and has also pointed to the importance of business networks in diffusing information and driving entrepreneurship. ¹¹ However, empirical research testing these theories has been limited, especially in a rural context.

Furthermore, the design of DERREG stressed the perceived importance of knowledge not only to inter-regional networking, but also to intra-regional capacity building. This built on the findings of EU Framework Programme 6 project CORASON, which demonstrated both that rural regions can benefit from the global circulation of knowledge, and that local and lay knowledge are important to innovation;¹² but sought to develop the analysis by adapting the concept of 'learning regions' initially conceived to analyse the interaction of industry, government and science in technology-driven urban development.¹³

2.4 Project Objectives

In order to respond to issues raised by the policy and scientific contexts, and with the aim of contributing both to the advancement of scientific understanding and to policy development, DERREG adopted the overall objective of producing an interpretative model that will enable regional development actors to better anticipate and respond to the key challenges for rural regions arising from globalization.

Supplementary objectives were to:

- ¹¹ See for example, R Boschma (2005) Proximity and innovation: a critical assessment, *Regional Studies*, vol 39, pp 61-74, and Johansson and Quigley (2004) Agglomeration and networks in spatial economics papers, *Regional Science*, vol 83, pp 165-176. A full review of this literature is presented in DERREG Deliverable 1.4.
- ¹² See H Tovey (2008) Rural sustainable development in the knowledge society era, *Sociologia Ruralis*, vol 48, pp 185-199.
- ¹³ See R Rutten and F Boekema (2007) *The Learning Region*. Cheltenham: Edward Elgar.

- Enrich the scientific evidence base for understanding globalization-led restructuring in rural regions;
- Promote good practice in regional development responses by assembling a database of good practice examples;
- Provide new insights into the challenges associated with particular processes of change, including the global engagement of rural enterprises, international migration, and the globalization of environmental discourse;
- Develop understanding of the different challenges facing different types of rural region, thus assisting the fine-tuning of regional development strategies;
- Establish a web-based resource centre to facilitate and coordinate the dissemination and accessibility of information to researchers, regional development actors and other users interested in the challenges of globalization for rural regions.

To support these objectives, the project was structured into seven work packages: four focused on specific research themes as described below - the global engagement and local embeddedness of rural business; international migration and rural regions; environmental capital and sustainable development; and capacity-building, governance and knowledge systems - one focused on the synthesis of research results and the development of an interpretative model; and two concerned with dissemination and project management respectively.

The project was coordinated by the Institute of Geography and Earth Sciences at Aberystwyth University (UK) and involved a consortium of eight further partners: Leibniz Institut für Länderkunde, Leipzig (Germany); Mendel University, Brno (Czech Republic); the National University of Ireland, Galway (Ireland); Nordregio – Nordic Centre for Spatial Development, Stockholm (Sweden); Universität des Saarlandes, Saarbrücken (Germany); the University of Ljubljana (Slovenia); Wageningen University (Netherlands), and Research Institute NeVork, Ljubljana (Slovenia).

3. RESEARCH RESULTS

3.1 Project Design and Research Methods

The DERREG project has been undertaken by a consortium of nine universities and research institutes from across Europe, led by Aberystwyth University. To provide a place-based approach, research has been focused on ten case study regions located in eight countries, which were selected to represent a range of geographical and political-economic settings (see figure 1).

The research has also been organized around four themes reflecting key aspects globalization processes and rural development responses (figure 2). The first theme has examined the global engagement and local embeddedness of rural businesses, and in the transactional and particular, networks of small and medium-sized enterprises (SMEs). Led by Nordregio, research on this theme involved an e-mail survey of over 200 firms in five case study regions to collect data on the scale and reach of business networks, supplemented by structured interviews with company managers - designed to explore the characteristics and evaluations of interactions in more detail - and 'network brokers' in the public, private and voluntary sectors.

The second theme has investigated **international mobility and migration to rural regions**, focusing particularly on migrant workers, foreign homeowners and return transnational migrants. Led by the Universität des Saarlandes, the research for this theme involved analysis of statistical and documentary evidence and qualitative interviews

with migrants, municipal leaders and representatives of initiatives working with migrant communities. A total of 113 interviews were conducted with migrants across six case study regions, including 50 with migrant workers, 39 with foreign home-owners and 24 with return migrants.

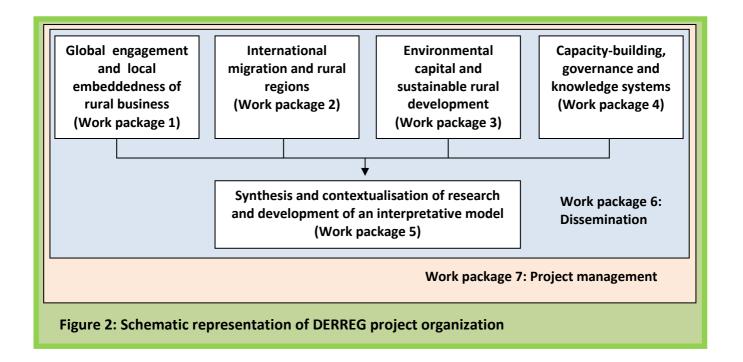
The third theme has concerned environmental capital and sustainable rural development, exploring the incorporation of local and global environmental issues into regional development strategies and opportunities for the exploitation environmental capital sustainable development. The research for this theme, led by the Leibniz-Institut für Länderkunde, involved the analysis of statistics, policy documents and media reports concerning environmental issues and sustainable development, interviews with regional stakeholders, and detailed case studies in each of five study regions.

Finally, the fourth theme has examined capacity building, governance and knowledge systems, particularly by developing and applying the concept of 'rural learning regions'. Research, led by Wageningen University, was conducted in six case study regions and involved the mapping and analysis of policy strategies to support joint learning and innovation - drawing on web literature and searches, reviews interviews; the in-depth analysis of a sample of grassroots initiatives in each region, including further interviews; and the identification and analysis of 'well-working' examples.



Figure 1: Location of DERREG case study regions

- 1. Övre Norrland, Sweden
- 2. County Roscommon / West Region, Ireland
- 3. Alytus county, Lithuania
- 4. Comarca de Verin, Spain
- 5. Goriška, Slovenia
- 6. Pomurska, Slovenia
- 7. Jihomoravský kraj (South Moravia), Czech Republic
- 8. Westerkwartier, the Netherlands
- 9. Direktionsbezirk Dresden / Oberlausitz, Germany
- 10. Saarland, Germany



The evidence from each of the four themes has been collated and combined with background statistical and documentary analysis to produce an overarching interpretative model, which is presented in this report. Additionally, examples of 'good practice' in regional development responses and initiatives were collected across the four themes and ten case study regions and compiled in a searchable database available on the DERREG website, www.derreg.eu.

The sections below present the main results from each of the four research themes, before describing how these results have informed the development of an interpretative model of globalization impacts and responses in rural regions.

3.2 Global Engagement and Local Embeddedness of Rural Businesses

Rural business networks are potentially a key component of a new approach to territorial rural development. This moves beyond outdated concepts of the rural economy as dependent upon urban spillovers and backwash effects, or compensation for locational disadvantage. Instead it acknowledges the fact that although some of the more extreme 'death of distance' predictions of the impact of improved transport, travel and communication technology have not materialised, and face-to-face communication still plays a key role in business life, a significant

incremental shift is taking place. An increasing proportion of the interaction between rural firms is no longer constrained by physical distance. Key transactions, and also non-market linkages often involve partners beyond the region, or even outside the national boundary. In academic terminology, it could be said that firms are increasingly operating within relational, rather than Euclidean space, or that there has been a partial decoupling of organised and spatial proximity. This is important in terms of economic development, because the extra-regional linkages are believed to act as channels for technical information and market intelligence which drive innovation and sustain competitiveness.

The existing literature in relational economic geography has described the characteristics of transaction and non-market linkages, outlined a number of different concepts of business networks, including industrial districts, clusters, milieu, innovateurs, learning regions, etc.. A key point that emerges across this literature is that business networking can act as a surrogate for agglomeration, allowing dispersed rural firms to compete with those operating in an urban suburban environment. The or preconditions for success of rural business networks relate not only infrastructure, or availability of good access to information technology (such as high speed broadband), but also to a range of 'intangible assets'. These include human capital (education,

age structure of the workforce etc), aspects of social capital (an outward looking, non risk-averse entrepreneurial culture, trust, cooperative ethos), facilitative governance arrangements and so on. It is also commonly argued that the most effective and dynamic business networks are those which combine dense and interactive patterns of local interaction with a smaller 'external' component. This idea is often referred to by the memorable phrases 'the strength of weak flows' or 'local buzz and global pipes'.14

By combining lessons derived from this literature, a hypothesis was articulated for the DERREG research on the global engagement and local embeddedness of rural businesses, as follows:

Successful and dynamic rural firms derive "networking economies" from frequent and effective interaction, not only with the local business environment, but also with a much more extensive set of linkages, stretching out across Europe. This implies that global integration and more local "territorial anchoring", are not Indeed mutually exclusive. they are complimentary aspects of a "survival strategy" for SMEs in rural areas.

This hypothesis provided the framework for empirical research in five case study regions (Övre Norrland, Sweden; Alytus county, Lithuania; Goriška, Slovenia; Jihomoravský kraj, Republic; and Westerkwartier, Netherlands). The research comprised three surveys, two targeting local SMEs and one focused on 'network brokers' who seek to develop and enhance regional business networking. The first SME survey was an electronic (e-mail) survey, with mostly 'closed' questions amenable to qualitative scoring and simple descriptive statistical analysis. A quota sampling approach was employed, with a target of 50 responses in each case study region and

over 200 responses eventually being received. The second SME survey took the form of structured interviews with а subset respondents to the e-mail survey. The main findings from the research are outlined below.

'Open' rural economies

A degree of internationalization of business transactions was observed in all five case study regions, although with significant variation. The highest levels of international engagement were recorded in Slovenia and Sweden, and the lowest in Lithuania and the Netherlands, with survey respondents in the Czech Republic exhibiting a bipolar distribution between internationally active firms and enterprises trading on a largely regional scale (Table 1). These different patterns reflect a number of factors including sectoral structure, the size of the regional market, human capital (especially language skills), local planning policy, and proximity to national borders. Nevertheless, in spite of the differences, the underlying trend is clearly one of SME networks in rural regions opening up to interact beyond regional and national borders. Many respondents regarded internationalization as an important step in their business development, with improved transport communications infrastructure helping to facilitate this expansion.

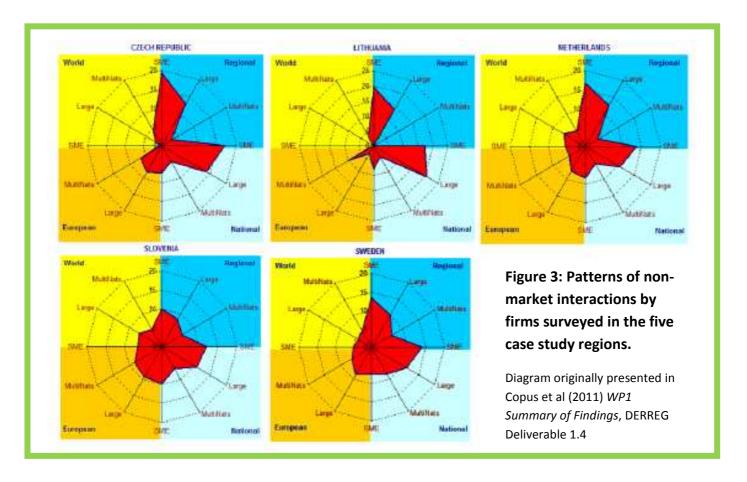
Embedded collaboration

The 'collaborative space' of rural businesses is defined by the web of non-market relations developed by firms. Interactions with other companies are very important in product and process development, as well as for market consolidation and expansion. These interactions are especially important for SMEs that are too small to afford to fully internalize activities such as research and development or marketing. In contrast to transactional linkages, the survey data shows that non-market interactions continue to be largely concentrated within the home region or country, most commonly with other SMEs (Figure 3). Transnational non-market linkages are more common in the Slovenian and Swedish case studies, but even here significantly less than the density of international transactional networks. As such, the results question the assertion in the existing literature that transactional and non-

¹⁴ The term "the strength of weak ties" is from M Granovetter (1985) Economic action and social structure: the problem of embeddedness, American Journal of Sociology, vol 91, pp 481-510; the term "local buzz and global pipes" is from H Bathelt, A Malmberg and P Maskell (2004) Clusters and knowledge: local buzz, global pipelines and the process of knowledge creation, Progress in Human Geography, vol 28, pp 31-56.

Region (no of responses)	Goriška (SI) (20)	South Moravia (CZ) (40)	Övre Norrland (SE) (47)	Westerkwartier (NL) (38)	Alytus (LT) (42)
Fully	35%	26%	21%	13%	4%
internationalized					
Party	45%	33%	32%	8%	15%
internationalized					
Mostly national	15%	5%	34%	15%	4%
Mostly regional	5%	37%	13%	65%	78%

Table 1: Classification of firms according to degree of internationalization of business transactions



market linkages are closely aligned,¹⁵ and point instead to the importance of 'institutional proximity' in building trust, and the role of faceto-face communication.

Translocal integration

The international linkages recorded by the survey were predominantly with SMEs in other regions within Europe. This finding contrasts with the presumption in the existing literature that small firms are primarily enrolled in international networks through 'vertical integration' into global

value chains controlled by large transnational corporations, usually as a supplier. Our evidence points instead to rural businesses developing direct networking with SMEs that occupy similar positions in the production chain in other countries, thus advancing a model of 'translocal integration' rather than distinctively 'global integration'. This may reflect the nature of products traded by rural enterprises, and the success of rural firms in carving out business spaces outside the sphere of large transnational corporations.

Moreover, quantitative measures of the density or intensity of business interactions at different scales do not in themselves tell the whole story

¹⁵ For example see F Tödling and A Kaufmann (1999) Innovation systems in regions of Europe – a comparative analysis, *European Planning Studies*, vol 7, pp 699-717.

about global integration. Interviews conducted for the research suggest that international linkages are often more highly valued by firms than regional or national linkages. In particular, international networks are regarded as important for information exchange, especially with respect to market intelligence. The diffusion of technical innovations through international networks, emphasized in the existing literature, was less significant for the rural businesses studied.¹⁶

Regional support networks

The rural firms responding to the survey predominantly continue to rely on regional or institutions such as national government agencies, trade organizations, research institutes and business consultants for support services. In some cases, the support mechanisms accessed have European Union funding, but are delivered regionally and there is little recorded direct interaction with organizations outside the home country for support services. One of the most notable forms of support provided to rural SMEs is 'network brokerage', which can perform one of two functions. Firstly, network brokers can act as 'match-makers' between individual SMEs to extend their networks, usually by adding international linkages. Secondly, network brokers can organize 'forum facilitation' activities bringing together firms with common interests to strengthen interactions and foster collective learning. Whilst the first function commonly supports international engagement, the second might consolidate regional embeddedness. A critical factor in the effectiveness of the first function is the quality and reach of the 'metanetworks' of network brokers that span different scales and can provide access to potential international partners.

Geographical variations

As noted above, comparative analysis of the five case study regions reveals a number of variations in the results that point to the continuing significance of geographical factors. Firstly, cross-border networking with adjacent regions in neighbouring countries contributed to the degree of internationalization in Slovenia, and to a lesser extent Sweden. In contrast, the border locations of the Lithuanian and Czech case study regions

appeared to present fewer opportunities for cross-border interaction. Secondly, proximity to domestic markets is a negative factor in stimulating internationalization – firms in regions with relative ease of access to sizeable domestic markets, as in the Dutch case study, have less of an incentive to develop international linkages than firms in more remote regions with smaller domestic markets, as in the Swedish case study. Thirdly, variations in national and regional policies can have an effect. Spatial planning policies in the Netherlands, for example, militated against the development internationally-engaged businesses in the rural Westerkwartier, whilst policies in the Czech Republic are more favourable to industrial investment, possibly contributing to the higher degree of enrolment in vertically-integrated networks observed for firms in the region. Similarly, the emphasis of network brokering activities varied, with network brokers in Sweden and the Netherlands focusing on connecting firms to intra-regional and international networks, and network brokers in Lithuania, Slovenia and the Czech Republic emphasizing regional capacity building and access to public funding.

Overall, research on this theme has revealed a significant, if regionally variable, degree of international engagement by rural SMEs through business transactions, but also a continuing tendency for these activities to be embedded in local support networks, collaborations and resources. The combination of international engagement and local embeddedness reflects the concept of 'local buzz and global pipes' articulated in the regional development literature, but in contrast to previous studies, the DERREG research indicates the importance of 'translocal integration'. This strategy of linking with smaller international partners in preference to large corporations, coupled with the use of regional resources and networks, arguably gives rural firms a greater degree of control over their engagement with the global economy and involves less exposure to risks from external approach events. As such, a mixed of and international engagement embeddedness can strengthen resilience, with the research providing some evidence of firms looking to expand international linkages as a response to the economic downturn.

¹⁶ See Bathelt et al., op cit.

3.3 International Mobility and Migration to Rural Regions

International migration is an increasingly significant aspect of globalization for rural regions in Europe. Increased mobility of people across national borders, permanently or temporarily, has resulted from cheaper and faster transport, the liberalization of travel, immigration and property ownership restrictions, variations in living and labour costs, and the growth of global communications technologies, as well as the push factor of uneven regional development, and the pull factor of labour shortages in key industries in more affluent regions. Within Europe, the standardization of residence and employment entitlements, and the introduction of the Schengen passport-free area, have facilitated freedom of movement.

As noted above, the international migration literature has conventionally focused immigration to urban areas, with rural regions situated as the source regions for international migration. In spite of a significant body of work in rural geography and sociology on domestic urban-to-rural migration, research international migration to rural areas has been limited until recently. Accordingly, there is comparatively little knowledge or understanding of how the dynamics of migration to and through rural regions may differ from those of urban immigration, or of the experiences of immigrants to rural areas, their social and economic integration with local communities, and the implications for rural development.

In seeking to address this knowledge gap, the DERREG research on international migration to rural regions aimed to investigate the role of migrants in rural regional development and to evaluate the problems of social cohesion and development that result from heightened migration into rural regions. The research has been framed around the hypothesis that peripheral rural regions are not equipped with the level of technical infrastructure, social diversity and dynamic labour markets associated with metropolitan areas, and consequently that theories of migration that emphasize these factors are not appropriate to capture the practices of processes and international migration to rural regions. As such, the analysis and explanation of international migration to rural regions requires a new framework, which can account for the specific situations of diverse rural regions, which may include an ethnically homogeneous settled population, limited industrial and professional employment opportunities, and low accessibility.

Drawing on recent developments in migration studies that have emphasized the complexity of contemporary migration patterns and the fluidity of global mobility, the DERREG research adopted a multi-dimensional approach to analysing migration.¹⁷ This has involved interrogation of six dimensions of migration, grouped in two interlinked clusters: kind or character of migration (e.g. rural to urban, urban to rural, individual, group etc.); time-related characteristics (short-term, long-term, permanent); distance-related characteristics; political dimensions (e.g. labour market policy, social regulations); purpose for migration; and sociologically-related dimensions (e.g. integration, legality, etc.). Furthermore, the model recognizes that these interlocking dimensions can be analysed for migration flows at different scales, thus representing the dynamic and interconnected character of global mobility (Figure 4).

This conceptual framework informed the methodology for the empirical research, which was conducted across six case study regions (Övre Norrland, Sweden; County Roscommon, Ireland; Alytus county, Lithuania; Pomurska, Slovenia; Regierungsbezirk Dresden, Germany; and Saarland, Germany). Following an initial analysis of statistical data and documentation relating to migration in these six regions, detailed empirical research was focused on three types of migrants (migrant workers, foreign home owners, and return migrants), targeted in the regions in which these migrant groups are most significant.

Falke (eds) Europäisierung Beiträge zur transnationalen Europadebatte. Hamburg: LIT Verlag.

¹⁷ This model is derived from F Düvell (2006) Europäische und international Migration: Einführung in historische, soziologische und politische Analysen. In U Liebert and J

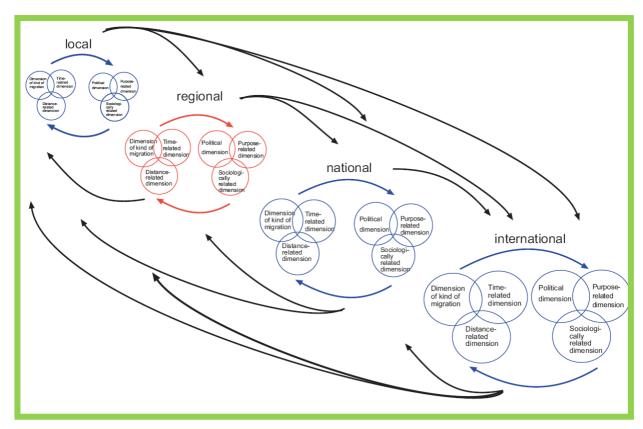


Figure 4: Inter-locking dimensions and scales of migrationDiagram originally presented in Frys and Nienaber (2010) *Overview of Different Migrant Histories*.
DERREG Milestone 2.2

Thus, research on migrant workers was Alytus, Övre conducted in Norrland. Regierungsbezirk Dresden and Saarland. This involved interviews with mayors or municipal leaders in Alytus in order to collect data on the out-migration of migrant workers (compensating for the absence of accurate and up-to-date official statistics on this), and information on destinations, experiences and the resulting challenges for the home communities. There then followed semi-structured interviews with migrant workers in Germany and Sweden, and with migrant workers in Lithuania, talking about their migratory history and exploring their motivations, experiences and intentions with regard to their life at home and abroad. A total of 50 migrant workers were interviewed, including not only migrant workers from within the EU, but also workers from outside the EU, including Turkish and Asian workers in Germany and Australian and South African workers in Sweden.

Biographical interviews were also conducted with **foreign home owners** (both as second homes and as permanent residences) in Slovenia, Germany and Sweden. These explored the motivations,

experiences and intentions of foreign property owners, and combined with documentary analysis, were used to examine the effects of foreign home ownership in its different forms on the case study regions. A total of 39 foreign home owners were interviewed across the three regions.

Finally, return migration to rural regions was examined through interviews with migrants in Ireland's West Region and Alytus, Lithuania. These interviews biographical in format, discussing the problems, challenges and opportunities that arise in the reinsertion of return migrants into communities, and the potential contribution of return migrants to regional development drawing on skills and competences developed elsewhere. A total of 24 interviews were conducted with return migrants.

The results of the three research strands were subsequently combined to create an overarching analysis of international migrant flows from, to and through rural regions, and the resulting challenges for regional development. The key findings are presented below.

Dynamics of migration

The multidimensional analysis shows that the majority of foreign home owners, migrant workers and return migrants moved from urban areas to the rural case study regions. Foreign home owners and return migrants were predominantly from other EU countries, but migrant workers included significant numbers of non-EU citizens, including a majority of those interviewed for the study. Most migrants interviewed, of all types, had been or were intending to be long-term residents in their destination region (staying for at least 12 months). This included British property owners in the Pomurska region of Slovenia, but not generally foreign home owners in northern Sweden, where properties tended be owned as holiday homes and occupied for only part of the year.

Most of the migrants interviewed were relatively long-distance migrants, including migrant workers from India, Sri Lanka, Vietnam, Mozambique and Central Asia in Germany, and return migrants from Canada and the USA in Ireland and Lithuania (Figure 5). Significant trans-European patterns of mobility were also evident, including foreign home owners from Britain in Slovenia and from Germany in Sweden, and return migration from the UK and the Netherlands to Ireland, and from the UK and Ireland to Lithuania. The major exception was Saarland, where the predominant pattern is of short-distance, cross-border migration from Luxembourg into border communities, driven by differential property prices. However, whilst the geographical distance of migration was often substantial, migrants frequently stressed the importance of cultural proximity in their selection of migration destination.

Choice of destination was also influenced by political dimensions. Different labour market policies, and linked immigration controls, were the most commonly cited reason for the selection of destination region by migrant workers, however, other factors including residential market, social and public regulations, environmental conditions and cultural ties between countries were also noted. For foreign

home owners, residential property markets were the most important pull factor, combined with environment and cultural ties. Interestingly, research in Slovenia also revealed the role of agents in promoting and facilitating international property purchases, thus consolidating bilateral migration relationships, in this case between Britain and the Pomurska region.

Experiences of integration

The majority of migrants interviewed in the research were integrated into the everyday lives of their communities, and reported positive experiences of settling in their destination some described regions. Although difficulties with communication and adapting to new cultural norms, as well as frustration with unfamiliar bureaucracies, most had established social networks and many were active in local community organizations (especially foreign home owners and return migrants). In some communities, particularly in Slovenia, international migrants were welcomed by local populations for renovating empty properties and contributing to communities that had been in decline. The perception of established local residents of international migrants is hence important in shaping experiences of integration. The most difficult problems were reported by international migrants in eastern Germany, especially those in former industrial towns with high levels of unemployment, who encountered discrimination and marginalization. One interviewee described his 'zero-point experience' [Nullpunkterfahrung] of having to reset expectations:

"Zittau is a zero-point experience: this means, everything you have learnt so far you have to give up more and more, you have to distance yourself from the structures of your developed understanding. Then you can experience this absolute zero-point experience. Only then can you learn and develop totally new structures, and only then can you feel at ease here."

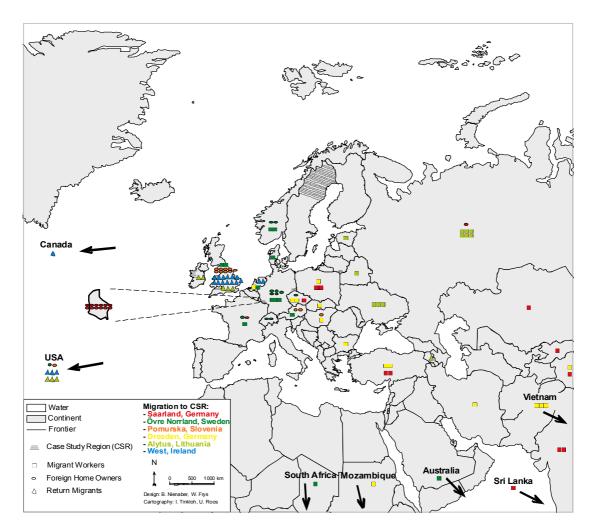


Figure 5: Origin of international migrants interviewed in six case study regions
Diagram originally presented in Frys and Nienaber (2010) Overview of Different Migrant Histories.
DERREG Milestone 2.2

Difficulties with integration can also follow from the expectations of migrants. Some return migrants in Ireland, for example, discussed finding that they had little in common with old friends or feeling that they had been let down by a lack of family support, though most emphasized the importance of becoming involved in local organizations as a counter to the 'outsider' status of the returnee. 18 A different dynamic of elective non-integration was identified Luxembourgese migrants to Saarland, with a tendency to form social and geographical Luxembourgese enclaves reflecting motivation of many cross-border migrants of multi-cultural escaping the perceived environment of Luxembourg.

Economic integration and contribution to rural development

The majority of migrants interviewed were in employment, and most were satisfied with their employment situation. However, the types of jobs held varied by region and migrant group. Foreign migrant workers in Saarland tended to hold lower-grade jobs, and several reported problems finding suitable employment. In contrast, a number of the migrants interviewed in eastern Germany were professionals who regarded their stay in the region to be a temporary staging post in their progression. Many migrants to rural regions have professional qualifications or skilled trades, but the utilisation of these skills varies. Return migration to Ireland has been facilitated in part professional opportunities created by economic growth, including foreign direct but entrepreneurship investment,

¹⁸ This finding confirms the observations of Ni Laoire (2007) The 'green grass of home'? Return migration to rural Ireland, *Journal of Rural Studies*, vol 23, pp 332-344.

common. Around half of the return migrants interviewed in Ireland had started their own business on return, often using skills and experiences acquired abroad, as one explained:

"I returned to Ireland as a qualified plumber and set up my own business in addition to running the farm. I trained and obtained all my skills in Boston and without a doubt the training helped me gain employment contracts once I came home."

Self-employment is also common among foreign home owners or amenity migrants and may involve working or networking internationally, but can also represent a contribution to the local economy. Support for new business development is however variable. A scheme run by the municipality of Jokkmokk in Sweden is expressly aimed at encouraging entrepreneurship among international migrants, but return migrants in Ireland described mixed experiences of accessing support. The greatest challenges were faced by return migrants to Alytus county in Lithuania, where the economic situation presents few opportunities. Much return migration to Alytus was to some degree involuntary, usually for health or family reasons, and many return interviewed struggled migrants appropriate employment. Accordingly, return migrants to Lithuania frequently fail to stay, creating a pattern of repeat emigration.

Overall, the research on international migration to rural regions demonstrated the fluidity and complexity of transnational mobility rural contemporary Europe. International migrants are found in all rural regions, but the type and origin of migrants will vary between regions, as will their experiences of social and economic integration. Patterns of migration are contingent on a number of factors, including wider political and economic developments. For example, DERREG has observed the impact of the economic downturn since 2008 on international migration, contributing to the stagnation and even reversal of British amenity migration to Slovenia, falling numbers of foreign migrant workers, and the revival of dominant outmigration from rural Ireland. Nonetheless, migrant workers are still critical to many rural industries - such as meat processing - and international migrants also commonly possess skills, expertise and experience that could assist rural development if effectively harnessed.

3.4 Environmental Capital and Sustainable Rural Development

Sustainable development and the establishment of an eco-economy are widely regarded as a necessary principle for the resilience of Europe's rural regions. However, formulating a strategy for sustainable development involves the careful negotiation of multiple scales of environmental discourse, from the global down to the local. Global environmental issues such as climate change are instrumental in shaping the parameters of regional development, positing perceived new opportunities for rural regions in fields such as renewable energy production, but also presenting challenges for regions with a traditional economic base in activities such as mining or intensive agriculture. At the same time, regional development strategies need also to respond to local environmental concerns, such as pollution or landscape despoilment, which can either amplify or conflict with global concerns.

The third research theme of DERREG examined how these different environmental perspectives have been negotiated in the formulation of regional development strategies across five case study regions: Saarland region, Pomurska region, West of Ireland, South Moravia and Dresden region. In each of these regions, the research was structured around two stages. Firstly, an analysis of policy documents and media reports was combined with interviews with key actors to discuss the articulation of regional strategies for sustainable rural development in response to different regional, national and global environmental concerns and pressures, with the aim of identifying and explaining inter-regional variations. Secondly, key environmental issues were identified in each of the five regions from the initial analysis, and then analysed in greater depth as detailed case studies, involving interviews and further documentary analysis.

In Saarland (Germany) and Pomurska (Slovenia), the detailed research examined the interaction of exogenous and endogenous actors in the designation and management of protected landscapes (including the UNESCO biosphere reserve Bliesaau in Saarland and the Goričko Landscape Park in Pomurska), opportunities for the exploitation of these natural environments for sustainable tourism and 'ecoeconomy' initiatives. In South Moravia (Czech Republic) and the West of Ireland, the research considered the repositioning of the forestry sector within regional development sector under influence from the interaction of global, regional and local environmental discourses, including the relative positioning of productivist forestry, conservation, and opportunities for economy' initiatives. Finally, in Direktionsbezirk Dresden (Germany), the research investigated incorporation of local and environmental concerns in regional development strategies relating to energy production, and in particular, on the implications for the traditional industry of opencast brown coal mining and for new opportunities for renewable energy projects.

Through this structure, the third research theme thus addressed four main research questions: How is consciousness of global environmental issues reproduced and interpreted with respect to local interests through the regional media? How are global, national and regional environmental concerns articulated through sustainable development strategies? tensions and practical difficulties can arise in the implementation of sustainable development projects, including conflicts between local and global perspectives? How can the deepening, broadening and regrounding of 'eco-economy' activities contribute to effective development in the context of globalization?

Media discourses of the environment

Analysis of articles in regional newspapers over the past decade revealed a clear overall trend of an increasing volume of reports on environmental issues across all the case study regions. The form and size of the regional media varied significantly between the regions studied, and influenced the focus and nature of the issues reported. Weekly local newspapers in the West of Ireland, as well as regional publications in Pomurska and South Moravia, all tended to emphasize local environmental issues such as nature conservation, waste management and

water resources, as well as aspects of sustainable agriculture and sustainable tourism, rather than global environmental issues. In contrast, the higher-circulation regional dailies in Saarland and Saxony not only published a far higher volume of articles, but also exhibited a clear shift in emphasis over the decade from more local concerns such as nature protection and landscape conservation to global issues such as climate change, energy conservation, biodiversity and renewable energy. Interestingly, whereas most articles about climate and energy in the Sächsische Zeitung in 2000 were in the international or national news sections, by 2008 these issues were primarily being reported as regional news – in part reflecting the significance of these issues to a region with a large energy industry. Yet, in the Saarbrücker Zeitung, the balance was still towards reporting climate change as a national or international story, with only renewable energy reported more as regional news.

Thus, whilst there is increased coverage of global environment issues in regional media, the dissemination of global environmental discourses is mediated through regional contexts. The scale and tenor of reporting of issues such as climate change, biodiversity and energy conservation reflects regional economic concerns and the structure of the regional media. In some regions, global environment issues continue to jostle for prominence with more local environmental issues such as landscape protection. These factors each affect perceptions of the environment in regions, and its incorporation into regional development strategies.

Strategies for Sustainable Development

Sustainability has been adopted as a central theme in the regional development strategies of all the study regions, reflecting the expectations of European and national policies, and the nearconsensus that emerged from interviews with public, private and third sector stakeholders that sustainability and economic development can be mutually accommodated, and that protecting the environment presents opportunities for the regions concerned. In framing these policies there is often acknowledgment of the context of global challenges such as climate change, but such references tend to be limited and general. In

terms of developing actual policies and initiatives, local environment concerns appear to be more important drivers. There is also a trend of movement from more general statements and prescriptions concerning renewable energy and organic agriculture in the early 2000s, towards more focused policies and initiatives in later documents.

as with the mediation of global Thus, environmental discourses through a local lens in the regional media, the global discourse of sustainable development is being translated into regional policies as mediated through an assessment of local problems, opportunities and pressures. Critically, the process of mediation places regional actors at the forefront of shaping regional development strategies. When asked to name the most influential actors in shaping regional strategies for sustainable development, relatively few interviews identified international bodies, national government departments or transnational environmental NGOs. Instead, stakeholders in all the case study regions pointed to local authorities and politicians, national and local conservation groups, local business and the regional media, as well as to local campaign including both environmental groups, movements and protest groups hostile elements of sustainable development environmental protection. As such, in mediating the translation of sustainable development discourse into policy, regional actors are not only localizing strategies, but may also be contesting elements of the global discourse.

Implementing sustainable development

Case studies in the five regions demonstrate that the implementation of sustainable development initiatives, often framed and justified with reference to global environmental issues, is nonetheless shaped by specific region contexts. The focus of initiatives, for example, can reflect an assessment of endogenous natural capital and its potential transformation into a commercially exploitable yet sustainable resource. Thus, in the West of Ireland projects have encouraged the use of forested wood for biomass energy generation, linking sustainable energy production with a parallel strategy of increasing the extent of forest land in Ireland as part of a programme for farm diversification. In South Moravia, in contrast, critiques of traditionally export-oriented

industrial forestry have contributed to initiatives to promote more sustainable methods of forest management and to encourage woodland tourism and leisure use.

The implementation of sustainability initiatives can in some cases involve direct challenges to embedded regional interests, and thus encounter resistance and conflict. The Bliesgau UNESCO Biosphere reserve in Saarland is typical of an environmental designation that is modelled on international programmes or standards, framed by reference to global environmental concerns and awareness, but also promoted on the basis of potential opportunities for regional sustainable development - in this case the branding of sustainable agricultural products. introducing restrictions on land management practices and hunting, the biosphere provoked opposition from some local residents, who perceived it as outside interference in established local practices. Similarly in the Görlitz district of Direktionsbezirk Dresden, regional development objectives of phasing out the heavily polluting historic brown coal industry and of forging a trans-national energy region based on renewable energy production, especially wind power, have been challenged by local support for mining and coal power-stations as a source of employment and opposition to windfarms. This has led to a diluting of policy statements on wind energy and the on-going operation of the last brown coal pits and power station, in spite of the direct involvement of Greenpeace in anti-coal protests.

The final case study, of the Goričko Landscape Park in Slovenia, also illustrates the complexities of developing regional responses to global environmental concerns. On the one hand it represents an attempt at transnational coordination in nature conservation, reflecting the reality that nature does not respect national borders. Yet, notable differences in the level of resources afforded to neighbouring management bodies in Austria, Hungary and Slovenia demonstrating the continuing importance of national and regional institutions in shaping the actual delivery of environmental protection and sustainable development.

The Eco-Economy and Rural Development

The final dimension of this theme considered the contribution environmentallypotential of oriented activities to rural development in the context of globalization, drawing on the concept of the 'eco-economy' developed by Lawrence Kitchen and Terry Marsden in work on Wales.¹⁹ Following Kitchen and Marsden, the analysis examined the deepening, broadening and regrounding of the eco-economy, identifying examples of good practice. Deepening activities are concerned with adding value to existing rural economic activities by enhancing sustainable practice, for example through organic farming or the reconstruction of local food systems. Broadening activities contribute to a diversification of rural incomes by developing new sustainable uses for rural land, such as agritourism and the cultivation of energy crops. Regrounding activities involve engagement with new or different sets of resources and new patterns of resource use, such as renewable energy production and equine activities. These processes deepening, broadening regrounding - are able to recombine and more effectively utilise natural resources and present ways in which new or combined environmental goods and services can be created and they suggest new forms of the interdependence of the economy and ecology.

Examples of all three dimensions of the ecoeconomy were found in the case study regions. The Bliesgau Genuß e.V. (Bliesgau Consumption Association) in the Saarland region and the Diši po Prekmurju (Scent of Prekmurje) project in Slovenia both represent examples of deepening activities, adding value through the promotion of sustainably-produced regional food. Broadening activities were evident in the Mlinarska pot (mill trail) along the river Mura in Slovenia, which acts both preserve and reactivate regional handicraft traditions as part of sustainable rural development, and the **Nachhaltiges** *Bergwiesenmanagement* im Zittauer Lausitzer Gebirge scheme in the Dresden region, concerned with promoting the sustainable management of mountain meadows as both an

attractive environment for tourism and a source of biomass for energy production. Finally, regrounding activities have emphasized renewable energy production, including the Bürger-Energie Zittau-Görlitz cooperative in Germany that operates photo-voltaic solar panels on public and private buildings, and the County Clare Wood Energy Project (CCWEP) in Ireland, aimed at promoting the installation of wood biomass boilers fuelled by wood chip from farm woodlands.

These processes of deepening, broadening and regrounding embody highly relevant ways for reconstituting nature-society relations within rural development, which can facilitate a reembedding of rural economic activities in the local ecology, thus contributing to societal responses to global environment concerns about climate change and biodiversity by valorizing local environmental capital.20

3.5 Capacity Building, Governance and **Knowledge Systems**

The focus of the fourth research theme of DERREG has been on how to (best) arrange support for joint learning and innovation in rural development grassroots initiatives, empowering them to effectively respond to the challenges and opportunities of globalization. The research has been structured on three questions: Firstly, how is public support and facilitation for joint learning and innovation in grassroots development initiatives arranged across the various case study areas? Secondly, how do beneficiaries and supporters evaluate these arrangements? And thirdly, what makes arrangements work well?

The study hence aimed to gain a better understanding of interfaces operating between three more-or-less self-contained 'worlds': a) grassroots (or place-based) development initiatives in various fields of activities within public b) diverse regions; policies formulated and implemented at different

¹⁹ See L Kitchen and T Marsden (2009) Creating Sustainable Rural Development through Stimulating the Eco-economy: Beyond the Eco-economic Paradox? Sociologia Ruralis, vol 49, pp 273-293.

²⁰ For more on the conceptual foundations of this analysis see T Marsden (2006) The Road Towards Sustainable Rural Development: Issues of Theory, Policy and Practice in a European Context, in Cloke, P., Marsden, T.K. and Mooney, P. (eds.) Handbook of Rural Studies, London: Sage.

governmental and administrative levels; and c) the heterogeneous 'knowledge' support structure of public institutes and private agencies that potentially can - or in some cases are - facilitating joint learning and innovation through education, research and consultancy.

Research on the theme was organized in three phases across six case study regions: Alytus County (Lithuania), Comarca de Verin (Spain), Direktionsbezirk Dresden (Germany), Roscommon County (Ireland), Saarland Westerkwartier (Germany) and the (Netherlands). In the first phase, relevant policies and knowledge support structures were mapped for all the six study regions, using data collated through documentary research informant interviews. In the second phase, a detailed inventory of 61 grassroots development initiatives was compiled and a comparative analysis undertaken, focussing on: a) the type of support and facilitation for joint learning and innovation provided and received; b) how the support and facilitation was arranged including the mediating interface; c) how the support and facilitation and the working of the interface were evaluated by both the beneficiaries and supporters. This analysis was developed through semi-structured interviews and group workshops involving providers and recipients. Finally, in the third phase, a cohort of 33 interfaces identified from the earlier analysis as particularly 'wellworking' examples were analysed in-depth to understand the factors that contribute to good practice, supported by further interviews and feedback events.

The analysis has been underpinned by a conceptual framework that has adapted and developed the model of the 'learning region'. Initially formulated in the context of urban industrial regions, a 'learning region' describes the space in which "regional actors engage in collaboration and coordination for mutual benefit, resulting in a process of regional learning". Within this space interactions are configured around the 'triple helix' of industry, state and universities, each performing a specific function: industry as the site of production,

²¹ R Rutten and F Boekema (2007) *The Learning Region: Foundations, State of the Art, Future*. Cheltenham: Edward Elgar, page 136.

universities as the source of innovation and human capital, and the state as the guarantor of stable contractual relationships.²²

Rural regions also need strong support systems for innovation, including structures that facilitate knowledge transfer between research, education and industry. However, the range of actors and activities in the rural economy arguably demands a more nuanced engagement with knowledge and human capital than in economic core regions. Hilary Tovey, for example, has argued that learning and innovation processes in rural regions require not only support and facilitation for the transfer of technological, expert knowledge and capital from human institutions, but also support and facilitation for the use and acquisition of indigenous knowledge about local places and locally-embedded resources.²³ Accordingly, the 'learning region' model has been modified for the DERREG analysis to conform more closely to the particular characteristics of rural economies. As such, 'industry' has been replaced by 'region' - defined as an arena encompassing diverse actors and commonly represented in learning and innovation interfaces by grassroots development movements; 'the state' has been replaced by 'public administration' - including all levels from the European Union to individual municipalities; and 'universities' have been replaced by 'knowledge infrastructure', including universities and colleges, schools, research institutes, state agencies, private consultancies, NGOs, grassroots initiatives themselves (Figure 6).

²² H Etzkowitz and L Leydesdorff (2000) The dynamics of innovation: from national systems and 'mode 2' to a triple helix of university-industry-government relations, *Research*

Policy, vol 29, pp 109-123.

_

H Tovey (2008) Introduction: Rural sustainable development in the knowledge society era, *Sociologia Ruralis*, vol 48, pp 185-199.

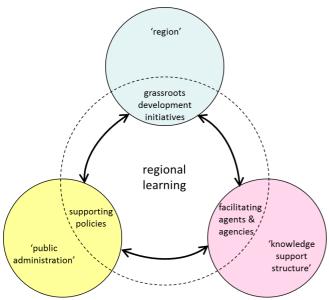


Figure 6: Modified model of a 'rural' learning region

Diagram originally presented in Wellbrock et al (2010) *Overview of Learning and Innovation Support Strategies*. DERREG Deliverable 4.1.

The modified model also expands the forms of interaction involved in regional learning from a narrow focus on technical knowledge transfer from universities and research institutes to industry, to a broader conceptualization of collective learning. This reflects the observation that place-based development in rural regions involves interactions between diverse agents working in the same territory, who need to learn how to work together. This occurs through 'joint-learning-by-doing', involving processes that cannot be understood as formal learning settings with a sender and a receiver, but which are informal, interactive, social and practical.

The modified model of 'rural learning regions' provided a template for mapping grassroots learning and innovation initiatives in the study regions (see for example figure 7), but also assisted in identifying factors that are important to the effective functioning of the interfaces between the different components. In particular, three key dimensions were positioned as significant, and thus formed the focus for further analysis of the detailed case studies: a) the shape of the operational space, b) the scale of operation and c) the delegation of specific operational tasks and roles to agents and agencies. composition of organization arrangements along these dimensions is critical to the effective working of learning interfaces and the efficacy of support policies, and is in turn reflective of the specific regional context.

The core results from this theme hence show that the diversity of rural Europe is reflected in the diversity of support and facilitation mechanisms for joint learning and innovation across different regions. Arrangements are context dependent and differences reflect, to a certain extent, the political arena and the institutional evolution of a case study area and the country of origin at large. This implies that one cannot simply transfer arrangements and well-working interfaces from one country to another, not even within countries: arrangements have to be contextualised. The comparative analysis, however, reveals a repertoire of promising practices that can be draw upon as showcases and learned from in improving arrangements and the working of interfaces. The key findings are as follows.

Operational shape and scale

Support and facilitation for joint learning and innovation is mediated through interfaces of different organizations and agents, the composition of which vary between regions difference reflecting the in the regional governance structure. operational These interfaces can either be determined governmental organizations, or designed collaboratively by public and private agents working in partnership. Interfaces can be designed as free-standing associations, publicprivate partnerships or loose networks, with participants potentially including government agencies, local municipalities, NGOs and local associations, public research or educational institutions, professional service companies, local businesses and individual community members.

The constitutive arrangements of an operational interface comprise three basic components: the scope of operation (i.e. the type of beneficiaries targeted and geographical position), the formal shape of the operational space (i.e. the type of support and facilitation provided, rules, regulations and procedures attached to obtaining it, and the resulting shape), and the delegation of tasks and roles to operational agents and agencies.

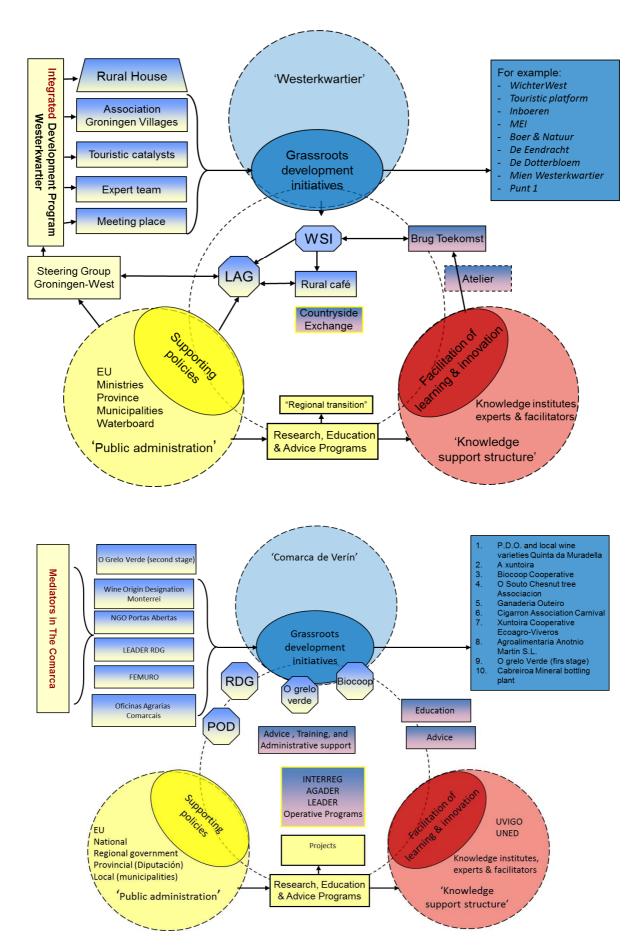


Figure 7: Maps of arrangements to support learning and innovation in grassroots development initiatives in Westerkwartier, Netherlands (top) and Comarca de Verin, Spain (bottom)

Equivalent diagrams for Alytus, County Roscommon, Oberlausitz and Saarland can be found in Roep and Wellbrock (eds) (2011) WP4 Summary Report. DERREG Deliverable 4.4.

The shape and scale of an operational interface can affect its visibility within the region and its accessibility to local communities. Visibility and accessibility can be enhanced by adopting a clear structure with a single 'gateway' through which a range of support and facilitation services from different schemes and providers can be easily accessed. The 'Rural House' (Plattelandshuis) in the Westerkwartier region in the Netherlands, for example, performs this role by bringing together a number of different agencies and scheme information points in a single building. Local residents can access advice on a number of initiatives through the Rural House, and can also apply for small grants (of up to 10,000 euro) which can be awarded by an expert team based in the office. However, combining different organizational services and maintaining a single physical office can create additional costs, and core funding is required.

Mobilizing initiatives

Stakeholders with leadership and networking roles are important to connect the different 'worlds' of rural development initiatives, public administration and the knowledge support structure. In particular, the involvement of charismatic, informal agents, able to bring together residents with various, possibly conflicting interests, is important. In this way, charismatic, informal agents act as spiders in the networking web. They are generally seen as crucial in forging consensus and in the formation of public-private partnerships that can provide formal working interfaces.

The delegated tasks and roles within the operational space of an interface is also a crucial factor for successful learning and innovation initiatives. The delegation of tasks and roles determines the ability of an interface to mediate effectively between the 'worlds' of supporting policies, the knowledge support structure and development grassroots initiatives. effective, operators need some delegated decision power in order to attend to the needs of grassroots development initiatives. If not, support may become too bureaucratic or even 'politicalized', de-motivating volunteer participants. Grassroots development initiatives need to be able to adapt their development aims to changing political contexts.

Forms of facilitation and support

The types of targeted beneficiaries of interfaces for learning and innovation vary between rural reflecting different development regions, priorities different regional contexts, in influenced by demography, geographical characteristics, history and local sense of place. Furthermore, the early engagement of local people in reflexive learning exercises can contribute to local ownership over later programmes by encouraging local people to debate and decide their local priorities and hence to inform the focus of subsequent initiatives. The Brug Toekomst ('Bridge to the Future') project in the Westerkwatier served this purpose by using students from partner universities to facilitate workshops that brought local organizations together to formulate regional development priorities and objectives. One outcome of the the establishment project was of the 'Westerkwartier Initiative Group', which has become the main operational interface for joint learning, innovation and rural development initiatives in the region.

Types of support and facilitation that can be provided for regional development through interfaces of public administration, regional actors and knowledge actors include: 'financial support' (i.e. different kinds of subsidies, and procedural support), 'knowledge and skills' (for example advice, facilitation, education and research activities), 'physical infrastructure' (for example meeting spaces, information centres), and 'social infrastructure' (for example network incubation and cluster forming). The balance of these different types of activities will vary depending on the organizational composition of the interfaces and the priorities set by the lead stakeholders.

Sustaining initiatives

Operational interfaces can be long-term arrangements or short-term projects. Long-term, commissioned arrangements have space and time to build trust between participants and to set research and development agendas. Short-term, project-based based assignments, in contrast, may not have sufficient time to build trust effectively, and may fail to link research questions to regional needs, therefore offering little support for grassroots development.

However, short-term, project-based interfaces can assist in stimulating longer-term grassroots development initiatives if they function as catalysts for partnership working and collective engagement.

Supporting policies

The policies and programmes of public agencies are important in initiating and supporting interfaces for regional learning and innovation, and especially for providing funding. In several of the regions studied, the LEADER programme in particular had played a central role in underpinning interfaces. However, if public administration - at whatever scale - exerts strong control over operational agents and agencies, support and facilitation can turn into clientelism. Thus, the role of public policies as a driving force of place-based development should not be overestimated. The involvement of charismatic, informal agents, usually from within regional civil society, is at least as important in mobilizing participation, establishing formal organizations and developing and sustaining agendas.

Overall, research on this theme has demonstrated that the framework of 'rural learning regions' offers a mechanism for analysing governance arrangements for joint learning and innovation in rural areas, and thus a tool for reflexive monitoring, evaluation and the organization of effective initiatives.

3.6 Towards an Interpretative Model

Globalization is not a singular, monolithic and homogenizing force. Rather it refers to a disparate collection of loosely connected but sometimes contradictory processes and tendencies. It can be best characterized as a tendency towards the *multiplication*, *stretching*, *intensification* and *acceleration* of social and economic relations, interdependencies and exchanges, as well as a deepening public consciousness of the world as a whole and our place in it.²⁴

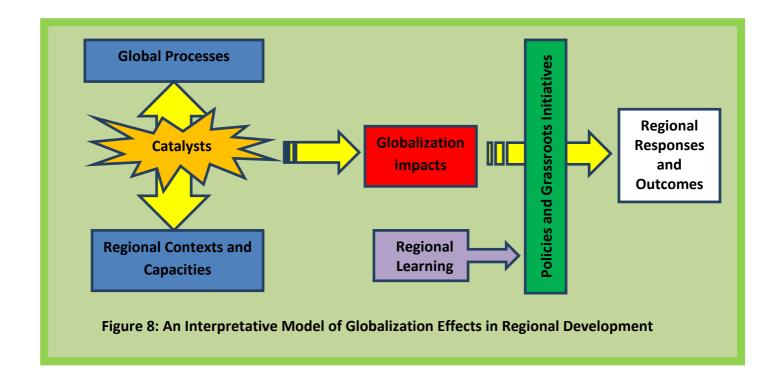
As such, different globalization processes operate in different combinations in different regions, with different results. There is no one rural experience of globalization, and no predetermined outcomes. National, regional and local factors can all intervene to shape impacts and responses.

The DERREG research records examples of this grounded reproduction of globalization in and through rural regions, and by drawing together evidence from the four thematic strands described above, combined with broader contextual research, we can propose an interpretative model for understanding the workings of globalization in rural contexts and the opportunities for policy interventions (Figure 8).

The model holds that the geographical pattern of globalization effects reflects the intersection of globalization processes (such as market liberalization, or increased international mobility) with regional contexts and capacities. Moreover, it suggests that agents or events are required to act as catalysts to convert the potential inherent in the engagement of globalization processes and regional capacities into specific, grounded impacts.

However, for regional resilience of sustainability, the impacts globalization processes themselves are less important than the responses that are developed to them. For example the presence of foreign migrant workers in a region is less significant than the question of how the migrants' skills are utilised to contribute to economic development. The model shows that regional development policies and grassroots initiatives, informed by processes of regional learning, are critical in engaging globalization impact and mediating particular responses and outcomes. Each of the stages of the model are discussed in more detail in the sections below.

²⁴ This definition is adapted from Manfred Steger (2003) *Globalization: A Very Short Introduction* (Oxford University Press).



3.6.1 Globalization Processes

As noted earlier, globalization is not a singular force, but rather comprises a diverse range of different processes. There are hence many different elements of globalization that might present challenges or opportunities for specific rural regions, but our research points to five major processes that are of particular significance for rural Europe.

Market Liberalization: The dismantling of trade controls and opening-up of national markets has forced regional producers, including farmers, to compete with imports in domestic markets. At the same time, market liberalization has created new opportunities for rural-based enterprises to grow by expanding export markets. Market liberalization has also encouraged footloose strategies by industries seeking cost efficiencies, resulting in the relocation of production outside Europe in traditional rural industries such as textiles. However, as global free trade is still restricted by economic blocs such as the European Union, some rural regions such as Goriška, Pomurska and Jihomorvaský in the DERREG case studies, have attracted investment by corporations seeking low-cost production sites within the European Economic Area.

Network Extension and Intensification: The stretching and reconfiguration of global

commodity chains has had numerous implications for rural enterprises that have variously found themselves dropped from chains in favour of cheaper suppliers, or enrolled into new transnational networks. The DERREG business survey found that many SMEs had developed transactional relations with SME partners in other EU states, but with significant regional variations. International networking is valued by rural SMEs, but it can also increase the exposure of rural economies to external economic events and corporate decision-making.

Intensification of International Mobility: Advances transport technology, the liberalization of travel restrictions and increased wealth have contributed to an intensification of international mobility over varied temporal and spatial scales. Global tourism has become a boom industry, with tourists travelling ever greater distances. International labour migration has increased. as have transnational amenity migration (both seasonal and permanent), and cross-border commuting. Unlike some earlier waves of migration, contemporary international migrants are frequently attracted to rural regions, including communities with little experience of immigration, whilst new opportunities have accelerated flows of out-migration from economically disadvantaged rural regions. New communications technologies and cheap flights have enabled migrants to remain involved in

home communities, creating extended transnational social networks, and promoting patterns of return migration to rural regions, and repeat emigration.

Global Consciousness: The transnational media has facilitated the development of a global consciousness in which there is a greater awareness of international inter-dependencies and of global perspectives on issues such as the environment. This in turn has stimulated the consolidation of global values and standards, and promoted transnational campaigning. consequence has been that established rural industries such as agriculture, forestry and mining have come under external scrutiny, as have traditional regional practices of engaging with nature, with the potential for conflicts where global models and values clash with local economic and cultural interests. At the same time, new opportunities have been created for rural regions rich in environmental capital to respond to demands for renewable energy, sustainable farming, eco-tourism and ecosystem services.

Acceleration of Information Flows: The global penetration of communications new technologies, including the internet, has allowed information to flow around the world almost instantaneously. The historic information gradient between city and country has been removed, enabling rural regions to compete on more equal terms, including for knowledge-based employment. Rural enterprises have benefitted from improved market intelligence, and rural tourism from wider promotion. Greater access to information can also support regional learning and transnational cooperation in rural development.

3.6.2 Regional Contexts and Capacities

The combination in which different globalization processes have an impact on specific rural regions, and the way in which they have an impact, is in part dependent on the regional context and its capacities and resources. As such, it is intersection of globalization processes and regional contexts and capacities that produces particular impacts in specific regions. The DERREG research points to four aspects of regional

contexts and capacities that are significant in mediating globalization processes.

Geographical Location: Contrary to some claims, new communications and open borders have not made geographical location irrelevant, although the dynamics of spatial disadvantage have been reconfigured. Liberalized borders have meant that some previously peripheral regions in national economies have assumed a new centrality in cross-border networks, including Goriška and Övre Norrland. Yet, some borders are less permeable than others. Alytus county's border with Belarus is arguably harder now as the frontier of the EU than it was as an internal boundary in the Soviet Union. Moreover, the reach of communications technologies has not entirely overcome the disadvantage of poor transport links for regions in attracting businesses, tourists or residents. Conversely, peripheral regions can be more attuned to certain globalization processes. Remote rural locations may have special attraction for some international tourists and amenity migrants; whilst the limited local markets for businesses in remote and sparsely populated regions provides a greater incentive for developing export markets than exists for businesses in rural districts close to large urban centres - a contrast we observe in the international networking of SMEs in Övre Norrland, compared with those in Jihomorvaský and the Westerkwartier.

Resources: Mineral resources, such as iron ore, copper and gold in northern Sweden, have seen some rural regions integrated into high value commodity chains driven by booming demand in east Asia. Oil, gas and timber resources similarly position selected regions in global commodity networks. Other rural resources opportunities for developing niche products for export, including wine, bottled water, regional food specialties and crafts. Distinctive cultural environmental resources can international tourists and amenity migrants, as observed in the case study region of Pomurska.

Political-Economic Context: For regions in central and eastern Europe, engagement with globalization processes continues to be informed by the legacy of socialist central planning and the post-socialist transition — including conciliating

local and global perspectives on brown coal mining in eastern Saxony, and the potential adaptability of Czech single-industry towns to foreign branch plant investment. Differences in political-economic emphasis can also be influential in western Europe, for example Sweden's liberal immigration policies and the regional dispersal of refugees, or the role of Ireland's fiscal policies in the 'Celtic Tiger' era in stimulating foreign investment and attracting return migrants.

Human Capital: The skills and capacities of the regional workforce can also be a factor in shaping the nature of engagement with globalization processes. Foreign investors can be attracted by educated and skilled workforces, including technical skills gained from traditional industries in decline. Both return migrants and migrant workers, meanwhile, might be attracted to fill labour gaps in regional economies, as in the west Ireland where return migrants contributed technical and managerial expertise to new industries, whilst Polish, Lithuanian and Brazilian migrant workers have filled shortages for lower-tier jobs created as local employees have moved into more attractive positions. Equally, a mismatch between a skilled workforce and limited appropriate employment opportunities can fuel international migration from rural regions, as in the Lithuanian case study region of Alytus county.

3.6.3 Catalysts

The intersection of globalization processes and regional contexts and capacities creates potential effects for rural regions, but catalysts are required in order to convert potential effects into actual impacts.

The DERREG research has repeatedly highlighted the role of individuals as catalysts in connecting rural regions to global networks and opportunities. These include entrepreneurs who spot new prospects for exports or international networking, or develop tourism businesses, as well as institutional actors including governance bodies with policies and strategies aimed at capturing certain globalization processes — for example, business zones in Goriška and business

parks in the west of Ireland targeted at attracting foreign direct investment.

Catalytical actors can equally be external to the regions concerned, including corporate managers search for new suppliers, markets or investment opportunities, tourism operators hunting new destinations, international environmental activists questioning particular industrial or cultural activities, and so on. Actors who bridge regional and international contexts can be particularly significant. British amenity migration to Pomurska, Slovenia, for example was largely facilitated by a locally-based British ex-pat who set up business as a specialist property agent; whilst Brazilian migrant workers in Roscommon, Ireland, were initially recruited by an Irish meat dealer trading with Brazil. Similarly, businesses in Alytus county described using Lithuanian ex-pats to scope and develop new international business opportunities.

Events can also act as catalysts. In the Czech Republic, Lithuania and Slovenia, accession to the European Union in 2004 facilitated both outward labour migration and inward amenity migration, as well as creating new transnational economic opportunities. Many of the transnational networks of enterprises in the Goriška region of Slovenia were developed in response to the loss of existing markets with the break-up of Yugoslavia and Balkans war. More recently, the global economic recession has acted as a stimulant for rural-based SMEs to explore new international markets in response to decreased demand within home regions.

3.6.4 Globalization Impacts and Regional Responses

The engagement of globalization processes has had extensive, multiple and far-reaching impacts on rural regions. Examples of globalization impacts observed in the DERREG research include, inter alia, foreign direct investment in branch plants; the development of export markets and international networks by endogenous enterprises; takeover the regional-based companies by transnational corporations; the closure of factories due to international relocation of production, or global corporate retrenchment; increased numbers of international tourists; the purchase of properties by foreign amenity migrants and cross-border commuters; out-migration from some regions by workers seeking employment abroad, and the influx of foreign migrant workers to other regions; return migration by residents who have lived and worked abroad; the designation of protected landscapes following international models, involving restrictions on agriculture and other activities; sustainable development initiatives responding to global environmental concerns; and more.

These numerous individual impacts form the context for rural regional development in the twenty-first century. Some impacts are highly visible and controversial; others more subtle. background changes that have an incremental influence on regional economies and societies. Some impacts present direct challenges for economic development - such as replacing the jobs lost when a factory closes due to international competition. Other impacts create more social challenges, such as successfully immigrant integrating new populations. for Occasionally, the challenge regional development might be to sustain or maximize the economic benefits resulting from new foreign investments, increased tourist numbers, or new markets for regional products; or to balance competing economic, social, environmental and cultural interests.

In each of these circumstances, regional development policies and the actions of public projects, programmes and grassroots initiatives, have a critical role in shaping regional futures by assembling coherent responses to globalization impacts. As will be expanded on in later sections, the form and focus of responses will be directed and constrained by factors including regional contexts and capacities, and informed by processes of regional learning, and thus should be tailored to individual regions. However, from the DERREG case study research and wider analysis, eight broad responses can be identified.

Global resource providers: Regions with rich mineral and energy resources have benefited from the global resource boom, and particularly demand from east Asia, with local industries becoming strongly integrated into global

networks. This transformation is usually driven by external corporate actors, with wealth flowing into the region, but at the cost of regional economies becoming vulnerable to political and economic trends, events and decision-making in distant countries. The challenge for regional development policy in this context is to maximise the retention of wealth generated by resource-exploitation within the region, and use to enhance regional resilience by developing more autonomous, locally-embedded economic activities.

Among the DERREG case study regions, the 'global resource providers' model was evident only in Övre Norrland, where significant mineral reserves are being mined to supply global markets. The mining industry in Övre Norrland has benefitted from the global resources boom, but with the consequence of increasing disparities in income between municipalities within the region. State-ownership of the major mine operator and the presence of a steel mill assist in retaining some added value in the region, and connections to China founded in part on the global resource economy are being consolidated to support wider regional development.

Global farmlands: These are regions with strong agricultural industries that are not only sufficiently resilient to adapt to competition from agri-food imports and the withdrawal of production subsidies, but have also become integrated into global agri-food commodity chains exporting produce to other parts of Europe and beyond. Agriculture in these regions is typically productivist and industrialized, and in addition to engagement in global commodity chains may also exhibit globalization impacts in the presence of transnational agribusiness corporations and reliance on foreign migrant labour. In some cases, 'global farmlands' have attracted foreign direct investment in the form of industrial farm units (such as intensive livestock farming), possibly offering relaxed by environmental regulations. In common with 'global resource providers', 'global farmlands' are potentially vulnerable to global economic trends and distant political events and corporate decision-making, and also present challenges in

terms of realizing wider regional economic benefits from the success of one industry.

None of the DERREG case study regions strongly exhibited a function as 'global farmland', although some included examples of export-oriented agriculture, especially viticulture.

Branch plant economies: Attracting foreign direct investment in branch plants has been a common strategy for rural regional development, and can boost regional economies by generating new income, creating jobs, upgrading labour markets and supporting secondary businesses as suppliers and service providers. Regional development policy can make a significant difference in attracting foreign direct investment consolidating and enhancing locational attractions by offering financial incentives (such tax-breaks), appropriate targeted and infrastructure (such as pre-built business parks). However, as with global resource providers, branch plant economies are highly integrated into global networks and vulnerable to distant economic events and corporate decision-making. As such, regional development policies may need to address the retention or replacement of branch plants, or to support the parallel development of endogenous businesses.

The doubled-edged consequences of a 'branch plant economy' approach is demonstrated in County Roscommon among the DERREG case study regions. Attracting foreign investment had been a central element of Irish regional development strategy during the 1980s and 1990s, with County Roscommon benefitting from investment in a number of branch plants of transnational corporations, particularly in the medical instruments sector. However, the more recent economic downturn has resulted in job losses at some of these plants. Branch plant investment is also evident in case study regions in the Czech Republic, Lithuania and Slovenia, as is the downscaling of traditional industries such as textiles under pressure from global competition.

Global playgrounds: Amenity-rich regions, especially those set in spectacular natural landscapes, have the potential to attract significant numbers of international tourists and amenity migrants to boost the local economy.

Whilst the catalysts for the 'discovery' of new regions by international tourists are frequently external (including tour operators, airlines and the travel media), regional development policies can be significant in supporting international promotion and providing appropriate infrastructure. Challenges also exist for regional development in ensuring that tourism-based economies are sufficiently resilient to withstand seasonal variations and fluctuations in travel fashions, as well as in pre-empting and resolving potential tensions over the integration of amenity prices increasing property and migrants, housing, pressures on affordable and environmental impacts.

Whilst not on the scale of better-known resort areas in the Alps or on the Mediterranean coast, the attraction of British amenity migrants to the DERREG case study region of Pomurska in Slovenia, and of German holiday-home owners to northern Sweden represented limited expressions of 'global playgrounds'.

Niche innovators: Niche innovation is a response to globalization driven by internal regional actors and catalysts, and involves exporting specialist products based on endogenous resources to niche markets internationally; or attracting international visitors to niche events and attractions. Examples identified in the DERREG research include the export of wild berries, Scandinavian bread and vernacular craft products from Övre Norrland, and tourist attractions in Övre Norrland such as the 'ice hotel'. Regional development policies can help to stimulate and support niche innovation by identifying potential markets and working with entrepreneurs to develop businesses networks and train specialist employees.

Trans-border networkers: For border regions, the most significant globalization impacts may be associated with increased cross-border flows. These may include new business networks and trading opportunities for regional enterprises, but also investment in new factories, offices and retail facilities to service emergent transnational regions, and inter-regional migration associated with cross-border commuting. Regional development policies need not only to utilize and consolidate opportunities for cross-border co-

operation, but also to protect regional interests within emerging transnational configurations – responding to risks that districts could lose businesses to centres with more favourable local policies or infrastructure across the border, or could become dormitory settlements for cross-border employment centres.

Trans-border networking for business is particularly evident in the DERREG case study region of Goriška in Slovenia, where both endogenous companies and inward investments by transnational firms have developed networks across the borders with Italy and Austria.

Global conservators: In regions with outstanding natural environments, some of the most significant globalization impacts can be the designation of protected areas following international models and classifications, such as UNESCO Biosphere Reserves, national parks, and Natura 2000 sites. Many of these designations recognize social and cultural assets as well as environmental assets, and regional development agents increasingly recognize the opportunities arising from such international 'branding' for sustainable development, including sustainable tourism. At the same time, such designations can place restrictions on land use and management, farming and hunting, potentially requiring a reorientation of local economic activities.

The 'global conservator' approach was observed on a geographically limited scale within some of the DERREG case study regions, including the Bliesgau UNESCO Biosphere in Saarland, as well as protected areas in Slovenia and the Dresden region of eastern Germany, with efforts to link environmental protection with sustainable development initiatives.

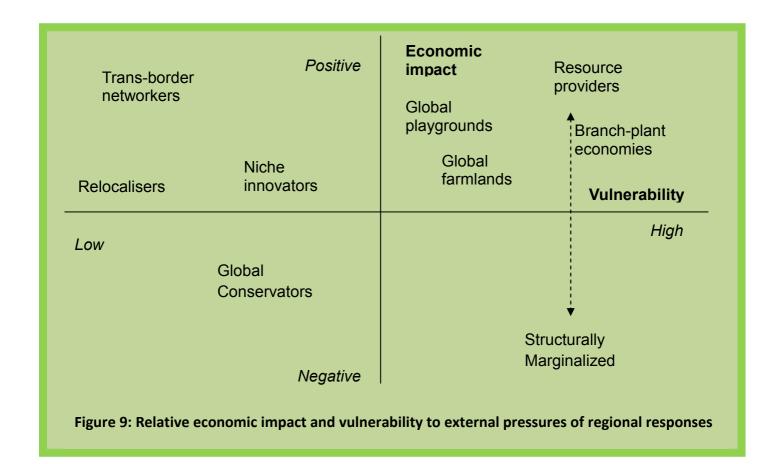
Re-localizers: Whilst the above responses have focused on engaging international networks and opportunities, an alternative response to globalization in rural regions has been to reassert local networks and cultures. In extreme cases this can include resistance to globalization impacts, such as opposition to new factories or tourist resorts or the sale of local companies or strategic properties, or hostility towards immigrant groups. More commonly, however, it involves the reconstruction and strengthening of

local value chains, for example through initiatives such as farmers' markets to consolidate local food networks, the rediscovery of local craft products, or alternative regional 'currencies' aimed at retaining money within the locality. Regional development policies and grassroots initiatives both play an important role in initiating and support such projects.

Examples of a 're-localizing' strategy were observed in the Comarca de Verin in Spain, including initiatives to revitalise the historic chestnut economy; protect rare regional cattle breeds by marketing their beef as a premium product; and resurrect traditional carpentry craft production. However, these examples also illustrate the entanglement of even re-localizing strategies within wider global networks — the carpentry initiative, for example, whilst producing furniture historically distinctive to the region has had to import wood from France, Russia, Scandinavia and North America, because the local monte forest has become too degraded to supply its requirements.

The variations outlined above form a typology of responses rather than a typology of regions because frequently more than one response can be found in a single region. Indeed, the different responses involve different balances between short-term economic effects and long-term sustainability, as reflected in the degree of integration into global networks and therefore vulnerability to external events (see figure 9). As such, the most effective regional development strategies will support several responses in parallel.

If regional development policies and initiatives are not mobilized to form coherent responses to globalization impacts, regional futures may be left seriously exposed to the vagaries of international events and corporate decisions, and opportunities for economic development might be lost. In some of these cases, a limited capacity to respond to globalization may result from structural disadvantages, such as location, political-economic context and composition of the existing economy. These **structurally marginalized** regions face the greatest challenges from globalization, and risk being drawn into



global networks as the 'dumping grounds' for noxious activities unwanted elsewhere (such as some forms of industrial livestock farming, polluting power stations, or nuclear waste dumps), or as simply exporters of labour to the global economy. Yet, even in regions facing such structural disadvantages, there is usually some potential to develop more positive responses to globalization if the appropriate policies and resources can be secured and enacted.

3.7 Supporting Regional Development in the Era of Globalization

The interpretative model outlined above describes how the restructuring of rural regional economies in the context of globalization is shaped by the interaction of external processes and actors, and regional capacities, resources and agents. As such, regional development actors can have an influence in shaping the development trajectory of their regions, functioning as catalysts to attract investment, migrants or tourists, or to enable international networking; or formulating and implementing responses to negative globalization impacts. In both cases, regional development actors are in practice

negotiating globalization, crafting strategies that involve the combination of endogenous and exogenous resources, capital and opportunities.

The results of the DERREG research have not only illuminated the dynamics of globalization in rural regions, informing the development of the interpretative model, but also provide insights into mechanisms that support effective regional development interventions. Four main findings can be emphasized, corresponding to the themes of the DERREG research.

Firstly, resilient responses to globalization require support for endogenous business. As described above, branch plant investments and exploitation of natural resources to feed the global resource boom can provide a significant injection into regional economies, however, they do not necessarily result in economic growth through a region as a whole, and leave a region exposed to the effects of distant political and economic events. More resilient — if not as immediately lucrative — are strategies based on supporting endogenous rural enterprises in taking advantage of globalization to develop international business networks, especially trans-

local linkages with equivalent firms in other regions. Whilst the DERREG research records obstacles that smaller rural firms face in engaging international networks, it also highlights the importance of network brokers in facilitating such linkages. The activity of network brokers in connecting rural businesses to international networks – include access to new export markets – can be a catalyst for strategies of 'niche innovation' and 'trans-border networking', whilst network brokering that aims to consolidate linkages within regions can contribute to relocalization strategies.

Secondly, international migrants can make a significant contribution to rural regional development. The **DERREG** research highlighted the extent and dynamism of international migration to, from and through rural regions in Europe. As such, human capital should not be regarded as a static endogenous resource that needs to be trained up to meet the challenge of globalization, but rather as a fluid resource that needs to be attracted, captured, retained and nurtured. International migrants, including migrant workers, amenity migrants, asylum seekers, and return migrants, all possess skills, expertise and experience that can benefit rural economies. In particular, our research points to the potential for entrepreneurship among migrants to contribute to economic development. Yet, with some notable examples, this resource appears to be under-utilized in the regional development strategies of rural regions. Out-migrants can also contribute to regional development by acting as bridging agents in constructing international networks. Recognizing the entrepreneurial potential of international migrants can add value to 'global resource providers' and 'global playgrounds' - both of which are associated with in-migration.

Thirdly, global environmental awareness has opportunities for the sustainable development of rural environmental capital. the most significant endogenous resources available to rural regions are those associated with the natural environment. Traditionally, rural economies have been built on the extraction of value from natural resources through mining, industrial forestry and productivist agriculture but with an

environmental cost. Growing awareness of global environmental issues, including climate change and the loss of biodiversity, has increasingly led to these established rural activities being questioned and challenged. The incorporation of global environmental concerns into regional development planning has thus in some cases encountered conflicts and opposition from some elements in rural communities. However, global environmental awareness has also added value to the sustainable use of natural resources, thus creating opportunities for income generation through activities such as renewable energy production, eco-tourism and agri-tourism, the premium branding of sustainable agricultural products, and payments for environmental services. These activities underpin the model of the 'global conservators', and can contribute to strategies of 'niche-innovation' localization', as well offering an alternative way of 'global resource provision' based on renewable energy.

Fourthly, effective regional development is supported by joint regional learning and innovation. The inclusive engagement of rural residents and other stakeholders in planning responses to globalization pressures is critical to effective regional development. This can involve reflection on the identity, character and future of a region, in terms of thinking about what needs protecting and preserving, and what endogenous resources might be valorized as part of 'niche 're-localization' innovation' or strategies. Harnessing such reflection as a tool for regional development can be described as a process of regional learning, through which communities become better equipped to respond challenges and recognize opportunities. addition to greater awareness, regional learning can also develop technical capabilities, including the rediscovery of lost local knowledge and craft skills. As described in the DERREG research, building capacity for regional learning requires the interface of public administration, knowledge actors and regional civil society, the efficacy of which can itself be dependent on organizational structure, funding arrangements, the distribution of responsibilities and agency, and the input of charismatic individual actors.

3.8 Conclusions

Europe's rural regions have not been bypassed by globalization, but neither are they helpless victims of globalization processes. Rather, the DERREG research has shown that rural regions across Europe are proactively engaging with globalization processes and their impacts, exploiting new opportunities for international networking and trade, and developing responses to the challenges presented by globalization.

The DERREG evidence demonstrates that rural regions can be independent and innovative actors in global social and economic networks, contrary to some perspectives in EU regional policy that position rural areas as dependent adjuncts to urban economies. For instance, our research emphasizes the significance of direct networks between SMEs in different European rural regions, as well as transnational migrant communities that stretch between rural regions, and the enrolment of rural enterprises into global commodity chains.

Experiences of, and responses to, globalization vary between rural regions. As the DERREG interpretative model proposes, globalization impacts in rural regions result from the potential formed by the intersection of globalization processes and regional contexts and capacities, and the transformative agency of catalysts that can variously include local entrepreneurs, corporate actors, government policies or political events, among others.

Regional actors are hence participants in the reproduction of global networks through rural regions, and regional development policies and grassroots initiatives consequently can shape regional responses to globalization. For instance, such responses can determine whether regional economies are future-proofed against the sudden withdrawal of foreign branch plants; whether the skills and expertise of international migrants are tapped for economic development; and whether international environmental designations are welcomed as opportunities for sustainable development, or resisted as threats to traditional economic interests.

Developing effective responses to globalization involves reflection and learning, with the successful harnessing of lay and expert knowledge, and the facilitation of entrepreneurship and grassroots action. With appropriate policy support, Europe's rural regions can engage globalization from the bottom-up, and can have an influence in shaping their own futures.

4. POTENTIAL IMPACTS AND DISSEMINATION

4.1 Introduction

The objective of DERREG has been to produce an interpretative model that will enable regional development actors to better anticipate and respond to the key challenges for rural regions arising from globalization. As such, the realisation of potential societal and economic impacts has been central to the design and delivery of the project, including strategies for dissemination to non-academic users as well as to academic audiences. The research undertaken for DERREG has produced results that not only contribute to social-scientific understanding of globalization and its impacts in rural regions, but also have enabled an evaluation of current regional development strategies from which a number of recommendations directed at European, national and regional policy-makers and practitioners have been proposed.

Furthermore, DERREG has also developed a number of tools that can be employed by regional development actors to reflect on and prepare appropriate strategies in their own regions, including an interpretative model and a database of examples of good practice, both of which can be accessed via the DERREG web resource centre at www.derreg.eu.

4.2 Policy Recommendations

Regional development policy has an important role in mediating rural experiences globalization, by formulating and directing responses to globalization impacts, and in some instances by acting as catalyst to convert potential opportunities into actual connections. precise form and focus of interventions will vary depending on the particular globalization processes that are relevant to a specific region, and on regional contexts and capacities, which may also constrain the scope of regional development actions. Not every rural region has the potential to attract significant numbers of international tourists or significant foreign investment in branch plants, for example.

Institutional capacity is also important for enabling effective policy interventions. Responding appropriately to the specific globalization pressures on particularly regions or localities requires an ability to formulate and implement a strategy at the right territorial scale. As such, the presence of empowered regional governance institutions operating territories that make sense functionally allows for a more targeted and tailored response to pressures from globalization than in states where political authority is either heavily centralized or diffused among small-scale municipalities. Regional capacity to act also tends to be strengthened by the existence of a buoyant regional civil society, including business associations and support networks that can be enrolled in regional development initiatives. Indeed, engaging public authorities, civil society groups and businesses in collective action, for example as part of LEADER partnerships or in regional learning projects is fundamental to constructing sustainable and inclusive locally-led responses to globalization.

However, some barriers to effectively engaging with globalization opportunities identified in the DERREG research require policy interventions by national or higher-tier regional governments. For example, access to finance capital is a major obstacle for many SMEs wanting to explore international opportunities, especially since the financial crisis of 2008, but requires action by EU and national authorities working with the banks. Similarly, tax concessions and other fiscal incentives that can be offered to attract foreign direct investment to particular regions are commonly the responsibility of national governments.

Policy actions that can be taken by European and national authorities include:

 Strengthening the coordination of rural development and regional development policies, which can currently have contrasting emphasizes in rural regions leading to confusion and tensions over priorities.

- Progressing the harmonization of regulations concerning small business development in member states of the European Union, to make it easier for international migrants to contribute to regional development through entrepreneurial activity.
- Protecting initiatives at promoting business networking and supporting the integration of international migrants from public spending cuts.
- Continuing support for inclusive, locallybased agents for rural development on the LEADER model, to provide a vehicle for regional learning and the facilitation of grassroots initiatives.
- Supporting networking and the exchange of knowledge, ideas and experiences between rural regions in Europe, such that regions can learn from each other, including disseminating experience of developing international networks from successful regions in western Europe to 'lagging' regions in eastern and southern Europe.
- Building into the 2014-20 programme for the European Structural Funds a stronger emphasis on supporting the development of arrangements with long-term objectives and the capacity to be sustained beyond the funded programming period.
- Recognizing that rural regions have the capacity to engage directly in the global economy, for example by rural firms forming direct trans-local trading networks with companies in other rural and urban regions, and that the economic development of rural regions is not necessarily linked to, or mediated through, urban agglomerations.

Nonetheless, there are numerous interventions that can be made by regional authorities and by grassroots initiatives at the regional scale to help develop effective responses to globalization. These include:

To support international networking by rural businesses:

- Formulating strategies for regional development that emphasize the growth and international expansion and networking of endogenous regional businesses, over attracting foreign direct investment.
- Supporting 'network brokers' to develop networks between endogenous rural SMEs and assist with identifying and enrolling international partners.
- Identifying opportunities for regional enterprises to develop international niche markets using endogenous resources, and facilitating appropriate business advice, technical support and training.
- Encouraging firms trading internationally to source materials locally and to participate in regional support networks.
- In the case of many regions currently designated as 'Convergence Regions', maturing mechanisms for business support away from a short-term focus on accessing European Union funds towards developing support for international networking that will enhance long-term resilience.

To harness the economic potential of international migrants:

 Constructing formal and informal structures to build connections between in-migrants and long-term residents, to provide support for ethnic and cultural minorities, and to induct and include migrants in local cultural traditions.

- Building the capacity of international migrants to contribute to regional economies and societies, for example through language classes, and similarly educating local residents to build regional capacity to successfully integrate and retain international migrants.
- Developing initiatives to unlock the entrepreneurial potential of international migrants and utilise the skills, expertise and connections of international migrants in economic development.
- Proactively seeking to attract and capitalise on the skills and experiences of return migrants, especially in rural regions of central and eastern Europe, by establishing appropriate business support networks and targeting investment in economic sectors that can provide attractive employment opportunities for return migrants.
- Ensuring that international migrants are able to easily access information about national and regional laws and regulations, including on business development and taxation, potentially as part of a wider 'welcome pack' or programme.

To promote sustainable development and the growth of the rural eco-economy:

- Adopting strategies for sustainable development that emphasize the sustainable use of endogenous regional resources and the development of niche products, rather than following generic models such as industrial-scale renewable energy production or sustainable tourism that may not be appropriate to regional circumstances.
- Promoting eco-economy activities that can tap into international markets, including the sale of high quality and sustainably sourced produces (such as wine and craft products), and sustainable tourism that promotes a region's natural

- environment to attract international visitors.
- Adopting an integrated approach to renewable energy schemes, targeting methods of renewable energy production that are appropriate to regional resources and landscapes, and that add value to local industries (e.g forestry) or can attract investment by companies seeking a reliable low-carbon energy supply, whilst not undermining wider environmental goals or other sustainable development interests such as tourism.
- Adding value to environmental designations such as national parks, Natura 2000 sites and UNESCO biospheres by promoting and branding sustainable tourism opportunities and sustainablyproduced food and craft products in association with protected area.
- Engaging local residents and other stakeholders in sustainable development planning at an early stage, to build consensus around objectives and projects and minimize conflict.

To facilitate and support regional learning and innovation:

- Developing public-private partnerships to facilitate regional learning and grassroots innovation, empowering regional citizens and stakeholders.
- Structuring initiatives with an appropriate balance of power between state, knowledge sector and regional participants, and a clear distribution of roles and responsibilities, reflecting specific regional geographical, historical, cultural, economic and political contexts.
- Clearly identifying the target beneficiaries of interventions and the types of support and facilitation that will be delivered.
- Ensuring that support structures for regional learning and grassroots initiatives

are visible and accessible to the targeted beneficiaries.

- Empowering regional development agents with decision-making powers, limiting bureaucracy, and allow time for initiatives to develop and produce results.
- Supporting limited-term targeted interventions as catalysts to forge networks and promote reflective engagement that will lead to longer-term arrangements.
- Building reflection and learning into regional development strategies, both to inform development initiatives and to learn from mistakes and successes.

4.3 Dissemination Activities

DERREG has engaged in a wide range of dissemination activities aimed at both academic and non-academic audiences in support of its objectives of contributing both to the advancement of scientific knowledge and to the enhancement of policy and regional development strategies. The major dissemination activities undertaken are described below.

4.3.1 Web resource centre

One of the core objectives of DERREG has been to establish a web-based resource centre to facilitate and coordinate the dissemination and accessibility of information to researchers, regional development actors and other users interested in the challenges of globalization for rural regions. The web resource centre was launched in June 2011, at the DERREG Scientific Workshop in Aberystwyth, and is hosted on the DERREG website, www.derreg.eu.

In addition to archiving DERREG working documents and deliverables, and providing access to publications and presentations on DERREG results, the web resource centre comprises three key elements that are aimed at non-academic users:

 Interpretative Model Toolkit: A downloadable 'tool-kit' enables professional or grassroots actors in rural development to work through the stages of the DERREG interpretative model and apply them to their own region. This exercise will help users to identify the key challenges and opportunities arising from globalization for their region, and signpost appropriate potential responses and relevant examples of good practice.

- Database of Good Practice: Over 100
 examples of good practice from the DERREG
 case study regions have been compiled into a
 searchable database. The database entries
 provide information on the focus, activities
 and history of initiatives as well as contact
 details and links to websites where available.
- Short Films: Nine short films illustrating globalization challenges, regional development responses and examples of good practice across the DERREG case study regions can be accessed from the web resource centre. The films primarily comprise interviews with key stakeholders and entrepreneurs, conducted in the local language, with English subtitles. The films can also be accessed directly on You Tube in a dedicated 'derregfilms' channel.

4.3.2 Conferences and Events

DERREG partners have both organized and contributed to a number of conferences, workshops and other events aimed at both academic and non-academic participants.

DERREG Final Conference: The primary event to disseminate DERREG project results was held in Murska Sabota, Slovenia, in October 2011. The conference was attended by over 60 participants, including a mixture of researchers and regional development practitioners, mainly from Slovenia, Croatia, Hungary, Romania, Austria and the Czech Republic. In this way the conference addressed the emphasis in the project proposal and initial call on contributing to regional development in Central and Eastern Europe. In addition to the presentation of DERREG results, the conference included a showcase of four good practice examples by invited practitioner speakers, a roundtable on globalization impacts responses in rural Central and Eastern Europe,

and presentations on policy interventions in rural development by a Secretary to the Slovenian Cabinet, the director of a regional development initiative, and a local mayor.

Policy Seminar: A policy seminar to disseminate emerging results and policy recommendations from the DERREG research was held at the European Parliament in Brussels in March 2001, hosted by Mairead McGuinness MEP, a member of the Rural Policy Committee. The seminar was attended by over 50 participants, including policy advisors and rural and regional development professionals from the European Commission and European, national and regional organizations. The seminar also included invited presentations on the CAP-IRE and RUFUS projects.

In addition to the DERREG Policy Seminar, emerging results from DERREG were also presented at policy seminars organized in Brussels by the CAP-IRE and RUFUS projects in October 2009 and February 2011 respectively, as well as at the RUFUS conference in Hanover in August 2010.

Regional Workshops: The engagement of regional stakeholders in the case study areas has been an important dimension of the DERREG research. This has primarily been done through a series of regional workshops held throughout the project. At least one, and up to three, workshops have been held in each of the case study regions, depending on stakeholder interest.

Scientific Conferences: Sessions linked to the DERREG project were organized at the European Society for Rural Sociology conferences in Vaasa, Finland, in August 2009 and Chania, Crete, in August 2011, and at the EUREGIA — Local and Regional Development in Europe conference in Leipzig in October 2010. These sessions included a number of presentations reporting emerging results from DERREG, as well as complementary papers by speakers external to the project. The EURORURAL 10 conference in Brno in August 2010 was also linked to the theme of DERREG, with a keynote lecture and a special plenary session dedicated to the presentation of emerging results from DERREG.

In addition, emerging results from DERREG have been presented in papers to a range of national and international scientific conferences including the Association of American Geographers (2011); German Geographical Society (DGfG) Annual Conference (2009); DGfG Conference Sustainable Tourism (2011); DGfG Working Group on Rural Regions (2010); European Association of Agricultural **Economists** (2009);Geographical Societies Conference (EUGEO) (2011);International **Farming** Systems Association (2010); International Geographical Union (IGU) Commission on Local Development 2010): IGU Commission (2009. Sustainability of Rural Systems (2009, 2011); IGU Commission on the Dynamics of Economic Spaces, mini-conference on 'Globalizing Rural Places' (2011); Irish Geographers Conference (2010); Regional Studies Association Annual Conference (2010, 2011); Regional Studies Association Winter Conference (2010); UK-US-Canadian Rural Geographers Conference (2011); Warsaw Regional Forum (2011). Abstracts have also been accepted for papers on DERREG results at the Association of American Geographers, International Geographical Union and International Rural Sociology Association conferences in 2012.

Guest Lectures and Seminars: Emerging results from DERREG and project background have also been presented through a number of guest lectures, seminars and other public presentations at universities, research institutes, government agencies and other venues. These include presentations in Aberystwyth, Berlin, Bogotá (Colombia), Brno, Galway, Leipzig, Ljubljana, Mykolayiv (Ukraine), Newcastle (UK), Osnabrück (Germany), Prague, Saarbrücken, Tel Aviv, Vienna and Warsaw. Presentations have also been given to a number of organizations in the case study regions.

4.3.3 Scientific Publications

A publication strategy has been adopted for the dissemination of results from DERREG to the social science community through an edited book, three journal special issues and a number of stand-alone papers in leading international journals and national periodicals. These include:

Edited Book: 'Globalization and Europe's Rural Regions', edited by John McDonagh, Birte

Nienaber and Michael Woods, to be published by Ashgate in 2012.

European Countryside: Double special-issue of the open-access journal, 'European Countryside' published as issue 3 of volume 3 (2011) and issue 1 of volume 4 (2012), comprising a total of 12 papers from DERREG.

IfL Forum: Special issue of *IfL Forum* (periodical published by the Leibniz-Institut für Landerkunde) on 'Environmental Capital and Regional Development in the Rural Areas of Europe'. To be published as number 17, 2012.

Published and submitted papers in international journals: Papers based on DERREG research have been submitted to international journals including the Journal of Rural Studies, European Countryside, EuropaRegional, European Journal of Social Science Research, and the Journal of Agriculture, Food Systems and Regional Development. Seven articles have been published or accepted for publication to date. Papers have been submitted to national journals including Geografiski Vestnik, Moravian Geographical Reviews, and Revija za geografijo.

Book chapters: In addition to the DERREG volume, 'Globalization and Europe's Rural Regions', mentioned above, nine further chapters based on DERREG research will be published in edited books, including four chapters in J R Diez and C Tamasay (eds) Regional Resilience, Economy and Society (Ashgate, 2013).

Papers in preparation: A number of further papers are currently in preparation submission to international journals, including four key overarching articles provisionally titled: 'Rural resilience and regional capacity in the era of globalization' (for Regional Studies); 'Rural mobilities, transnational networks and regional development in Europe' (for Journal of Rural Studies); 'Individual agency, relational political economy and catalysts for globalization-related restructuring in rural regions' (for European and Regional Studies): 'Methodological issues in identifying examples of good practice in rural development' Sociologia Ruralis).

4.3.4 Other Publications

As well as the scientific publications outlined above, DERREG has produced or contributed to a number of other publications targeted at non-academic readers. The most significant include:

- EU Policy Briefing paper, March 2011, published for DERREG Policy Seminar and available to download from www.derreg.eu
- Feature in *EU Researcher* magazine, Spring 2012.
- Article in Public Service Review: European Science and Technology, March 2012, also available on-line at www.publicservicereview.co.uk
- Feature in *SCOOP Newsletter*, September 2011.
- Profile in SEED Research Library, available at http://www.seedresearchlibrary.com/
- Articles published in 11 regional newspapers in Germany, Ireland, Lithuania, Slovenia and Sweden reporting findings from the migration research.
- Two radio features and one television feature on the migration research in Germany and Ireland.
- Regular postings on the DERREG research and findings on emerging the public blog maintained by the Rural Sociology at Department Wageningen University, available at: www.ruralsociologywageningen.wordpress.com

PROJECT WEBSITE

More information about the DERREG research, its findings and recommendations is available in the DERREG Web Resource Centre at www.derreg.eu

Materials available in the Web Resource Centre include:

- A searchable database of good practice examples of policies and initiatives.
- Short films illustrating the impacts and responses to globalization.
- A toolkit for regional development actors to work through and apply the DERREG interpretative model.
- A European Policy Briefing summarizing policy recommendations from the DERREG research.
- Detailed summaries of research findings and recommendations from each of the four thematic work packages.
- Summary reports and background contextual papers for each of the case study regions.
- Copies of DERREG internal working papers, and of academic publications and presentations from the DERREG research.

www.derreg.eu

CONTACTS

The members of the DERREG consortium are:



Aberystwyth University, UK (Michael Woods and Laura Jones) m.woods@aber.ac.uk



Leibniz Institut für Länderkunde, Germany

(Joachim Burdack, Michael Kriszan and Robert Nadler) J burdack@ifl-leipzig.de



Mendelova univerzita v Brně, Czech Republic

(Antonín Vaishar and Milada Šťastná)

a.vaishar@seznam.cz



National University of Ireland,

(John McDonagh, Marie Mahon and Maura Farrell) john.mcdonagh@nuigalway.ie



Nordregio, Sweden

(Andrew Copus, Alexandre Dubois and Moa Hedstrom) andrew.copus@nordregio.se



Research Institute NeVork, Slovenia

(Emilija Kairytė)
emilija.kairyte@gmail.com



Universität des Saarlandes, Germany

(Birte Nienaber and Wioletta Frys) b.nienaber@mx.uni-saarland.de



Univerza v Ljubljani, Slovenia (Barbara Lampič, Irena Mrak and Irma Potočnik Slavič)

barbara.lampic@ff.uni-lj.si



Wageningen Universiteit, Netherlands

(Dirk Roep, Wiebke Wellbrock, Lola Dominguez and Ina Horlings) dirk.roep@wur.nl