Rural Innovation

Sami Mahroum, Jane Atterton, Neil Ward, Allan M. Williams, Richard Naylor, Rob Hindle, Frances Rowe
Rural Innovation

Foreword

In the past, innovation policy has tended to concentrate on urban areas. This is understandable: simply due to density, much traditional innovation that is countable by R&D expenditure or patent production happens in cities. But 86 per cent of the UK is rural, and those areas are home to almost 20 per cent of the population. Isn’t it time to look a little more closely at how innovation happens there and how we might stimulate it?

NESTA’s role is to be an experimental organisation, a test-bed for ideas and programmes that stimulate innovation. Alongside our mainstream innovation research, NESTA tries to explore new areas, some of which later become ‘common knowledge’. It was in this vein that we began our research programme into rural innovation earlier this year.

The results are exciting. By gathering a collection of expert researchers, policymakers and practitioners from around the UK, we uncovered a wealth of hitherto unknown innovation – in SMEs, public services, creative industries and tourism, alongside more traditional rural industries. We also uncovered some common themes and challenges that hold important lessons for policymakers.

Alongside our other work on ‘Making Innovative Places’, this project builds towards a greater narrative of innovation as a ‘whole UK’ activity – not just something for a chosen few. This theme informs all of our work at NESTA as we try to best-prepare the UK for the economic and social challenges of the 21st century.

As always, I welcome your input and your comments.

Jonathan Kestenbaum
CEO, NESTA

December, 2007

NESTA is the National Endowment for Science, Technology and the Arts.
Our aim is to transform the UK’s capacity for innovation. We invest in early stage companies, inform innovation policy and encourage a culture that helps innovation to flourish.
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NESTA Policy & Research Unit

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Centre for Rural Economy, Newcastle University

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1. Introduction: Rural innovation

Innovation is high on the UK policy agenda; this is manifested not only in the name of the Department for Innovation, Universities and Skills, but also in important Government documents such as the Pre-Budget Report and Comprehensive Spending Review. As in most other advanced economies, UK innovation policy revolves largely around creating innovation hubs and technology clusters in and around cities and urban economies. This is largely justified by the fact that cities often bring together important conditions for innovation including depth and breadth of resources, proximity and connectivity.

Nevertheless, not all innovations happen in and around cities. Many innovations in health, housing and transport have emerged primarily in response to growing demand in the primary rural sectors such as the need to transport minerals, agricultural products or wood to ports or cities. For example, today’s satellite generated geographic information systems, used by many urban motorists (Sat Nav), have their origins in rural Canada where they were first developed to map information about soils, agriculture, recreation, wildlife, waterfowl, forestry, and land use. More recent examples include the use of rural waste management techniques – such as composting waste – to manage waste in cities.

Furthermore, some rural areas have shown extraordinary success in transforming themselves into global centres of innovation. The Silicon Valley in the United States was until the 1950s largely a rural region, and Sophia-Antipolis in Provence (France), was entirely rural until the early 1970s. Both now play home to some of the most important innovation centres in North America and Europe.

There is an important relationship between rural natural resources and innovation. This has been enhanced by the growing strategic importance of sustainable technologies that rely on rural resources, such as crop-based energy, wind and wave power. These new technologies not only bring new resources to rural areas, they also create a renewed political interest in their role in the wider economy. Indeed, economies fuelled by rural natural resources can be very innovative, as both Canada and the Nordic countries demonstrate.

This collection of papers examines the ongoing changes in rural areas and what they mean for innovation. Thus, Chapter 2 examines innovation in the traditional land-based industries and the remarkable transformations taking place in this sector. Chapter 3 deals with the growth of the rural tourism industry and the challenges and opportunities emerging from it. Chapter 4 examines the creative industries (a typically urban-based sector) in rural areas and how it is acting as a catalyst for innovations across a number of other sectors. Chapter 5 takes a non-sector approach to innovation in rural areas by looking at the role and challenges of innovation in small rural businesses. Finally, Chapter 6 looks into the growing demands on public services in rural areas and the impact they have on driving innovation in that sector.

2. Rural areas in the UK are becoming less distinct

About 86 per cent of the UK’s land area is rural. Rural areas can be found within city-regions and in remote peripheral areas, but most (75 per cent) exist within one or more city-regions. About 19 per cent of the population – 9.5 million people – live in rural areas. Of this group, 6 per cent live in rural areas where the surrounding region is particularly sparsely populated. Increasingly, rural areas in the UK benefit from a net in-migration of people, especially of professional and managerial ex-urbanites. Although, some have identified a net out-migration of skilled and unskilled workers, the overall trend is of rural population growth.

Traditionally, rural economies have been dominated by industries such as farming, forestry, mining and seaside tourism. However, today, even in remote rural areas the largest employment sectors are in: public administration, education and health (638,313 or 25 per cent); distribution, hotels and catering (582,328 or 23 per cent); and manufacturing (384,921 or 15 per cent). By contrast, agriculture and fishing account for just 116,744 jobs (5 per cent) in remote rural areas. As a result, rural areas are gradually becoming less distinct from their urban counterparts.
Rural areas adjacent to major urban metropolitan areas tend to resemble the industrial and economic structures of their neighbouring cities even more (see Chapter 5); they have similar occupational structures with a large concentration of employment in the services and manufacturing sectors. This reflects the emergence of the commuter belts after the expansion of transport networks into these rural areas, and the advances in communications technologies that have allowed some businesses to expand outside city boundaries and into adjacent rural areas. On the whole, both nearby and remote rural areas’ economies are growing more similarly to the rest of the economy (see Chapter 2).

3. Changes are bringing rural economies closer to the rest of the economy

In recent years, some major economic and technological trends have provided new stimuli to innovation and economic development in rural areas. First, more and more people are seeking ‘quality of life innovations’ such as healthier food and environment-friendly products and services, which are seen as typically rural offerings (see Chapters 2 and 3). Businesses in rural areas, as the various papers in this compendium demonstrate, are seeking to capitalise on this growing trend.

Second, the primary sectors (particularly farming) that have historically dominated land use in rural areas are acquiring new roles through increased diversification and broader multifunctional economic use. This trend is detailed further in this collection by Atterton and Ward (see Chapter 2). Farms are producing non-food products, such as crops for energy purposes or serving as tourism resorts. Parts of the coastline are serving as wind and wave farms. Forests are being used in the fight against climate change and flooding, and also as a source of ‘green fuel’. These new uses of land are set to redefine the place of agriculture in society.

Third, the counter-urbanisation movement is not only increasing the population of rural areas, but is also bringing with it a wealth of experience and expertise. The new migrants bring with them significant human and social capital. Their impact is multifaceted. Many in-migrants tend to be entrepreneurial; they arrive with new ideas and seek to implement them. As Allan Williams shows (see Chapter 3), in-migrants are creating new tourism businesses that offer new forms of experience. Others take advantage of the possibilities offered by ICT to create ‘digital’ businesses in the creative sector, a trend documented in the paper by Richard Naylor (see Chapter 4).

The impact of an increased population will also leave its mark on innovation in public services. As Frances Rowe demonstrates (see Chapter 6), in-migrants are creating new demands for public services, including education, health and business support services. They also expect a better infrastructure, with broadband and wireless networks, improved transport and housing. So, ultimately they create both pressure and incentives for increased innovation in public services.

In sum, the overall picture is very different from the traditional rural idyll. Rural areas are undergoing many important changes; they are witnessing population growth and industrial renewal. They are growing less isolated and more connected.

4. Innovations with a rural impact

The UK Government defines innovation as the successful exploitation of new ideas. A more specified definition was developed for this collection of papers. Rural innovation is defined as the introduction of something new (a novel change) to economic or social life in rural areas, which adds new economic or social value to rural life.

However, just as distinctions between rural and urban economies have become increasingly blurred, so have the innovation systems that drive them. In particular, improved communication and transport systems can sometimes dissolve the distance between rural and urban areas. Thus the distinction between rural and urban innovation is blurred.
For example, a small software firm based in a small village in the Scottish Highlands conducting business directly with clients around the world, receiving orders and delivering services, might innovate to weather international competition, but its innovations will be difficult to classify as being rural, urban or global. Likewise, a large bank in central London might run some of its sophisticated ‘back office processes’ from a seaside village in Devon where continuous process and product innovations might take place. In such instances it is difficult to characterise the origins and nature of such innovations. However, it is equally important (as in the case of so much innovation policy) to observe this lack of clarity and not default to the urban area as the source of innovation.

Broadly speaking, however, we can distinguish between three types of rural innovations: innovations from rural areas aimed at applications elsewhere (e.g. organic food); innovations for rural areas that have originated elsewhere (e.g. Geographic Information Systems (GIS)); and innovations that are universal in nature, but which have had strong impacts on rural life (e.g. the Internet). The ‘3 x 3’ matrix in Table 1.1 identifies and maps the areas of concern for a comprehensive policy analysis of rural innovation.

### Table 1.1: Different Types of Innovations with Rural Impact

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These three types of rural innovation, categorised by their origins, do not occur in isolation from each other, but are connected through market forces (supply and demand) and the wider innovation system. Thus, rural demands can drive innovation in cities (as with GIS); and likewise urban demand can drive innovation in rural areas (e.g. quality food driven by supermarket specifications). In fact, innovation may also be stimulated at the interface between urban and rural supply and demand (for example, refrigerated trucks).

#### 4.1 Rural innovations driven by ‘urban demand’

Traditional rural industries are becoming increasingly important sources of new innovation (see Chapter 2). Witness the growing interest in ‘non-food farming’ as a source for new industrial materials, including materials based on fibre crops or, perhaps more importantly, as a source of biofuels to provide new energy.19

In both instances, new technologies are being applied in traditional rural industries to spin out new innovations targeting new markets and creating new added value. This ‘diversification’ can take non-technological routes too. So, in agro-tourism, farms become recreational retreats (see Chapter 3). In such cases, rural innovation activities reflect largely urban demand.

Even in traditional rural industries such as agriculture and food, a growing urban demand for quality food is a major source of innovation (see Chapter 2). Here we find organic farming, the production of high quality products and regional specialities, on-farm processing and marketing, as well as the creation of new short supply chains, all driving new waves of innovation.

Urban-based organisations like supermarkets can also drive innovation on farms, such as Farm Biodiversity Action Plans (Sainsbury’s premium fresh produce suppliers), conservation plans linked to FWAG20 (Tesco’s ‘Nature’s Choice’), and the development of additional audit requirements for the Assured Produce Scheme linked to the LEAF21 audit (Waitrose’s LEAF brand). The main organic standards also include requirements to address biodiversity.
4.2 Rural innovations driven by ‘rural demand’
The most common rural-driven innovations are in traditional rural industries: such as farming through new harvesting machinery or tractors; fishing boats, nets or navigation systems; and mining automation or drilling equipment. Incremental innovations in these industries improve productivity. Indeed even when such innovations are developed outside rural areas, rural businesses (often through farmers or fishermen associations) still play an important role as ‘users’ in shaping and pushing the development of many such innovations.

Some rural areas urgently need to conquer natural barriers, such as harsh climate, the effects of climate change (including rising water levels), rugged topography, desertification, or sheer remoteness. These demand new types of innovations. While the weather system of the British Isles is hardly extreme, seasonal instances of extreme weather, particularly flooding, are becoming regular occurrences. These create urgent demand for innovations in flood management and evacuation, as well as in water-resistant materials and weather monitoring systems.

4.3 Rural innovations driven by universal basic needs
Many rural innovations have their origins in basic needs, such as access to critical public services, like education, health and social services (see Chapter 6), and to a minimum level of commercial services, such as post offices, banks and retail (see Chapters 5 and 6). In this regard, rural areas have benefited from the distance learning over the Internet, the provision of online banking, and e-government services created to lessen the barriers of distance.

Innovation in response to these needs does not necessarily emerge from rural areas themselves; in fact it mostly comes from outside. However, overcoming the problems posed by ‘sparsity’ and distance may sometimes lead local businesses and public services delivery organisations to excel in the use of such innovations, as the two papers by Frances Rowe (see Chapter 6) and Rob Hindle (see Chapter 5) show.

5. Traditional challenges persist

5.1 A thin economic base
Rural regions are comparatively disadvantaged in their ability to be innovative. Most economic geography literature suggests that the low business density and dispersed business population undermines rural businesses’ ability to access and benefit from knowledge transfer (tacit or otherwise), or the knowledge spillovers and external economies that prevail in cities. Moreover, a thin business environment does not normally create an environment sufficiently competitive to stimulate innovation.

However, this is not always the case; in some instances, these rural challenges actually become drivers of innovation. For example, a small business in a remote rural area is disadvantaged by distance and location, so it faces greater pressure to innovate in order to remain competitive (see Chapter 5). Furthermore, the spread of ICT has arguably opened up rural markets and made them more exposed to international competition (see Chapters 3 and 5). Through the Internet, a Londoner now has access to a wider selection of rural products – clothes, artefacts, leisure and food – than 25 years ago. Thus the pressure of international competition increases the pressure to innovate (see Chapter 3).

Furthermore, rural economies tend to be dominated by very small businesses (see Chapter 5). These often face the traditional challenge of rising costs associated with ‘distance’, especially in transport. Small businesses tend to have very limited financial resources for investment in innovation, new technologies or product development. They also lack local innovation support services, reducing their access to sources of new knowledge and learning. Advances in information and communication technology have somewhat improved matters by providing new opportunities for sourcing knowledge, but there is still much to do, particularly in the transfer of tacit knowledge.

5.2 A weak knowledge base
With a few exceptions – such as Aberystwyth University in rural Wales, or Cranfield University in Bedfordshire – rural areas suffer from the absence of Higher Education institutions and research centres, reducing their
access to learning and skills. Rural students are forced to migrate to urban areas to receive the training needed to survive in a modern economy. Rural areas also lack access to local institutions that recognise their businesses’ needs. While initiatives in Cumbria and the Scottish Highlands and Islands have sought to establish new universities in rural areas to provide that missing knowledge base, there remains a significant problem.

6. New challenges are a barrier and an incentive

6.1 Innovating for environmental sustainability
The growing environmental agenda is exerting more political and social pressure to achieve an environmentally friendly rural economy. From farming to aquaculture, environmental regulation is putting more pressure on rural industries to meet national and international environmental standards. Typical small rural industries often do not have the means to invest in new technologies, practices or techniques to meet these challenges (see Chapters 2 and 5). This reduces their ability to respond innovatively to the pressure of regulation, making it an additional business cost that threatens their competitiveness (see Chapter 5).

6.2 Public services and the quality of life
Rural areas derive much of their competitiveness from their high quality of life. But that quality of life can be threatened by poor access to public services (see Chapters 3 and 6), an absence reflecting similar challenges to those in the private sector. As Frances Rowe explains (see Chapter 6), the delivery of public services to dispersed and sparse rural settlements involves high inefficient costs associated with transport, connectivity and access, as well as in recruiting skilled workers to provide these services.

7. Driving innovation in rural areas: The way forward

7.1 Support local partnerships
Help rural businesses organise through forums and associations to create a critical mass of ‘buyers’ and ‘suppliers’. This should help rural businesses to articulate their offerings and demands, creating markets for ‘innovation’ (as with the business clubs established for food SMEs in the West Midlands region, and Food Yorkshire).

7.2 Provide a ‘distance-neutral’ infrastructure
A ‘distance-neutral’ infrastructure can be used regardless of one’s location. The broadband infrastructure is well established in most rural areas, but there is a need to invest in connectivity research to create new modes and models of collapsing distances and working in virtual environments. A good example is the Distance Lab initiative in Scotland, which researches how digital media and ICT can help reduce the impact of distance on individuals, communities and businesses in the north of Scotland as they link to other areas of the world.

7.3 Invest in knowledge transfer and learning
Policymakers should work with appropriate universities and colleges to transfer ‘hands-on’ expertise and training to local communities – as with Learning Networks in the Newcastle region. In areas without such institutions, technical colleges could use similar techniques to help foster rural innovation.

7.4 Target the individual
Without people, there is no innovation. Government support for rural areas should target individuals as much as businesses. In many rural areas, they are often the same, since many are one- or two-person businesses. Businesses in rural areas, particularly in peripheral areas, tend to be either very small (<10 employees) or consisting of self-employed persons (see Chapters 3 and 5). In these circumstances, every individual matters.

Women and senior citizens are two key groups. Traditionally neglected by innovation policy, there is a need to increase the number of female entrepreneurs. One success in this area is the Women in Rural Enterprise
(WiRE) programme, which now has over 1,600 rural business members engaged in networking, mentoring and skills development. Likewise, there is an opportunity to make better use of the elderly workforce – rural workers tend to retire later than urban workers and enjoy more flexible work arrangements.

7.5 Help sustain a high quality of life
Rural areas are currently experiencing a net flow of immigration from the cities, driven by the pursuit of a better quality of life. Government must therefore continue to invest in the provision of rural public services to help these areas maintain their quality of life comparative advantage, offset other challenges and accelerate the benefits accrued from this population growth.

8. Rural innovation and UK innovation policy
The growth of innovation activities in rural areas requires greater attention from all levels of government, but especially from sub-national regional agencies and the devolved administrations. It is critical that policymakers reflect positive attitudes towards the broad topic of innovation in peripheral regions, not least by recognising the growing prospects of a new rural economy fuelled by innovation.

Currently, rural innovation is either overlooked in regional innovation strategies, or only scantily mentioned in very specific contexts (such as Foot and Mouth Disease, or broadband projects). Central Government also tends to neglect rural areas as locations for innovation, focusing instead on cities and their adjacent regions.

Local authorities have an important role to play too. The Sub-National Review, which integrated regional spatial planning and economic development, proposed an increased role and new powers for local authorities to promote and deliver interventions to support economic development within their ‘territories’. This offers local authorities an excellent opportunity to include the creation of optimum conditions for innovation in their ‘place shaping’ role. Such an approach would encourage the public sector to understand, invest in, enable and facilitate innovation in rural as well as urban businesses.
Chapter 1 Endnotes

1. On September 5th, 2007, NESTA convened a small workshop of experts on various aspects of rural affairs, bringing together people from Regional Development Agencies (NWDA and One NorthEast), Defra, Highlands and Islands Enterprise, Combined Universities in Cornwall, as well as consultants and academics. The workshop discussed changes in rural economies across the UK, and the challenges and opportunities associated with them. NESTA’s interest and focus was on how these changes will impact on the ability of various players (enterprises, organisations and individuals) to innovate and how can innovation help rural economies take advantage of these changes.

2. See Chapter 4, Sustainable Growth and Prosperity.


5. The development of ‘Geographic Information Systems’ was pioneered by the Canadian Department of Energy, Mines, and Resources in 1964.


10. Defra’s new definition of rural areas are ‘settlements that have 10,000 inhabitants or less’. Berkeley Hills (2003) Rural Data and Rural Statistics. A Report to the Economic and Social Research Council.

11. Ibid.


13. These are rural areas in the traditional sense of the word, where the population is found in very small and dispersed settlements.


17. Ibid.


27. Tacit knowledge is informal practice-generated knowledge that is hard to formalise or describe in text and is transferred best through personalised face-to-face contact.


30. See www.wireuk.org


Chapter 2

Diversification and Innovation in Traditional Land-Based Industries

Jane Atterton and Neil Ward
Centre for Rural Economy, Newcastle University
1. Introduction: Diversification and innovation in traditional land-based industries

Rural economies have undergone tremendous change in recent years. One of the most significant has been the decline in the importance of the traditional land-based industries. Between 1990 and 2006, the workforce employed in UK agriculture fell by a third, and the number of farm-workers fell by almost a half. At the same time, policy reforms and shifts in consumer preferences have opened up new opportunities for those working in the land-based sector. They are growing new food products and energy crops, promoting conservation and recreational opportunities, and diversifying into new forms of economic activity.

All of this would seem to suggest innovation in practice. Yet UK innovation policy remains highly science-based and urban-centric, ignoring research that suggests that the dominant means of analysing patterns and processes of innovation have been hampered both by an overly narrow conceptualisation of innovation and by the limitations of traditional indicators of innovation.

This narrow perspective has also affected our geographical imagination of innovation. It has emphasised larger urban areas over other localities, seeing the research and development infrastructure of universities and knowledge-intensive businesses as more likely to produce innovation than rural areas lacking such infrastructure.

Whilst cities are regarded as being innovative due to the size, depth and breadth of their resources, rural areas tend to be regarded as traditional, conservative and lacking in dynamism. At worst, they are seen as passive recipients of exogenous forces for change. This latter view is perpetuated in current debates about city-regions where rural areas are viewed as secondary beneficiaries of urban-focused development strategies, their impacts ‘trickling out’ to surrounding rural areas. However, this perspective ignores the strong relationship between urban and rural economies and the opportunities for innovation provided by rural economies themselves (see Chapter 1).

Those interested in rural economic development also face a widely-held misconception about the place of traditional land-based industries like farming in the rural economic scene. All too often, urban-based economic development professionals equate the ‘rural economy’ with ‘farming’. Yet, while land-based industries dominate the use of rural land, only a small proportion of employment and Gross Value Added (GVA) in rural areas is directly generated by these industries.

Nevertheless, the land-based sector remains important in providing the context in which a whole range of other rural economic activities take place, and in maintaining the rural landscape. The land provides the natural resource base on which rural communities depend. It is the source of economically valuable products and services for both rural and urban communities, including water resources, energy, food, timber, waste disposal and the provision of space for recreation. It also provides vital environmental functions such as waste assimilation, flood mitigation and carbon sequestration at scales from the local to global. Although food production remains the primary output of land in rural areas, rural areas now perform a wide variety of functions far beyond the provision of food.

2. Major transformations in the rural economy

2.1 Diversification away from declining traditional land-based industries

Agriculture comprises less than 2 per cent of the national labour force, and even in the rural areas of England, this only rises to 2.6 per cent. Although businesses involved in agriculture and fishing make up 13 per cent of the total number of businesses in England’s rural areas, their numbers are declining more rapidly than all other sectors. Statistics for rural England show the number of agricultural and fishing jobs fell by 26,000 between 1998 and 2002. At the same time, there were 230,000 net new jobs created in distribution, hotels and restaurants, and in banking and finance. Overall, the number of jobs grew by 275,000 – a proportionately greater improvement (5.3 per cent) than for urban areas (4.7 per cent). Agriculture now accounts for only 0.8 per cent of the UK’s Gross Value Added.
The countryside has seen a growth in woodland and forested areas since the 1940s. Across the UK, 9 per cent of all land – 1.1 million hectares – is woodland. In England, 754,000 hectares (67 per cent) are made up of broadleaved species, the majority of which is privately owned. Forestry is a significant employer in some rural areas, providing 6,166 jobs in direct forest activities in England and a further 8,573 jobs in non-forest related activities such as haulage and processing. English grown timber and woodland management in England is associated with businesses estimated to contribute £2.1 billion to GDP and employing 64,000 people. Woodland-based businesses such as recreation and tourism are equivalent to around 16 per cent of this activity.

Most farm households have multiple sources of income, and multiple income earning has become more common and important over recent decades. By the early 1990s, a study covering some 7,000 farm households across twelve European countries revealed that half of all active farm households were no longer exclusively dependent on agricultural production for their incomes. The study also showed how off-farm income sources were of much greater significance than non-agricultural income generated on the farm (through conventional diversification activities such as farm-based tourist accommodation). The buoyancy of the surrounding rural economy is therefore a crucial source of alternative or additional income to farm households, particularly when farm incomes are squeezed, but farm household members need to be innovative in recognising and taking advantage of these opportunities.

2.2 Rural economies now have a sectoral composition comparable to urban economies

The traditional image of rural economies as dominated by primary industries is increasingly anachronistic. As noted in Chapter 1, rural economies have become increasingly diverse and differentiated as agriculture has ceased to be the main source of employment for those living in rural areas. Other activities across both the manufacturing and service sectors have grown in importance. As a result, the sectoral composition of urban and rural economies is now broadly comparable (see Table 2.1). In terms of the number of businesses, the two largest sectors in both rural and urban areas are wholesale and retail; and business and professional services.

In many rural areas, new firm formation rates have also been higher than in urban areas. Between 1995 and 2004, rural districts saw an increase of over 7 per cent in the number of new businesses registering for VAT (or 37,000 per year). This was marginally higher than the rate of increase in urban or mixed authorities. More recently, Department for Environment, Food and Rural Affairs (Defra) data showed that only major urban centres have more businesses per 10,000 of population than the most remote rural areas.

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Table 2.1: Employment by sector (2002)
Agriculture retains a national policy profile, but continues to be conceived and managed as a national economic sector rather than as a force for territorial development. Experience across OECD countries suggests that sectoral approaches to agricultural support and development deliver only limited wider benefits for rural people and territories. In the early years of the Labour Government, there were signs that the role of agriculture might be being re-thought as an integral component of rural or territorial development rather than as a separate economic sector. The Cabinet Office Performance and Innovation Unit on rural economies (1999) recommended reform of central government structures. It was decided also to apply modulation to the financing of the Common Agricultural Policy (CAP) and boost its second pillar, the Rural Development Regulation. However, since the outbreak of Foot and Mouth Disease in 2001, there has been a retrenchment into a sectoral approach to agriculture illustrated, for example, by the work of the Policy Commission on Sustainable Farming and Food, which presented a supply chain perspective on the future of the farming industry.

3. The drivers of innovation

3.1 The changing political framework – reforming the CAP

During the 1950s and 1960s, much emphasis was placed on encouraging farmers to operate more efficiently and effectively and on encouraging private sector investment in agriculture. This period saw dramatic technological changes in the land-based industries. Mechanisation was followed by the application of new agrochemical technologies. These technological changes profoundly altered the nature of farm work, cropping and husbandry practices and patterns of agricultural land use. They were highly orchestrated by the state through publicly funded agricultural science and R&D and a state-funded agricultural advisory service, as well as grants and subsidies to ‘oil the wheels’ of change.

When the UK joined the Common Market in 1973 it began to operate under the remit of the CAP, which includes in its aims the need to increase agricultural productivity and to ensure a fair standard of living for the agricultural community. Although there were some reforms to the CAP in the 1970s and 1980s (such as the introduction of milk quotas), the CAP remained principally a protectionist policy aimed at supporting domestic production. Only since the early 1990s have further reforms reduced the protection that the CAP provides and sought to make EU agriculture more competitive. The CAP has moved away from price support and market interventions towards payments for delivering environmental objectives through agri-environmental schemes. These reforms have stimulated new innovations in land-based industries by opening up UK agriculture to international market pressures, leading to an increasing emphasis on the quality rather than the quantity of food produced.

3.2 From farmers to rural entrepreneurs

A key driver of change in the land-based sector has been the changing economic and policy context for supporting agriculture. As well as opening up farming to greater international competition, reforms to the CAP have meant that farmers have had to take on new and multiple roles, channelling some of their effort from food production towards acting as environmental and countryside managers, and as rural entrepreneurs. As we have seen, downward pressure on farming incomes has also encouraged many farmers to seek other income sources and develop new types of business activity.

Encouraging on-farm diversification by incentivising farmers through grant schemes or advisory services has been a prominent strategy within rural economic development. In 2002, 58 per cent of farms surveyed were involved in some form of diversified activity. In 2003/4, some 27 per cent of farmers’ total taxable income came from non-agricultural activities. Thus the idea that farmers are solely food producers is becoming anachronistic; they are increasingly expected to innovate in response to wider policy and economic change.

For some farmers, their most profitable option has been to sell some or all of their land for new house-building or to convert their farm buildings into units for new businesses. Their ability to do so has been enabled by ICT improvements which can also bring wider benefits, including local employment generation (see the example of Dipsticks below). In some cases, farmers may leave the land altogether. For others, the sale or conversion of land or buildings may be a way of remaining in the industry in the longer term and thus maintaining the ‘farming lifestyle’.
Also, in contrast to mainstream agriculture – which could be described as the output of largely undifferentiated commodity products for national and global markets – many farmers have attempted to re-integrate themselves into regional and local markets by marketing value-added food products on the basis of their geographical provenance. This could involve a switch to locally differentiated products, based sometimes on traditional family, local or regional knowledge. Alternatively, new knowledge and technology may be used to create novel products (see the box overleaf for two examples from North East England). Many producers are carving out market niches by selling higher-quality products embedded with information about product, process and place. These market niches sometimes involve more value-added processing at the farm or local level (turning milk into cheese, for example) and often mean more direct contact between farmers and consumers, which can help to stimulate product and process innovation.23

3.3 Regulation and Legislation
Regulation is often popularly perceived as stifling innovation, but it can encourage new working practices and activities. For example, new regulations aimed at protecting and enhancing water quality are encouraging many different innovative responses. These include the better use of land close to water courses (through the establishment of buffer strips to reduce runoff, for example) and new ways of handling farm livestock wastes in farm-yards.24 Similarly, restrictions on agrochemicals often prompt alternative methods of weed and pest control through crop rotations and Integrated Pest Management.

### Case study 1: Dipsticks Research

Dipsticks Research is a rapidly growing knowledge-intensive business, which relies on state-of-the-art ICT technologies to conduct market research. Its headquarters were established in 1997 in a former farm-house and buildings in Keenley, Allendale in rural Northumberland in the far north of England – one of England’s most remote and sparsely populated rural areas. The District of Tynedale, where Allendale is located, has a population density of just 26 persons per km². Keenley is about an hour’s drive from the city of Newcastle.

Dipsticks Research was founded by a husband and wife team of entrepreneurs with backgrounds in advertising, marketing and media. The company now has six directors, three associates and around 50 full-time employees, with a further 160 staff at its Computer-Assisted Telephone Interviewing (CATI) centre, 48 fieldwork supervisors and over 600 fieldwork interviewers. Dipsticks is now a major local employer not only in a remote rural part of Northumberland but also in the nearby market town.

The growing success of Dipsticks Research is founded on the company’s principle of providing rapid, reliable and responsive research at reasonable rates. The company’s location allows it consistently to provide better value than urban-based agencies, and its dedicated team of research professionals ensures levels of customer service second to none. Dipsticks is a rapidly expanding organisation with an established blue chip client list and a fast-growing list of public sector clients, including national government departments, One NorthEast, the London Development Agency and Northumbria Police.

Research projects range from small, ad hoc surveys of around 200 people to large, long-term tracking studies with thousands of cumulative respondents representing diverse demographic groups. The firm processes around 4,500 individual cases per month, with the flexibility to expand that capacity quickly to meet individual client briefs. All functions are operated in-house, ensuring Dipsticks does not need to sub-contract any critical functions, and always retains control of the research project.

The growth of Dipsticks illustrates the potential for rural localities to host cutting-edge, technologically innovative and growth-oriented businesses in what were previously agricultural settings. Indeed, the attractive rural surroundings (produced and still managed by farmers) were an important part of the appeal for the entrepreneurs in locating their new enterprise (for more information see [http://www.dipsticksresearch.com](http://www.dipsticksresearch.com)).

Also, in contrast to mainstream agriculture – which could be described as the output of largely undifferentiated commodity products for national and global markets – many farmers have attempted to re-integrate themselves into regional and local markets by marketing value-added food products on the basis of their geographical provenance. This could involve a switch to locally differentiated products, based sometimes on traditional family, local or regional knowledge. Alternatively, new knowledge and technology may be used to create novel products (see the box overleaf for two examples from North East England). Many producers are carving out market niches by selling higher-quality products embedded with information about product, process and place. These market niches sometimes involve more value-added processing at the farm or local level (turning milk into cheese, for example) and often mean more direct contact between farmers and consumers, which can help to stimulate product and process innovation.23

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3.4 Climate change
Climate change is likely to have a number of different impacts on those working in the rural land-based sector, often requiring innovative production methods or new approaches to the timing of crop planting. In England, a warmer climate could mean an earlier spring and longer summers, with a potential increase in insect activity and the introduction of new species into the British Isles. More mobile species may be able to adapt to the pace of change but even these may need help through the provision of migration corridors and large scale ecological landscape planting. Climate change may alter the types of crops that can be grown – indeed, there are now nearly 400 vineyards in England and Wales – requiring farmers to be sensitive and flexible in the management and use of their land. The potential effects of climate change on the length of the growing season and on the amount of precipitation are less clear. However, warmer temperatures will increase demand on water resources, particularly abstraction for irrigation, and will probably increase urban water consumption with consequent impacts on water availability for agriculture.\textsuperscript{25} In the future, the fact that land managers are likely to have an increasingly important role mitigating and adapting to climate change and its associated impacts (such as water shortages) is likely to be an increasingly important driver of innovative practice. Enterprising land managers are already examining how they might secure economic returns from carbon trading.\textsuperscript{26}

3.5 Changing cultural perceptions
An additional driver of change in the land-based industries is the long-held British attachment to the countryside. The rising importance of its consumption (as opposed to production) functions means the countryside is valued as a site for day leisure visits, recreation, short breaks and holidays (see Chapter 3). Now, instead of being seen simply as a location for producing food, the countryside is increasingly regarded as a good place to spend leisure time, whether walking, eating and drinking, or driving.\textsuperscript{27} Countryside recreation and tourism now employ more people and generate more income than agriculture. An estimated 25,000 businesses dedicated to rural tourism directly or indirectly support 380,000 jobs in rural areas.\textsuperscript{28} In 2002, rural tourism contributed an estimated £14 billion a year to the national economy.\textsuperscript{29}

3.6 The emergence of niche markets around health and quality of life
Increasingly empowered consumers are likely to spend their money on goods and services that have greater aesthetic, moral or ethical value.\textsuperscript{30} They see such goods as both improving their quality of life and enhancing...
their sense of identity. Ethical, political and environmental reasons motivate many UK consumers: they worry about growing levels of obesity; they are more risk aware; and they are increasingly concerned about how their products are produced and any potential health risks that might result.

Consumers are demanding improvements to food safety and quality during the production process and want more locally sourced, distinctive, traceable food, hence the growing importance of farmers’ markets and organically produced food. Organic food production is increasing and the total area of organic land in England continues to expand, albeit slowly, with a slight increase of just below 4 per cent over the period 2005-6, mainly due to change in the land area held by existing producers and growers. In England in 2006, the total area of organic and in-conversion land was 291,578 hectares or 3.1 per cent of the total agricultural area, up from 2.7 per cent in 2003.31 In addition to the demand for safer production processes, consumer anxieties about issues such as GM crops, food safety and farm production practices require innovative ways of encouraging greater interaction and understanding between rural-based producers and urban-based consumers.

3.7 The rise in demand for energy crops and sustainable technologies
A further driver for change in the land-based sector is provided by policy reform. CAP reform is releasing resources (in the form of human and financial capital and land) from intensive agriculture and making them available for other uses. There has been a steady increase in schemes to promote environmentally sustainable farming practices and promote the natural beauty and diversity of the countryside (e.g. the Environmentally Sensitive Areas Scheme and the Countryside Stewardship Scheme).

As the production of ever larger quantities of undifferentiated food becomes less important, and as concerns about the environment and climate change become stronger and more widespread, farmers are also making new uses of the land and diversifying into the production of a range of new non-food crops, such as energy crops and trees. Energy crops have the potential to provide many environmental benefits. However, their benefit will depend on where they are planted, what they replace, the landscape character of the area, how they are managed and the extent of planting. The Commission for Rural Communities reports that the area covered by ‘industrial’ crops is starting to grow, although the total area remains small (2.2 per cent of all farmland in 2005).32 Further growth may result from the establishment in 2003 of the National Non-Food Crops Centre (NNFCC) which acts as the UK’s National Centre for renewable materials and technologies. It provides independent advice and information to industry, government and the general public on plant-based renewable materials and technologies and helps to build and strengthen supply chains for plant-derived renewable materials, offering support to all actors, including producers, manufacturers and consumers.

Table 2.2: Area devoted to main non-food crops grown in England, 2003-200533

<table>
<thead>
<tr>
<th>Crop type</th>
<th>2003 (ha)</th>
<th>2004 (ha)</th>
<th>2005 (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oilseed rape (non-fuel)</td>
<td>57,997</td>
<td>33,541</td>
<td>53,401</td>
</tr>
<tr>
<td>Other</td>
<td>4,662</td>
<td>3,794</td>
<td>6,578</td>
</tr>
<tr>
<td>Industry</td>
<td>52,105</td>
<td>38,108</td>
<td>54,485</td>
</tr>
<tr>
<td>Fibre</td>
<td>3,586</td>
<td>1,599</td>
<td>1,208</td>
</tr>
<tr>
<td>Energy, of which:</td>
<td>714</td>
<td>32,729</td>
<td>93,277</td>
</tr>
<tr>
<td>Miscanthus</td>
<td>0</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td>Short rotation coppice</td>
<td>714</td>
<td>440</td>
<td>498</td>
</tr>
<tr>
<td>Oil seed rape (fuel oils)</td>
<td>-</td>
<td>32,237</td>
<td>92,727</td>
</tr>
<tr>
<td>TOTAL</td>
<td>119,064</td>
<td>109,771</td>
<td>208,949</td>
</tr>
</tbody>
</table>
Table 2.2 shows that in 2005 just under half of the land used for non-crop production was used for oilseed rape for fuel oils, and another quarter for oilseed rape for non-fuel purposes. Provisional figures for 2006 indicate a near doubling of the area devoted to oilseed rape for energy in Great Britain to 187,000 hectares. In the near future, the area used for Miscanthus and short rotation coppice (using species such as poplar and willow) may increase with consequent landscape impacts. The rate of development of biomass heat-and-power and biofuel projects will be partly affected by global drivers such as the price of fossil fuels and demand for grain and other products in Asian Markets (e.g. China).

Consumer concerns about climate change are translating into a wish to consume cleaner fuels and recyclable materials. Rural areas have the potential to be an important source of renewable energy generation, particularly from wind turbines and tidal power but also through growing energy crops. While existing wind generation capacity is limited, it is growing under government-funded infrastructure development programmes. Coastal and upland areas offer considerable potential for onshore wind farms as they tend to have consistent winds.

Land-based businesses have specific opportunities to take advantage of possibilities to install renewable energy technology, such as wind farms and anaerobic digesters, and to grow wood for fuel and energy purposes. Sometimes, these may be small-scale projects, perhaps generating enough power from a turbine to make a farm or enterprise energy self-sufficient, but they may also be on a much larger-scale in the case of wind farms involving a large number of turbines. However, while taking advantage of such opportunities may be lucrative, the use of the land for energy production tends to conflict with other land uses, such as recreation, as well as having impacts on landscape character and biodiversity.

Some renewable energy generation technology is not new. There are also barriers to installing it, not least high installation costs, planning issues (especially over wind turbines) and a lack of up-to-date information and advice about grants. However, these technologies offer a whole range of innovative business opportunities. They can help with the establishment of new business ventures. They can also enable existing businesses to diversify into new activities, using new technologies or by securing the connection of the energy generator to the National Grid.

The wider value of woodlands is also increasingly being recognised. They offer opportunities for recreation, including walking, cycling, picnicking and horse riding. They are good for people’s health and support biodiversity. They can contribute to carbon sequestration, flood mitigation, increasing landscape value and land stabilisation. Although timber production remains well below UK requirements, there is increasing interest in the production of wood fuel from forested land and under-managed woodlands in particular. New opportunities also exist in the market for forestry products, making roundwood and thinnings – which formerly had little value – potentially worth harvesting. There have been small amounts of new planting for short rotation coppice through the Energy Crop Scheme over the period 2001-2006 amounting to a total of 1,180 hectares, and there is also potential to increase the quantity of wood fuel produced through traditional forest practices such as coppicing and pollarding, with consequent beneficial impacts on biodiversity (as more light penetrates to the forest floor). The Forestry Commission has recently established a target of an additional two million tonnes of wood fuel per year by 2020, which may increase current production levels.

4. Opportunities and challenges for innovation in land-based industries

4.1 Opportunities

An increased recognition of the value of, and support for, non-food land-based products

The main strength of the land-based sector may lie in the increasing support and value placed on agriculture for its non-food producing functions, including the promotion of valued and distinctive local environments, landscape and cultural heritage. Financial support is available to farmers through a number of schemes (such as Countryside Stewardship and Environmentally Sensitive Area Schemes) to enhance and conserve the environment – protecting and enhancing high quality public goods such as attractive landscapes, increased biodiversity and flood water management. Through conservation, farmers have a key role in underpinning
the attraction of the countryside for a range of other activities, including leisure pursuits, day visits and tourism, and as an attractive location for businesses and in-migrants.

Changing consumer preferences
Changing consumer preferences are driving innovation in farming activities, bringing new demands for high quality, safe, ethical, locally produced and traceable food. However, while these shifting preferences bring considerable opportunities for those working in the land-based sector, they also bring challenges. For example, demands for ‘quality’ foods and amenity spaces are often regionally specific but are also based on variable consumption cultures and constructions which may be influenced by wider media, such as corporate retailers, tourist advertising and ethical concerns.

Increasing consumer concerns about animal welfare and the environment are putting pressure on producers to achieve environmental sustainability, and to adapt to and mitigate the effects of climate change. These changing preferences also offer important new market opportunities and hence act as important drivers of innovation.

Increased opportunities provided by information and communications technology (ICT)
Advances in ICT have transformed business management. They have changed how goods are bought and sold. It is not uncommon now for a farm shop to sell locally distinctive food or craft products to a global market through a dedicated website. ICT developments have also opened up large areas of rural land as locations for businesses, whose founders come for the attractive landscape maintained by farmers and other land-based workers.

CAP reforms
It is not yet clear how the Single Farm Payment Scheme will impact on farmers’ business planning over the medium term. It may lead to more change and variability in farming practices. It could also concentrate land into larger holdings, reflecting the current age profile of farmers and the profitability of some forms of farming. Continuing CAP reform is placing less emphasis on the production of undifferentiated food commodities and is releasing land for alternative uses, including energy crops. More opportunities are opening up for rural land-based businesses to exploit rural renewable energy sources, including wind (onshore and microgeneration), photovoltaics, small scale hydro power, ground-source heat pumps and the use of wood for energy generation.

4.2 Threats

Traditional land-based activities continue to decline in size
Land-based industries now represent only a very small proportion of the national economy, although in some regions and sub-regions they do remain a notable component of economic activity. Their diminishing contribution to the national economy risks rendering the sector politically less important, reducing its profile among policymakers concerned with innovation. Farming incomes are generally poor and have become increasingly volatile over the past two decades. Agriculture will also remain susceptible to food and farming scares, such as Foot and Mouth Disease, Bluetongue and Avian Flu.

The need for higher skill levels
The Higher Education Funding Council for England (HEFCE) recently reviewed the provision for land-based studies (LBS) in England. Government policy is increasingly encouraging land managers to take a holistic view of land management which recognises the multiple interests and ‘outputs’ from any particular land use. The HEFCE review notes that degree courses and other Higher Education programmes in the sector need to respond to three key drivers: the need for new business models to allow the land-based sector to compete in deregulated global markets; the need for land managers to consider the growing importance of land for recreational activities; and the role of the land-based industries in helping the UK to address many of the challenges it faces in terms of resource use.

The review notes that degrees related to the land-based industries could develop stronger links with other subjects (including social sciences, and engineering and technology). The sector is predominantly made up of micro-businesses meaning that the industry may sometimes struggle with articulating its demands and translating them into activities. Small businesses often have less time, and are less likely to have the skills...
within the business, to engage directly with basic research. The review therefore highlights the need to look closely at how world-class research is transferred to large numbers of small businesses.42

The planning system
The planning system in the UK may serve to stifle innovative opportunities. While the system needs to manage the increasing consumption of the limited resources of the countryside,43 it must also be flexible and innovative in permitting and encouraging new forms of development. National and regional planning policy statements often tend to cast the countryside in terms of landscape aesthetics, and in need of protecting for its own sake, rather than as a legitimate location for business and business development.

The planning system should also be flexible and open enough to permit new industrial development to generate power, and new housing to encourage in-migration, where these do not damage the quality of the rural landscape. Within the constraints of the planning system, rural communities could be given opportunities to explore the scope for co-operative energy production (see the example from Kielder, Northumberland below). Communities and government could also work together to develop innovative strategies to manage the movement of people and the delivery of services to reduce the transport contribution to global warming.44

Case study 4: Kielder District Heating System
The remote forestry village of Kielder (population about 200) in Northumberland has set up a shared wood-fuelled heat network to heat private houses and communal buildings, including the youth hostel and visitor centre at Kielder Castle. Locally-grown wood is chipped and stored by Forest Enterprise at a fuel store in the village, which is filled up about three to four times a year. The wood chip is fed into a boiler generating hot water which is piped to surrounding buildings, where heat exchanges transfer the energy into domestic central heating and hot water systems. The local community company, Kielder Community Enterprise Ltd, bills householders. The wood chip fuel supply secures local forestry jobs and contributes to the Kielder Regeneration Initiative, helping to ensure the future viability of the village. The scheme is one of the first of its kind in the UK and is particularly innovative in terms of using a local resource, adopting new technology and operating at a community level (for more information see http://northwoods.org.uk).

Innovation policy for rural areas remains on the periphery of central innovation policy
UK-wide innovation policy focuses primarily on cities. Combined with the current policy emphasis on city-regions, this means that rural areas continue to be seen as passive beneficiaries of the trickle-out effects of urban-based initiatives and investment. Yet the diversified economies of rural areas matter to the rest of the UK economy not only because a fifth of the population live there, but also because of their potential for further economic growth. These changes are not unique to the UK, but other countries are working hard to seize the opportunities provided by growing diversified rural economies.45

5. Conclusions
Rural economies are experiencing profound changes that render outdated the concept of ‘the rural economy’ as a unitary and sectorally distinct entity. The importance of the land-based industries to the constitution of rural areas should not be over-emphasised, particularly in terms of employment and income. Nevertheless, this sector remains important in terms of land use and land management, producing the landscape in which other economic activity in the countryside takes place and which attracts visitors and new residents.
5.1 The need for a comprehensive approach to business support for land-based and other rural businesses

There have been changes to how regional business support is delivered in England in recent months, including the ‘mainstreaming’ of rural business support into general business support arrangements. Although there are similarities between urban and rural businesses, it is still important that business support providers recognise the different context in which rural-based businesses are operating and the different challenges and opportunities they face.

Recent research carried out in the North East of England found that general financial support, and start-up and growth advice, should continue to be available for rural businesses, including those that are land-based. However, there may also be merit in providing specialist support for rural businesses and in focusing support services on a number of key but interdependent areas (such as the diversification of agricultural businesses, the formation of primary producer groups and the creation of local supply chains, and rural tourism).46

The adoption of renewable energy technologies should also be a further area of business advice to land-based rural businesses, including the identification of specific business opportunities. Business support providers can increase awareness of these technologies, supply basic information (guiding businesses to more specialist support where necessary) and sharing best practice. As the costs of purchasing and installing such technologies are often high, businesses could explore the potential for working collaboratively, perhaps negotiating with energy companies to sell surplus energy generated to the National Grid.47

5.2 The need for a broader approach to innovation

The traditional science-based, linear approach to recognising and measuring innovation does not recognise the breadth of innovation that may take place in rural areas and thus a broader definition is required.

Innovation in rural areas may be much wider than product innovation, and may incorporate new ways of living, travelling, working and collaborating. Rural innovation may be about different ways of working – perhaps using technology – or of encouraging human capital development. It may involve new forms of collaboration – for example, drawing together land-based, retail and tourism businesses into networks, or new relationships formed between producers, retailers and consumers – which can create considerable value for the local economy. Business support agencies, and others involved in innovation policy, need to be sensitive to this broader perspective of what counts as innovation.

5.3 The need for a more territorial approach to rural areas

Farming and other land-based industries remain important to diverse rural economies for the environmental services they provide, and the landscapes they maintain, which attract tourists, in-migrants and businesses to their areas. Nevertheless, agriculture continues to be managed as an economic sector rather than as a force for territorial development.48 Too often regional and local plans and strategies portray the rural economy narrowly in terms of food production and tourism.49 Defra has not yet played a leading role in the development of central government’s innovation policy. However, as the champion of rural areas and rural economies within government, the challenge is now for Defra to establish the national contribution that rural and land-based industries can make to innovation and economic development in the 21st century.
Chapter 2 Endnotes

1. The term ‘land-based industries’ is taken to refer to farming (crops and animals), hunting and forestry. In recent years, other leisure and nature conservation activities involving the management of relatively extensive tracts of rural land might also be thought of as part of the land-based industries. These would include golf courses, horse livery and wildlife and nature conservation sites.


10. Ibid. p. 115.


14. It is important to note that businesses may take some time after establishment to reach levels of turnover requiring registration for VAT, or employees who are registered for PAYE taxation. Thus, VAT registrations may under-report business formation. Rural areas also contain large proportions of sole traders, a characteristic which may further affect reports of new firm start-ups.


24. The EU Nitrates and Drinking Water Directives have provided the regulatory impetus for much of the innovation in ‘catchment-sensitive farming’.


30. As opposed to a purely functional value.


32. Ibid.

33. Ibid. p.114.


38. Ibid. p. 116.


41. Ibid.

42. Ibid.

43. Including growing demands for water, minerals, land for development, recreation and space for energy generation and waste disposal.


49. Ibid. p. 312.
Chapter 3

Rural Tourism and Innovation

Allan M. Williams
Institute for the Study of European Transformations, and Working Lives Research Institute, London Metropolitan University
1. Introduction: Rural tourism and innovation

Tourism is an important focus for rural innovation. Not only is it a substantial part of the rural economy – for which innovation is essential for enhancing productivity and competitiveness – but it is also closely linked with other rural sectors, such as farming. As a result, it can shape the image of entire rural areas.

Tourism is a growth sector both UK-wide and in rural areas. It has several distinctive features that influence innovation: the tourism experience itself; the challenge of seasonality; the role of the voluntary sector; the prevalence of micro-enterprises; and the prominence of farm tourism.

Rural tourism innovation also has some highly specific characteristics that differentiate it from other rural sectors, notably the difficulties of protecting innovations, the impact of remoteness on the development of the industry, and the need for collaboration amongst a range of public, private and voluntary bodies to deliver the complete tourism experience.

2. Rural tourism

Rural tourism is ill defined but encompasses a broad range of activities. Rural areas have long been the focus of traditional recreational pursuits, such as walking or nature appreciation. More recently, mountain biking and other relatively new forms of technologically-driven recreational activity are supplementing these.

Rural areas also host recreational activities that require the wide open spaces of the countryside, such as open-air music festivals. They are the setting for rural properties, such as old manor houses converted to conference centres. These are often as important to tourism as specific rural or natural features.

2.1 Rural tourism in the UK

The difficulty of defining such a composite sector means there is a shortage of reliable statistics. However, there is no doubting the overall importance of tourism to the UK economy, accounting as it does for an estimated £85 billion of expenditure annually. More specifically, rural tourism is an important focus for both domestic and international tourists, and for overnight and day visitors.

Domestic tourism is also significant and rising. The proportion of the UK population who spent at least one day in the countryside each month increased from 25 per cent in 1987 to 40 per cent in 1998. And by 2002-3, 62 per cent had visited the countryside in the last year, compared to only 53 per cent who had visited the coast. In total, an estimated 15 per cent of all day tourism expenditure occurred in the countryside.

Farm tourism is a particularly important strand of rural tourism because of its role in agricultural diversification. Four per cent of English farms offer tourist accommodation, 9 per cent offer sporting and recreational activities, and 28 per cent let buildings for non-agricultural purposes, often as holiday cottages.

The UK was the world's sixth ranked destination for inbound international tourism in 2006. Though London remains the main destination for some 45 per cent of all international visitors, there is some evidence of increasing tourism to rural areas for leisure purposes or to visit friends and relatives. The UK also benefits from the strong demand for rural tourism in its major international market, mainland Europe. In Europe as a whole, the countryside and mountains were the destinations of 48 per cent of tourists in 1997-8.

2.2 Tourism is particularly important for rural economies

Tourism is important in the rural economy for several reasons.

• First, it is a vital engine of rural economic growth, and an important source of employment creation.

• Second, it plays an important role in rural economic diversification, especially in the farming and forestry sectors. Innovations such as farm tourism, or farm shops, while important in their own right, also generate funds for investing in the original farm businesses.
- Third, rural tourism contributes to how people view places and their marketing, which can be integral to rural regeneration strategies. Examples of such powerful ‘place images’ include: Heartbeat Country, Herriot Country, Robin Hood Country, Hereward the Wake Country, Constable Country, Thomas Hardy Country, Lorna Doone Country and Betjeman Country. Building on real or fictional figures, these can provide powerful platforms for promoting place identities, encouraging tourists, in-migrants and inward investment.

3. Innovations driving change in rural tourism

Several innovations are driving changes in rural tourism, among them Internet developments, marketing initiatives and new forms of collaboration. In common with other rural sectors, there are three main types of rural tourism innovation:

1. **Rurally-demanded innovation**: tourism by its very nature generates demand for innovation aimed at external users, such as transport systems that serve tourists and visitors. But these innovations also impact on the supply chain, with food tourism contributing to the growing urban demand for organic, quality and regionally demarcated foods.

2. **Rurally-generated innovation**: rural areas have been at the forefront of heritage innovations. In particular, the original focus of the National Trust was the preservation of the landscapes of rural Britain, before it became a more broadly based heritage management body.

3. **General purpose innovations**: developed for universal use, such as the development of global positioning systems (for climbers and walkers, but also for land monitoring and planning) or the Internet, they also have a strong impact on rural tourism.

3.1 Innovation in rural tourism is distinctive

Tourism innovation is distinctive and this applies in particular to rural tourism.

- Tourism experiences are shaped by the encounters between tourism services and product providers and the tourists themselves. Co-production of services and experiences by users and producers can be an effective platform for generating consumer-friendly innovations around rural tourism.

- The service encounter is at the heart of the rural tourism experience, not least because rural businesses are relatively small. This means that direct interaction with customers can be a main source of innovation, particularly user-led innovation.

- Rural tourism is more highly seasonal than urban tourism because outdoor pursuits, and nature and landscapes, are so dependent on the climate. Tourism activities also peak at weekends, particularly short breaks and day visits. Such fluctuating demand poses major challenges for many tourism producers because vacant bed spaces or restaurant tables are lost revenue opportunities. Consequently, there is considerable interest in yield management tools as a means of flattening out peaks in the demand curve.

- Rural tourism experiences reflect the tourist’s experience of a range of tourism enterprises that together resemble a supply chain – in transport, accommodation, tourist attractions, restaurants and pubs – as well as the rural landscape. Innovations are therefore strongly mutually dependent and an improvement in one area will yield benefits throughout the supply chain. For example, an innovative attempt to extend the season of a tourism attraction will rely on hotels also innovating by opening year-round and on suitable transport provision outside the main holiday period.

- Many rural tourism experiences – for example, walking in the countryside, or visiting historic villages – are shaped by the local community. The farmers whose lands they walk across or the residents of the villages they frequent help shape their experience. This calls for innovation in visitor management, and for partnerships that involve not only tourism businesses but also local communities.
• Rural tourism comes in many forms, but the natural environment usually plays a big part. An estimated 40 per cent of tourism-based employment in the UK is dependent on a high quality environment, a proportion increasing to between 60 per cent and 70 per cent in rural areas. However, tourist activities can also undermine the natural environments that are such powerful tourist attractions. Technological changes, leading to off-road vehicle usage, can lead to conflicts with other countryside users. Or the massive increase in walking on the Pennine Way and other long distance footpaths may lead to severe erosion and congestion in supposedly remote and often protected rural areas. Therefore, innovation in rural areas, particularly in the tourism sector, faces specific challenges regarding sustainability.

• Rural tourism businesses are relatively small, not least because many have grown organically and incrementally from farms, or from private households (for example, offering bed and breakfast). This has implications for innovation in terms of their flexibility and the resources they can bring to bear on developing innovations.

In summary, the ability of businesses in rural tourism to innovate or absorb innovations is affected by wider sets of factors, some which are external to the region and others that are internal. Section 4 explores these further.

4. The changing face of rural tourism

4.1 Changes in rural conditions that have impact on rural tourism

Rural areas have experienced net inward migration in recent decades, with some of the higher growth rates being in remoter rural areas such as the Scottish Highlands and Islands and Cornwall. Two distinctive groups of in-migrants are particularly important.

First, rural areas are attractive to economically active, often lifestyle seeking, migrants. They tend to have above average education and skills, and extensive urban-based networks, both of which are important for rural innovation. These migrants also add significantly to social diversity in rural areas, an important potential source of creativity. Later-life migrants, whether early retired or retired, are also attracted to rural areas by lower house prices and alternative life styles. Sometimes they are returning to the areas where they grew up. They are a source of knowledge, spending power and of voluntary labour, all of which can also support innovation.

In contrast, rural areas continue to suffer from losses of human capital through the out-migration of relatively young and well-educated people. That has partly been reversed by recent migration trends, although in-migrants tend to be relatively older than out-migrants. One important new feature is that while international migrants have not traditionally favoured rural areas, migrants from the new EU accession countries have tended to be more evenly regionally distributed across the UK. Although we do not know their exact distribution between urban and rural areas, there is at least anecdotal evidence that (relatively young) Eastern European migrants are moving to rural areas, bringing with them human capital, enthusiasm and new ideas.

Farm incomes have been under pressure over several decades, particularly in marginal agricultural areas. This has spurred innovation as farmers have sought to diversify, with farm tourism playing a prominent role. Farm visits, serviced and self-catering accommodation, horse riding and nature trails are all increasingly important. The 2001 Foot and Mouth Disease (FMD) crisis demonstrated how vulnerable rural tourism is to risks originating in other sectors, particularly agriculture. There were estimated total revenue losses from reductions in international and domestic tourism of some £5 billion. An estimated 5.4 million consumers changed their travel plans in the UK due to the FMD outbreak, and this probably disproportionately affected rural areas.

Two other important changes in rural areas are increasing broadband penetration, which helps to make tourism businesses more efficient and more directly accessible to tourists, and the increasing provision of Higher Education (for example, via the University of Derby) which is helping to improve the skills of people
working in tourism by increasing their knowledge of tourism marketing, tourism behaviour and international best practices.

4.2 Changes external to rural areas that have impact on rural tourism

While rural areas adjacent to major cities have access to substantial day visitor markets, remoter areas are more likely to depend on the short or long holiday market segments. In both cases, tourism growth has been driven by favourable external demand conditions – increases in leisure time, higher real disposable incomes, and a strong positive income elasticity of demand\(^{17}\) for leisure and tourism activities.

The growing demand for second and third holidays has favoured rural tourism, as have changes in market segmentation such as the growth of later life tourism, driven by the increased leisure time and disposable incomes of this group. Similarly, the growth in activity holidays has also favoured rural areas, where the most popular activity in 2005\(^{18}\) was walking and rambling. However, other market trends have been less favourable, particularly the growth of business tourism which remains heavily urban.

4.3 Technological changes increasing the rate of innovation

Tourism has relatively low levels of in-house research and development (R&D) compared to manufacturing, in common with most service activities.\(^{19}\) This is reinforced in rural tourism by the small size of enterprises – although the latter can also be a source of the flexibility that more disruptive innovation requires.\(^{20}\) A major obstacle to R&D, and possibly innovation, is the difficulty of protecting intellectual property. In tourism, the time lag before a competitor imitates an innovation may be as short as a single season.

However three families of technologies can be said to have influenced rural innovation the most:

*Information and Communication Technologies (ICT)*

ICT is particularly important in tourism because it is an information-intensive industry. There are two important aspects of this. First, the tourist industry, including hotels and airlines, collects enormous amounts of data about its customers that can be used for analysing their behaviour and experiences, and fed into market research and marketing strategies.

Second, tourism firms (and destinations) increasingly use the Internet – initially to present information on their products, but more recently for direct sales to individuals. This leads to ‘disintermediation’ as individual customers increasingly make direct reservations with hotels, airlines and tourism attractions. This is potentially important to rural tourism businesses as a way of overcoming difficulties of remoteness. New Zealand provides an excellent example of how small rural tourism businesses have promoted themselves via this medium.

Although ICT developments have already had a strong impact on rural tourism, there are still rapid universal innovations, especially involving multi-media forms, which offer considerable scope for further innovation both for individual businesses and for particular tourism destinations. And there is also – compared to say New Zealand – a relatively lower penetration of Internet use amongst the smallest tourism businesses, which means there are significant catch-up innovation opportunities. Their potential is illustrated by the Cornwall Act Now programme which has helped to deliver virtually 100 per cent broadband coverage across the county, with accommodation providers being one of the main beneficiaries. Hotels and guesthouses have developed new web sites and provided Internet connections within their establishments, in communal places or in individual bedrooms.\(^{21}\)

*Transport technologies*

Transport innovations have been significant. The organisational innovations brought about by budget airlines have not only resulted in disruptive innovations in terms of costs, prices and usage, they have also changed the geography of air travel. There has been a relative shift in accessibility from metropolitan to intermediate regions across Europe,\(^{22}\) though remoter rural areas still tend to lag behind. However, as the provision of new low cost air services to Newquay in Cornwall demonstrates, new air services can have a major impact on rural tourism.\(^{23}\)

Elsewhere there are smaller scale but significant innovations in public transport, such as the Trossachs Trundler, a stop-on-request bus service with a rack for bikes, that serves the Scottish national park. In
Cornwall, the Eden Branch Line provides a bus link from St Austell railway station to the Eden project, with a bicycle rack, family seating area, a short introductory video, and the ability to buy through rail-bus tickets from any UK railway station.

**Sustainable technologies**

Sustainable and green tourism initiatives are increasingly important in rural tourism. These range from those taken by individual businesses through solar power or using locally produced food, to local and regional sustainability strategies, such as those promoted by the Office of the Deputy Prime Minister under its Beacons Council theme of ‘Promoting sustainable tourism’ in 2003–4.24 The Green Tourism Business Scheme promotes sustainable tourism practices among individual businesses, via its certification scheme, and has more than 1,400 members. Rural tourism associations can also work together to promote sustainable technologies, as with Ecodyfi in Wales which promoted sustainable energy, cycling tourism, and activity holidays in the Dyfi Valley. Such innovations can be a source of competitive advantage in an increasingly environmentally aware market.

**4.4 Cultural/societal changes**

Nature is often portrayed as the antithesis of a flawed society. While this may be a gross simplification, it has meant that rural areas have frequently been portrayed as repositories of good health and quality of life. This benefits rural tourism by creating a growing preference for countryside holidays as a counterbalance to the noise and bustle of city life.

More specifically, there has been a growing interest in food and wine – forms of production that often have a mutually-beneficial relationship with tourism. Promotion of local foods enhances and strengthens the rural tourism product, while tourists and visitors provide a market for agricultural products – whether on holiday, or back home in the city.

This relationship has been seized on by rural tourism policies: *Tomorrow’s Tourism*25 (DCMS, 1999) encouraged British tourism businesses to source and promote locally-produced foodstuffs; *Working for the Countryside*26 emphasises the need to promote local produce; and, in Scotland, the *Tourism Framework for Action: 2002–2005*27 argues for the need to build stronger links between tourism and sectors such as retailing and food and drink. Such promotion can be very effective. For example, a study of the Isle of Arran Taste Trail demonstrates that visitors who had purchased the Trail guidebook were more likely to spend more money on local foods during their holidays, and intended to continue to do so after returning home.28

**4.5 Political and policy changes**

The tourism policy environment is relatively weak at both the EU and the national levels and there is little specific focus on tourism innovation.29 This reflects the limited powers of the EU in tourism, and the weak representation of tourism in central government in the UK, as well as a tendency to favour promotion over other types of tourism policies.

Of course, some national and EU policies do have a significant impact on rural tourism innovation. For example, the promotion work of Visit Britain may be an invaluable aid to marketing innovation in particular firms or local areas,30 and the EU’s LEADER rural development programme31 has invested substantially in a range of rural restructuring policies, within which tourism policies have featured prominently. But promotion policies are not specifically concerned with rural tourism innovation or, as in the case of LEADER, have only engaged with rural tourism in a relatively few areas within the UK.

Rural tourism is far more important to Regional Development Agencies (RDAs) and local authorities. In local government, there has been a steady engagement with rural tourism in recent years, particularly as a source of local economic development and rural regeneration.32 Many local authorities have embraced sustainable tourism initiatives. RDAs have also assumed greater responsibility for tourism, linking it to their skills, growth and competitiveness agendas, although with varying activity levels and degrees of success.

Public sector involvement in tourism has increasingly taken the form of promoting local partnerships, and often leading them. The partnership approach partly reflects current national thinking about policy delivery and stakeholder engagement. However, it also specifically addresses the composite nature of the tourism experience (the need for co-ordinated action by a wide range of agents) and the difficulties of
protecting tourism innovations, which deter some new private sector initiatives. Partnerships are most active in promotion and marketing where the benefits to the participants are most obvious, but there are also successful examples of projects with different remits such as the Devon and Cornwall Rail Partnership.

5. Strengths and weaknesses of innovation in rural tourism

5.1 Rural innovation has a number of strengths

Fast growing markets: There is strong and growing demand for tourism from both domestic and international sources. Market segmentation tendencies (the growth of second and third holidays, greater focus on quality, and more individualisation of preferences) also favour increasing demand for rural tourism. This will facilitate demand-led innovation, increase competition as new providers enter the market, and ensure that more resources are available for innovation. Although rural tourism in the UK benefits from strong international markets, it also faces strong international competition. The expansion of budget airlines has intensified such competition within Europe – although this can also be a source of innovation to enhance competitiveness.

Rural tourism is particularly well positioned to benefit from increased investment because of the growing emphasis on individualised, outdoor and active holidays, as well as the desire for innovative quality products and a focus on engaging with nature.

Niche markets: Although some forms of rural tourism compete with urban-based hotels and attractions, many create their own niche markets. For example, farm tourism is a distinctive product within the UK tourism market. Farming communities have unique knowledge of the changing countryside for which there is a growing market amongst those seeking nature-based experiences in relatively small and informal tourism settings. Again this gives them an advantage in guiding and leading new forms of innovation based on direct encounter with tourists and visitors.

Growing connectivity: Remoteness, which can be a problem for many rural industries, can be a competitive advantage in tourism. Tourists seeking escape from urban lives, or who are seeking peace and rest, prefer remoter areas with low population densities. They are more willing to travel to remoter areas to seek out such features. Therefore, remoteness, combined with attractive landscapes, as in the Scottish Highlands and Islands, can become a major attraction, especially if the barriers of distance can be reduced by enhanced transport and broadband access. The development of ICT, especially the Internet, has been particularly important as a source of innovation for rural tourism providers, offering opportunities to extend their market reach. Elsewhere, more accessible rural areas have the advantage of strong growth in disposable incomes in metropolitan areas, and increasing demand for short holiday breaks.

5.2 But rural innovation suffers from weaknesses too

Despite strong recent growth, rural tourism also has a number of weaknesses, some of which are common to most rural industries or to tourism in general, though other weaknesses are distinctive. Such weaknesses may constrain innovation, but overcoming such barriers can stimulate it.

Demand for rural tourism is highly seasonal: Although this is being ameliorated by investments to upgrade accommodation and tourism attractions, seasonality can pose significant difficulties for rural tourism firms in terms of training, retaining skilled workers, or simply in restricting the time period in which they can secure returns on their investments in innovation.

Infrastructure continues to be a problem: Although ICT offers considerable advantages to rural tourism, the slow diffusion of higher speed broadband connections to many rural areas continues to put innovation activities at a disadvantage, which innovation has to respond to.

Small can be difficult: Small family businesses, many working from home, may lack financial resources for investment and, where they have grown organically and incrementally, lack the expertise for expansion. There are an estimated 300,000 tourism, hospitality and leisure businesses nationally, and 85 per cent of
these employ fewer than 25 staff. In coastal and rural areas, many of the lifestyle migrant entrepreneurs lack experience of the tourism sector, which makes it harder for them to innovate or to absorb innovations.34

Remoteness can be a disadvantage: Exposure to new innovations, especially in terms of new technologies but also marketing and organisational techniques, may have a delayed effect on the diffusion of new innovations. The remoter rural areas also find it difficult to compete in the buoyant markets for short breaks, especially if they lack nearby transport links, such as railway stations, ports and airports, to counteract their location. This can be a double-edged sword, though. On the one hand, remoteness reduces the incentive to innovate given the smallness of their markets. On the other, however, it might act as an incentive to innovate to bounce beyond their geographic reach.

Low skills still prevalent in the industry: Tourism is characterised by generally low levels of skills and a relative reluctance to invest in extensive training.35 According to the national skills strategy: “Micro-businesses account for 76 per cent of all sector businesses and approximately half of the workforce. However, these employers are much less likely to offer their staff training or receive funding to help support training”. This is compounded by the predominance of micro-enterprises in rural areas. Many are family enterprises that have evolved piecemeal and organically out of farming activities. They find it particularly difficult – or are unwilling – to invest in training.

5.3 New opportunities have the potential to foster innovation in rural tourism
Balancing the strengths and weaknesses of rural tourism, there are also two particular opportunities that could drive new innovations in rural tourism.

The quality of life offer
The continuing interest in locally-sourced and distinctive quality foods provides opportunities both for rural tourism, and for rural tourism to contribute to the expansion of urban markets and supply chains for such products. This will require the creation of innovative supply chains which link rural producers and urban retailers, with rural tourism acting as intermediaries by stimulating demand and sustaining rural suppliers. The experience of the Wensleydale Creamery at Hawes illustrates the powerful stimulus provided by tourism to a local food production industry that was on the brink of extinction in the early 1990s; the Visitor Centre (opened in 1994) played a major part in renewing sales in the cheese, combined with product innovation and fortuitous links with the Wallace and Gromit films.

In-migrants with niche skills
The new in-migrants bring considerable resources to enhance the absorption capacity of rural tourism. Those lifestyle migrants who are economically active represent an important potential source of entrepreneurship. Many of the more innovative new tourism products in New Zealand, for example, such as white water rafting or diving with dolphins, were initially developed by lifestyle in-migrants who also exploited and established significant niche markets.36 This could be an important innovation opportunity for UK rural tourism: the growth of the surfing industry in North Cornwall provides evidence of the potential.37

5.4 Innovation in rural tourism can be slowed down by a number of factors
Low level of technology use: While increasing numbers of rural tourism firms may have access to the Internet, the real issue is the extent and the sophistication with which they use this resource. Evidence from other countries suggests that many firms rarely do more than use email and create relatively simple, information-providing web sites.38 There is a need for accompanying organisational and process innovations if such technological innovations are to be maximised.

Quality of service might be at risk as demand grows: The importance of quality to the future success of rural tourism places a premium on innovative means of enhancing the skills of managers and owners, including through short international study tours.

The incentive to invest in innovation is not always clear: Tourism innovations are notoriously difficult to protect. Services, as opposed to products, are difficult to patent, while tourism is strongly characterised by public goods, such as the rural landscape. This is one reason why the voluntary sector is disproportionately important in managing and producing rural tourism, whether in terms of the volunteers who run new countryside museums, or those who give up their holidays to clear litter off the top of mountains, or to
repair rural footpaths. The National Trust is the largest such voluntary body, being one of Europe’s leading conservation charities and the largest private landholder in England, Wales and Northern Ireland, with extensive landholdings in some of the more pressurised rural areas such as the Lake District and South West England. Innovation in the voluntary sector will be particularly important for the future of rural tourism.

**The sector remains below the policy radar:** Much of the policy debate about creating clusters may not apply to rural tourism, where there are low densities of businesses and often a lack of historic trust and co-operation. Innovative policies will have to address how to create effective ‘micro-clusters’. Some of these may involve businesses which are complementary: for example tourism attractions that have complementary opening hours, or which provide attractions that different family members may want to attend at the same time.

6. Policy recommendations

**Deliver training and advice for micro-businesses to grow:** Rural tourism businesses are often micro-enterprises, sometimes building on farms or occasional bed and breakfast accommodation. Such enterprises often lack the formal skills and access to capital that are critical if they are to innovate and expand beyond the stage of family businesses.

**Focus on developing social skills and competencies:** The importance of the service encounter in rural tourism requires appropriate training for the tourism workforce. Both technical and social skills and competencies are essential in providing quality tourism services. In remoter areas, innovative ways to deliver training to dispersed work forces may be needed in what are often ‘difficult to reach’ enterprises. This could involve on-line learning or flexible local delivery of training. Women entrepreneurs, who often work part-time from home and care for dependents, may require tailored support. Similarly, the importance of the voluntary sector poses challenges for delivering support to a sector that is partly reliant on enthusiasm and freely given time.

**Support greater co-operation amongst firms:** Firms need to cooperate given the composite nature of the rural tourism experience. Above all, it is important to develop trust amongst firms that provide different but complementary elements of the tourism experience, such as hotels, bus companies, restaurants and tourism attractions. In rural areas, this may call for greater reliance on IT networks, backed by occasional face-to-face encounters scheduled to coincide with markets or local shows.

**Provide more training and research into rural-specific ICT applications:** Tourism enterprises need support to utilise ICT innovations more fully, which may require accompanying organisational innovations. This is critical in an information-rich sector such as tourism. With the increasing commercial availability of ICT technical support, this additional managerial advice is a priority for business support agencies.

**Establish collective property-rights:** Improving organisations’ ability to protect the intellectual property behind their innovations could encourage greater investment in innovation. One way to do this is through the allocation of property rights collectively amongst a group of rural tourism enterprises, indicating quality either in terms of carefully selected membership or geographical origin. Such collective property rights allow firms to differentiate themselves from those who are non-members, while enhancing consumer confidence in their products and services. This can help to distribute the costs and benefits of innovations more equally, and has been important, for example, in green tourism initiatives in the Alps.

**Invest in new, efficient and sustainable transport:** There is a need to consider more innovative ways of providing access to and amongst tourism businesses in rural areas. These may range from extending Community Rail Partnerships, to expansion of mail buses, to providing new air or ferry links in some of the remoter rural areas.
7. Summary

Rural tourism in all its forms – whether in remote or accessible areas – is a sector of impressive growth. This is underpinned by a strong record of innovation, whether in applying universal innovations such as broadband and web-based marketing, or in the development of specifically rural innovations, such as farm tourism, or food production-tourism chains.

The prospects for continuing strong growth in demand are creating further opportunities for growth and innovation in the sector. However, innovation remains essential because, despite current strong demand prospects, tourism is a highly competitive sector, where there are many competing demands for discretionary consumer spending.

Helpfully, there are considerable opportunities for building on innovation successes in rural tourism. These include the injection of new ideas and entrepreneurship in the form of life style migrants, the arrival of international migrants who will partly replace the historic loss of human capital through youth out-migration, and the still only partly realised potential of broadband and ICT. Quality of life and quality of the environment are likely to be at the heart of such innovations, which will provide opportunities to foster mutually beneficial links with farming, transport and other service providers.
Chapter 3 Endnotes


12. For example, the Yorkshire Dales National Park Authority has built partnerships with local organisations to try and manage visitor and local car user through provision of new maps for cycling and a Dales bus discount scheme.


14. Most of the writing about migration and creativity has focussed on metropolitan areas (see Florida, R. (2005) ‘Cities and the Creative Class.’ New York: Routledge.). This is often uncritical in assessing the impact of migration. However, migration is a source of ‘uncommon’ knowledge, and hence of new ideas and creativity (see Williams, A. M. (2007) Listen to me, learn with me: International migration and knowledge. ‘British Journal of Industrial Relations.’ 45(2), pp. 361-382).


22. Whereas in the 1990s, Newquay airport handled only about 80,000 passengers, the introduction of services by several low cost carriers has seen passenger numbers increase to circa 400,000 in 2007. See http://www.airportwatch.org.uk/news/detail.php?art_id=869 [Accessed October 7th 2007]. While some services take tourists out of the region, new Rights to Scotland and the North East are expected to refresh tourism markets that had been in relative decline. For a general discussion of the impact of low cost air travel on regional competitivevessiness, see Williams, A. M. and Baláz, V. (2008) Low cost carriers, economies of flows and regional externalities. ‘Regional Studies.’ In press.

23. The six councils judged to be beacons of best practice in sustainable tourism in 2003–4 were: Birmingham City Council, The Broads Authority, London Borough of Greenwich, New Forest District Council, South Hams District Council and Tyne and Esk District Council.


29. For instance, in 2007 the government announced an additional £750,000 of new funding for Visit Britain to help extend the markets for rural tourism, through its Rural Escapes campaign brochures and e-marketing.

30. LEADER is an initiative financed by EU structural funds which is designed to help rural actors foster the long-term potential of their local region.


34. People 1st (2007) ‘National Skills Strategy for the Hospitality, Leisure, Travel and Tourism Sector in England: Raising the Bar’ London: National Sector Skills Council. p.13. This strategy also states that: “Smaller employers are much less likely to receive government funding to help them train: Only 6.7% of employers with fewer than ten staff access government funding compared to 10.6% of businesses with over 200 staff.” p.15.


39. For example, the Red Rooster trademark was established by the Farmers’ Union in South Tyrol for farm holidays, and later for farm incomes and quality foods; they emphasise the natural environment, the rural way of life and ‘authentic’ working farms. See Santagata, W., Russo, A. P and Segre, G. (2007) Tourism quality labels. An incentive for the sustainable development of creative clusters as tourist attractions? In Richards, G. and Wilson, J. (eds.) ‘Tourism, Creativity and Development.’ London: Routledge.
Chapter 4
Creative Industries and Rural Innovation

Richard Naylor
Burns Owen Partnership
1. Introduction: Creative industries and rural innovation

Since the first Department of Culture Media and Sport (DCMS) ‘Mapping Document’ in 1998, the ‘creative industries’ have become an area of intense interest among policymakers and researchers in the UK.

A main driver for this interest is the role that the creative industries appear to play within territorial economic development. For instance, all of the English RDAs identified the creative industries as a ‘priority’ sector or cluster when they began in 1999. Most RDAs retain this focus today. The DTI’s ‘Cox Review of Creativity in Business: Building on the UK’s strengths’ in late 2005, latterly signaled an explicit acknowledgement of the role that the creative industries can also play within the innovation process.

The background for policymakers’ interest in the creative industries has been the sector’s size and recent growth. The UK Government’s latest economic estimates indicate that the sector accounted for 7.3 per cent of GVA in the UK in 2005, generated by a workforce of 1.1m employees, and that its annual employment growth was almost double that of the economy as a whole for the period 1997–2006. Recent analysis of innovation activities in the creative industries also shows that the sector outperforms the economy as a whole, with 78 per cent of creative industries businesses covered by the most recent UK Innovation Survey being ‘innovation active’ – a higher proportion than in any other sector.

At the same time, however, the creative industries appear to be more volatile than the economy as a whole, and are also disproportionately concentrated in London and the South East, which together account for one third of employment in the sector.

Despite the absolute dominance of the Greater South East in the UK’s creative industries, policymakers in many other major cities, particularly the members of the Core Cities Group (which includes Manchester, Sheffield, Birmingham and Bristol), have also sought to develop policies that support and promote these industries. Indeed, in early drafts of a paper on territorial development developed as part of the DCMS’ Creative Economy Programme in 2006, the message was that “creative clusters are only viable in big cities”. While the language in the actual published DCMS document was subsequently revised, it is perhaps a useful illustration of the general mindset of economic development policymakers when engaging with the creative industries.

Significantly, this urban policy ‘orthodoxy’ as regards creative industries correlates with recent thinking about the territoriality of innovation, in which innovation is seen to be “concentrated in and around cities”. In part, this is true: the UK is one of the most urbanised societies in the world so virtually all economic activity is, in absolute terms, greater in and around cities. But the danger is that this creates a rather crude binarism between urban and rural areas when the reality is more complex.

Unless policymakers are alert to the complexity of territorial development, there is a danger that research commissioned by policymakers will simply find what it’s looking for. In the case of the creative industries, this is a story that is familiar from the economic geography of post-Fordism: the importance of urban agglomeration economies and learning spillovers to the success of the sector, including the role that urban education and research institutions play in these processes.

The purpose of this paper is not to deny the importance of these factors, but to suggest that in some crucial aspects, this is a partial account. In particular, as in the wider rural economy, the creative industries in rural areas have actually enjoyed strong growth over the last decade. Furthermore, recent empirical qualitative research also illustrates how the creative industries provide a range of innovation ‘inputs’ into other sectors of the rural economy. Thus, the presence and role of the creative industries in rural areas needs to be both more widely acknowledged and better understood in order to pursue innovation policies aimed at developing rural economies.
2. The creative industries in rural areas

2.1 Definition(s)
Before providing an account of the creative industries sector in rural areas, it is important to reiterate the activities encompassed by the term. The sectoral definition referred to is that used by DCMS in their 1998 ‘Mapping Document’:

“These [creative industries] have been taken to include the following sectors: advertising, architecture, the art and antiques market, crafts, design, designer fashion, film, interactive leisure software [computer games], music, the performing arts, publishing, software and television and radio.”

In some of the research referred to subsequently, these thirteen constituent creative industries are aggregated into four main groupings. An analysis of the supply chain activities for these groupings is also provided. The groupings are not based on market output (such as film or music), but on common business models.

1. **Creative services**: firms that sell services to other businesses, including advertising agencies, architects, designers, photographers and software consultants. Revenues are earned principally in exchange for time. Intellectual Property (IP) rights often do not reside with these companies.

2. **Creative content**: businesses that invest capital upfront in the development of content, often (but not exclusively) media and entertainment content, and that earn revenues by exploiting the resulting IP through sales, advertising and licensing. This grouping includes broadcasters, book and newspaper publishers, record companies, film studios and computer and video game publishers.

3. **Creative experiences**: businesses and organisations that sell the right for consumers to experience or witness specific creative activities, performances, or locations, which are often time-limited. These are generally venue-based and include cinemas, art centres, theatres, galleries and museums.

4. **Creative originals**: producers and sellers of physical artefacts that are ‘one-offs’ or produced only in very limited production runs, and in which the value is derived from their perceived creative or cultural value, exclusivity and authenticity. These include visual artists, crafts and designer-makers, and antique sellers.

This is not how the creative industries have typically been viewed within policy designed to support the sector in the UK, though this may change as DCMS is currently re-thinking how it defines and analyses the industries. However, the focus on business models is useful for economic analysis, as each model brings with it an accompanying set of very specific and distinct commercial pressures that need to be understood if policymakers are designing interventions to individual enterprises. Having a ‘meso’ level grouping of creative industries also provides a pragmatic advantage for conducting secondary statistical analysis by offering scope for sub-sectoral analysis, while also ensuring sufficient aggregation to overcome the problems that arise from the small sample sizes of national statistics at local authority district level.

Of course, as with all models, this is something of an ‘ideal type’. In reality, some creative businesses combine different kinds of business models. For instance, many visual artists sell their paintings and sculptures while also generating revenues from selling their time as teachers or lecturers. But the general logic still applies. In addition to these groupings, the creative industries are also dependent on a number of dedicated and related supply chain activities:

**Manufacturing inputs**: firms that produce specialist tools and materials required in the production process (e.g. the manufacture of musical instruments) as well as those that are involved in the reproduction of creative and cultural products (e.g. printing of newspapers, reproduction of sound recordings).

**Dissemination inputs**: enterprises involved in bringing the products of the creative industries to the marketplace, principally specialist retailers (e.g. bookshops), and dedicated wholesale activities and rental organisations (e.g. video shops, libraries).
2.2 Recent growth trends

It is still the case that the creative industries tend to account for a smaller share of employment in rural areas than in urban areas. As Figure 4.1 illustrates, creative industries employment averages 4.6 per cent of jobs in the 50 worst performing rural districts, rising to an average of 5.5 per cent in the 50 best performing rural areas. Both are below the UK average of 6.2 per cent.

There is a particular geography to the best and worst performing rural areas in terms of employment in the creative industries. Table 4.1 shows a, by now familiar, geography of uneven economic development in England.

Table 4.1: Employment in creative industries as a proportion of total employment in rural districts in England, highest and lowest, 2004

<table>
<thead>
<tr>
<th>District</th>
<th>Employment share in creative sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 South Oxfordshire</td>
<td>13.1%</td>
</tr>
<tr>
<td>2 South Buckinghamshire</td>
<td>12.5%</td>
</tr>
<tr>
<td>3 South Cambridgeshire</td>
<td>10.8%</td>
</tr>
<tr>
<td>4 Waverley</td>
<td>9.7%</td>
</tr>
<tr>
<td>5 Aylesbury Vale</td>
<td>9.6%</td>
</tr>
<tr>
<td>121 West Lindsey</td>
<td>2%</td>
</tr>
<tr>
<td>122 Easington</td>
<td>2%</td>
</tr>
<tr>
<td>123 South Holland</td>
<td>1.9%</td>
</tr>
<tr>
<td>124 Sedgefield</td>
<td>1.8%</td>
</tr>
<tr>
<td>125 Wansbeck</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

Source: Annual Business Inquiry, 2004
The districts in which the creative industries account for the highest share of local employment (up to 13 per cent) are all accessible rural districts in the South East.

The districts in which the creative industries account for the smallest share of local employment are generally peripheral rural areas, many in the North East.

The significance of the accessibility of rural areas – and, in particular, proximity to successful urban economies – for employment in the creative industries is also borne out by separate research on the creative industries in the rural districts of the East Midlands. As Figure 4.2 shows, in the East Midlands, employment growth in the creative industries in rural areas is entirely concentrated within the accessible rural districts.

In the most remote areas – the ‘Rural 80’ areas where at least 80 per cent of the population live in rural settlements – growth in creative industries employment lags behind the economy as a whole. However, growth far outstrips the national average in the less rural areas – the ‘Significant Rural’, where more than 26 per cent of the population live in rural settlements. Accessibility, as other papers in this compendium demonstrate, is one of the most critical factors shaping the structure and performance of an economy in rural areas. Indeed, previous research on rural businesses has argued that the real difference in uneven territorial development is not between urban-rural but in fact between accessible-remote.

Finally, the Creative Countryside study indicates sub-sectoral patterns in the creative industries sector between:

- the best and worst performing rural districts in England; and
- remote rural areas and other geographies.

In England’s 50 fastest growing rural districts (as measured by GVA), Creative Services account for 2.8 per cent of all employment, whereas this falls to 1.8 per cent in the 50 slowest growing areas (Figure 4.3).

Lastly, the areas chosen for qualitative case studies within the Creative Countryside project spanned two rural districts each in Cornwall, North Yorkshire and Northumberland. According to Defra’s classification, all six are ‘Rural 80’ districts. The typical differences in the composition of the sector in each of the six districts, compared with the composition of the sector at regional and UK level, are:

- comparatively fewer employees working in Creative Services and Content; and
comparatively more employees working in the ‘arts-based’ Creative Originals and Experiences, together with those employed in Dissemination activities. However, this does not mean that employment in Creative Services and Content is insignificant. These are relative differences. Despite their rurality, employment in either Creative Services or Content remains the largest component of the sector in absolute terms in four of the six districts. This is a factor which has not yet been explored in either research or the developing rural creative industries policy (see Section 5, below).

2.3 Creative industries as innovation inputs into local consumer sectors

But it is also significant that the relative strength of Creative Originals in the composition of the creative sector in rural areas can be illustrated statistically. It needs to be remembered that many more people who work in these principally visual arts and crafts activities will be self-employed and will not be reflected in these figures. Qualitative research, however, can find these individuals – important because visual artists, performing arts workers and the new generation of designer-makers have so far done most to engage with other sectors of the local economy in rural areas. Specifically, businesses and individuals working in Creative Originals and Experiences in rural areas are often important to:

- (cultural) tourism;
- diversification of the land-based economy; and
- place-making.

In each of these areas, the creative industries effectively function as ‘innovation enablers’ for other sectors and the wider economy in rural areas. This happens in a number of ways.

First, the creative industries often ‘diffuse’ a range of creative products, services and experiences that have been pioneered in urban areas but are new to the economy of many rural places.

Second, the creative sector in many rural areas is now well established enough, and of sufficient quality, to be able to develop innovative new creative products, services and experiences that can be sold to urban
areas. These two dimensions of the innovation value of the creative sector are particularly relevant to cultural tourism and the interaction with the land-based sector.

Third, the sector also produces a number of commodity and ‘non-commodity outputs’\(^1\) (or positive externalities) that are likely to increase the overall innovative capacity of rural areas. These issues are more commonly discussed through the rhetoric of ‘place-making’.

**Cultural tourism**

The creative sector is now a key part of the tourism offer in many rural areas, whether in terms of time-limited festivals, performances and Open Studio events; site-specific installations; or the all-year round presence of galleries and crafts centres. The creative industries thus make a distinctive contribution to innovation in rural tourism. For instance, by providing activities generally not dependent on particular weather conditions, they can help to combat the extreme seasonality that tourist businesses face. More importantly, creative and cultural activities are helping to introduce new service innovations and attract a different kind of tourist to rural areas – one who is generally more urban, younger and more affluent than the traditional visitor.

For instance, Open Studios events – when a community of local visual artists and designer-makers agree to open their workshops on an agreed day or weekend – have become a successful model of how to aggregate otherwise fragmented small-scale suppliers into a larger event. The combined event has greater audience appeal, and can draw in visitors from further afield. Successful examples have been running for several years in many areas of the South West, Northumberland and Lincolnshire. For instance, the North Yorkshire Open Studios event has now been running successfully for three years, attracting many younger visitors and buyers from central Manchester and other nearby urban areas.\(^1\)

Artists and performers are also now regularly commissioned to undertake site-specific rural work linked to rural tourism development. This can be through linking installations to existing established tourist attractions such as Belsay Castle and Kielder Reservoir in Northumberland, where the intention is to increase the number of repeat visits as well as attract more visitors, including younger more affluent city dwellers. But such installations may also be developed in places that are not already mass tourist destinations. For instance, in summer 2005, a Glasgow-based arts group, NVA, used light and music to create an artistic experience on the summit of The Old Man of Storr on the Isle of Skye. Access to the installation was by a fire-lit procession of no more than 200 people for two hours that took place every day at midnight.\(^1\)

While public art and sculpture has a long tradition, the kind of site-specific work embodied in The Old Man of Storr is a more recent innovation and many of the most cutting edge practitioners undertake innovative projects in rural settings. For instance, Welfare State International, one of the UK’s leading arts organisations working with participatory site-specific events, established a training centre, called Lanternhouse, to develop these ‘new cultural forms’ in rural Ulverston in Cumbria.\(^2\) As well as interacting with the landscape and changing seasons, rural site-specific projects often place considerable emphasis on the audience experience and their relationship with them, while challenging traditional, received wisdom about the countryside.

**Diversification of the land-based economy**

The creative industries – and activities in Creative Originals and Experiences in particular – are facilitating the diversification of agricultural businesses by helping them to be more innovative. For instance, there are now many farms across the country that offer ‘art farm’ stays to tourists as part of a diversification strategy. This is one form of business innovation that weds the creative industries with land-based traditional industries.

Other creative uses for agricultural infrastructure include opening Auction Markets for plays or exhibitions – as in Skipton – or completely replacing agricultural activity or other traditional activities that have now ceased. Kirkharle Courtyard in Northumberland was previously the site for one tenant farm and now is the location for 14 mainly creative enterprises. Morpeth Chantry Craft, a 14th century medieval bridge chapel, has been brought back to (commercial) life through creative industries activities that are in keeping with its listed status.
These examples should not just be seen as new uses for traditional sites by new businesses; they are also indicators of an important industrial change and diversification – the expansion to rural areas of a sector hitherto largely associated with urban living and lifestyles.

**Place-making**

Creative industries can provide new cultural amenities and activities to rural residents. A secondary effect of the presence of galleries, studios, musicians, performance venues or companies may be to extend the holiday season or general time use of town and village centres, bringing new and different consumers into the area, and providing aspirational jobs and examples of entrepreneurship that are particularly attractive to young people, in turn encouraging them to stay. Furthermore, these new cultural activities and amenities can attract and inspire like-minded and complementary businesses and entrepreneurs in other sectors, often initially in the hospitality sector (e.g. boutique hotels and gastro pubs). In this way, the creative industries can act as a catalyst for enhancing social and human capital, both of which are very important to the innovation process.21

This catalytic or spillover effect – a phenomenon which has, of course, been widely observed in the development of many urban areas22 – occurs because the core product of many creative industries is culture. In addition to innovation in a particular set of cultural products and services, there is a constant innovation in what the cultural historian and critic Raymond Williams labeled as ‘a structure of feeling’. In the case of the contemporary UK countryside, much of the ongoing cultural innovation is to diffuse a set of essentially urban cultural practices, ideas and values to rural areas, and to re-shape and re-cast these in this new context.

This more anthropological and pervasive understanding of culture is close to the term ‘cultural capacity’, which refers to the attitudes and values of a community, particularly with regard to ‘openness’. In a report for Defra, it has been argued that cultural capacity is one of the eight determining factors that contribute to the relative economic performance of rural areas.23 In part, the influence of the creative industries on the ‘structure of feeling’ and cultural capacity of rural areas is related to the fact that many people working in the creative industries in rural settings are in-migrants and new to the countryside (i.e. they are coming from urban areas), if not always new to the region.24

2.4 Creative industries as innovation inputs into local business-to-business sectors

Unlike the evidence we have seen of creative innovation inputs into local consumer sectors, much less is known about the interactions between the creative industries and local business-to-business sectors in rural areas.

In part, this seems to reflect the failure of businesses in these sub-sectors to develop strong localised industry networks that actively seek to engage with other local businesses and public agencies. Rather, rural Creative Services and Content businesses (beyond local newspapers) appear more focused on external urban markets, often in large metropolitan centres. Consequently, these businesses tend to place a premium on accessible rural locations with good transport connections, rather than more remote rural locations.

The kinds of innovations they can facilitate – presentational innovation (e.g. branding/marketing communications), organisational innovation (e.g. service design), and technological innovation (software, ICT) – are increasingly identified as key to competitiveness in the knowledge economy.25

Whether most Creative Services and Content businesses in rural areas are as ‘disembedded’ as initial research seems to indicate26 – meaning that they produce for external markets and have supply chains that are also external to their local rural areas – is worthy of further research.

3. Ongoing changes in rural areas that have relevance to their capacity to innovate

Of course, the development of the sector outlined above has not happened in a vacuum. It has been both driven and constrained by a range of factors, both those that are internal and those that are external to rural areas.
3.1 Changes in rural conditions

Population growth: since the 1970s, the UK has experienced significant counter urbanisation, with more affluent people choosing to move from cities and large towns into rural areas. This migratory trend continued in both England and Scotland over the last decade (1995-2005), with all types of rural areas – large market towns, rural towns, villages and dispersed rural areas – gaining population faster than all types of urban areas. This means that some of the classic rural problems of ‘sparsity’ have declined correspondingly, particularly in more accessible rural areas common in England. In turn, this has increased the number of consumers and producers in many of these areas – towards the kind of critical mass that has been identified as a necessary driver of innovation. Many have argued that such a critical mass is also necessary for the development of knowledge-based sectors such as the creative industries.

Rural areas have outperformed urban areas in terms of economic growth over the last decade. However, that growth appears to be concentrated in the South East of England and in areas close to successful urban economies (see Figure 4.4). Employment gains also reflect the pattern of growth in output and productivity as measured by Gross Value Added (GVA). All of which indicates that the business base in rural areas is not just growing, but also becoming more sophisticated and, in turn, more likely to be able to purchase and adopt innovations, including those supplied by the creative industries.

The industrial structure of rural economies increasingly resembles that of urban economies: services are the dominant sector in the UK across all types of geography. Agriculture only accounts for 4 per cent of employment in dispersed rural areas, falling to 3 per cent in large market towns. The move to a service economy in terms of employment reflects both technological innovation in the land-based sector and advances in Information and Communication Technologies (ICT) that have made service sector jobs no longer the exclusive preserve of city centres. Once again, the move to a service-dominated economy creates positive demand conditions within rural areas for the creative industries, given that the service sector is a major purchaser of creative services.

Lack of high level skills in rural areas: despite high rates of employment, the rural workforce has lower skills than the urban workforce. While there are difficulties in the supply of high level skills in rural areas, due to a general lack of Higher Education provision, this also often reflects demand. Many rural employers do not require high level skills, ensuring a ‘low skills equilibrium’ often prevails. Since the creative industries are high skill industries, this potentially creates a challenge to their expansion in rural settings. Even the significant number of in-migrants working in the creative industries is an insufficient counterweight, as the lack of skilled local workers can still be a constraining factor in creative businesses that want to grow.
3.2 Changes in conditions outside rural areas
There are two key positive demand drivers in the UK economy that have contributed to the growth of the creative industries.

**Rising levels of disposable income and education among consumers:** growth in creative industries’ products and services are strongly correlated with rising levels of disposable income and education. Together with increasing growth in tertiary education, the UK economy in particular has also enjoyed a sustained run of long term growth and macroeconomic stability. Both are key demand factors for the creative industries.

**Increasing business investment in intangible assets:** since the 1970s there has been a long-term trend for increasing business investment in ‘intangible’ assets. These include key products and services supplied by the creative industries, such as software, advertising/branding and design, as well as R&D and training. These intangible assets enable innovation and have become more important to firms in advanced economies as they seek to remain competitive in the face of lower cost competition from emerging markets. By 2004, nominal business investment in intangible assets in the UK had virtually reached parity with investment in tangible assets such as property and capital equipment.

3.3 Technological changes
The rapid and ongoing growth of new ICTs is fundamental to the creative industries. The creative industries are cornerstones of the ‘new economy’, in terms of developing networked software applications (including entertainment applications), building websites, e-commerce systems, online communities and virtual environments, creating digital marketing and advertising campaigns, as well as co-developing digital ICT applications in other sectors, such as telemedicine.

But the basic telecommunications infrastructure needed for the digital age – essential to creative industries businesses – was initially not available in rural areas. Telecommunications liberalisation in the 1980s meant that BT and other private sector telecommunications companies were not compelled to provide the advanced infrastructure required for broadband Internet access universally. Instead, the telecom companies equipped the most lucrative urban areas first. In the late 1990s and earlier this decade, this placed many rural areas, particularly in England and Wales, at a distinct economic disadvantage.

However, a combination of increasing regulatory pressure and additional funding from a number of the RDAs in England and the Welsh Development Agency means that there is now almost full coverage of digital exchanges in the country. In Scotland, broadband Internet access was more widely available in rural areas earlier, due to much earlier investment in developing advanced telecommunications infrastructure by Highlands and Islands Enterprise. Thus, while some rural areas have fewer competing providers and/or slower speeds via ADSL, Internet access is no longer as great a constraint on rural businesses. Other barriers, such as management and business skills, are now more likely to be an issue for the adoption of broadband rather than simple availability.

All of the research that BOP has undertaken in the creative industries in rural areas indicates that the sector is an enthusiastic user of broadband, with almost all enterprises having some form of web presence.

3.4 Culture/societal changes
As incomes and prosperity continue to rise in the UK and the pace of modern life becomes ever more frenetic, some commentators have observed an increasing trend towards ‘well being’, satisfaction and indeed ‘happiness’ beyond simple material and financial rewards. This is often expressed in terms of contemporary worries about work/life balance, a trend that arguably favours migration to rural areas which are seen to have a ‘slower pace of life’.

The new literature on happiness partly draws on earlier psychological theories of the ‘hierarchy of needs’ first identified by Abraham Maslow. In Maslow’s Hierarchy of Needs, once basic material needs have been met, people are drawn to seek out emotional enrichment, intellectual fulfillment and aesthetic pleasure. Some commentators argue that this is driving growth and innovation in the creative industries as they provide products and services that meet these needs. These distinct but overlapping trends are both potentially positive drivers for the creative industries in rural areas.
3.5 Political and policy changes

As was observed above, the creative industries have dramatically risen up the UK policy agenda over the last decade, in terms both of economic development and their contribution to knowledge-based innovation. As a result, there is a generally favourable national policy climate towards the promotion and support of the sector, though our research experience indicates that this is still much more widespread within urban rather than rural areas.

Many entrepreneurs working in the creative industries report that, particularly within rural district councils, attitudes towards the sector are often still negative. Despite their public espousal of the new, service-based rural economy, many in the creative industries sector in rural areas perceive that district councils continue to favour agriculture and land-based industries, particularly in planning policies. Many creative businesses report real difficulties with planning applications to change the use of agricultural buildings to artistic or cultural premises. Objections are often raised on aesthetic grounds, with council planning departments typically insisting on designs that are ‘in keeping’ with other existing rural buildings, even where the contemporary designs are more environmentally friendly. There is a perception that similar planning applications from agricultural businesses are not subject to the same criteria or scrutiny (‘they can be as ugly as they like!’). More seriously, there is a feeling that the ‘diversification’ agenda is only really practised when the diversification is from one form of land-based industry to another, from, say, dairy to mink farming.

4. Assessing creative industries’ role in innovation and business growth in rural areas

As this paper has discussed, the last thirty years in the UK have seen a steady convergence between rural and urban economies in terms of the sectoral profile of businesses and employment. Notwithstanding the innovation and productivity gains that will still occur in the remaining land-based sector (Chapter 2), the

Table 4.2: Structural weaknesses of rural areas in developing an innovation-intensive knowledge economy

<table>
<thead>
<tr>
<th>Economic fundamentals</th>
<th>Drivers of innovation and economic performance</th>
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<tbody>
<tr>
<td><strong>Educational base:</strong> few or no HEIs</td>
<td><strong>Human capital:</strong> low skilled workforce related to lack of demand for high skills from local employers and weaknesses in the education base</td>
</tr>
<tr>
<td><strong>Business environment:</strong> lack of agglomeration economies and knowledge spillovers; possible lack of firm rivalry and competition; potential lack of sophisticated demand</td>
<td><strong>Investment:</strong> a probable lack of angel and other equity investors</td>
</tr>
<tr>
<td><strong>Physical environment:</strong> attractive environment but often serious constraints on development and land use due to protected status</td>
<td><strong>Economic diversity/specialisation:</strong> lack of critical mass preventing cluster-based specialisation</td>
</tr>
<tr>
<td><strong>Social and cultural infrastructure:</strong> can still be weak due to (i) thinness of consumer demand to support physical infrastructure developments (venues); (ii) large distances and poor transport connections that make social and business networks difficult to maintain</td>
<td><strong>Quality of life:</strong> potentially more strengths than weaknesses, though still issues associated with quality of life for young people in particular (including pressure on house prices)</td>
</tr>
<tr>
<td><strong>Governance structure:</strong> district council structure ill-equipped to deal with major structural challenges; coalition of interests based on land-based industries still holds sway in many areas</td>
<td><strong>Connectivity:</strong> telecommunications infrastructure improved significantly but major challenges remain around physical connectivity</td>
</tr>
<tr>
<td><strong>Decision-makers:</strong> weak governance institutions and often antagonism to change on the part of key decision makers, related to land-based ‘path dependency’</td>
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Source: BOP and Experian (2007), adapted from Simmie et al. (2006)
vast majority of further growth and innovation is likely to come from much the same set of knowledge-based services that are driving economic development in urban areas.

In particular, policymakers have to consider how best to support the development of the knowledge economy in rural areas given the factors identified as structural weaknesses within this process in an urban context. In this instance, it is useful to apply the framework developed by James Simmie et al. for the 2006 ‘State of the English Cities’ report to the issue of knowledge economies within rural areas, as the report is essentially an account of the drivers of the competitive process of knowledge-based economic development per se.

The report identifies five main economic ‘fundamentals’ that are important to sustaining competitiveness and innovation in knowledge economies. In turn, these economic fundamentals can be translated into a set of drivers of innovation and competitive economic performance. This framework enables an analysis of the generic structural weaknesses that rural areas face in developing an innovation-intensive knowledge economy. This analysis also picks up many of the factors discussed in the previous section and is summarised in tabular form as Table 4.2.

This framework of economic fundamentals and the drivers of competitive economic performance is a useful lens through which to view the current wider contribution of the creative industries to the development of an innovation-based knowledge economy in rural areas. This analysis is presented in tabular form in Table 4.3.

While it is certainly true that some creative businesses are already innovation ‘enablers’ or diffusers in rural areas, their role in other areas still seems under-developed. In particular, the degree to which Creative

<table>
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<tr>
<th>Strengths</th>
<th>Weaknesses</th>
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<tr>
<td><strong>Educational and skills base</strong>: source of (aspirational) high skill jobs; increasing overall demand for higher skills</td>
<td><strong>Educational and skills base</strong>: little actual effect on retention of young (graduates) as entrepreneurs often older and not looking to grow their businesses in employment terms</td>
</tr>
<tr>
<td><strong>Business environment</strong>: injection of entrepreneurialism; new firms; diversifying the business base; often supply chain links to metropolitan centres; intermediate inputs into other sectors, in particular tourism, hospitality and food</td>
<td><strong>Business environment</strong>: inputs into local B2B sectors under-developed, creative industries potential as ‘diffusers’ of innovation therefore seems to be more restricted than it is in urban areas at present</td>
</tr>
<tr>
<td><strong>Physical environment</strong>: re-use, refurbishment and upgrading of built environment; typically sustainable, low environmental impact development in keeping with protected status</td>
<td><strong>Physical environment</strong>: creative industries potential role as ‘rural gentrifiers’ may exacerbate existing pressures on housing markets</td>
</tr>
<tr>
<td><strong>Social and cultural infrastructure</strong>: provision of new cultural amenities and activities with a more youthful, contemporary edge; development of social and business networks often linked to urban centres, enhanced cultural capacity and cultural identity</td>
<td><strong>Social and cultural infrastructure</strong>: potential to improve the cultural capacity of areas often limited due to creative industries businesses’ often few/weak ties into the local community</td>
</tr>
<tr>
<td><strong>Governance structure/decision-making</strong>: creative industries entrepreneurs are often prominent local advocates and champions for change</td>
<td><strong>Governance structure/decision-making</strong>: difficulties in coalition-building means that institutional inertia and ‘lock-in’ still often stymies change</td>
</tr>
</tbody>
</table>

Table 4.3: Strengths and weaknesses of the creative industries in acting as enablers of innovation and business growth in rural areas

Source: BOP and Experian (2007)
Services and Content businesses might be contributing to the emergence of a new kind of rural economy based on the interaction between outside influences (markets, technologies, know-how etc.) and the internal capacities and resources of rural areas (local labour market, natural resources etc.) is still little understood.

Planned changes in local governance structures and policy priorities for spatial development may make decision-making in rural areas easier. This is particularly important if we are to enable a more strategic and proactive stance towards innovation and knowledge-based economic development. Specifically, the move towards unitary authorities and the concomitant scrapping of rural district councils ought to improve the capacity of public actors to act strategically. However, this may be undermined in those rural areas in England that are not close to urban areas by the developing city-region agenda.

5. Policy recommendations

There is a need for better understanding of the role that the creative industries play as ‘diffusers of innovation’ throughout rural economies. While this is partly developed in local consumer sectors – Creative Originals and Experiences’ businesses contribute strongly to upgrading the tourism, hospitality and retail offers of rural areas as with festivals, Open Studios, art farms and galleries – there is still room for policymakers to better capitalise on this. In particular, policy should routinely integrate the creative industries in plans for place making (including market town centre redevelopment), as well as tourism strategies and wider place marketing initiatives to help attract and retain skilled individuals.

More fundamentally, current policy is underdeveloped with respect to how the creative industries can provide intermediate inputs into local Business to Business (B2B) sectors in rural areas – through design, branding or ICT applications. This reflects a lack of research in this area, which is, in turn, only part of a more general lack of research into innovation in rural areas. Therefore in seeking to address this current policy failing, further research is required, for instance:

- Is there a demand problem – do businesses in rural areas not recognise the value of investing in intangible assets? Is this disproportionate to those in urban areas?
- Do existing creative services firms in rural areas serve predominantly urban markets? If so, is there a way to leverage their business networks to spur endogenous growth?
- What are the factors that make rural areas ‘accessible’ enough for Creative Services and Content businesses?

From a policy perspective, existing and forthcoming opportunities could start to ensure that the creative industries, as part of a wider innovation agenda, are more strongly embedded in rural areas. In particular, relevant mainstream programmes, such as the Department for Business, Enterprise and Regulatory Reform’s ‘Designing Demand’ programme need to make sure that rural areas are properly incorporated in their plans for rollout. Similarly, the next generation of RDA-controlled rural development support programmes (such as the Rural Development Plan for England and the European LEADER programme) should look at supporting further interventions aimed at:

- improving the uptake of the output of Creative Services firms by rural businesses in particular (i.e. similar but more targeted initiatives than ‘Designing Demand’); and
- supporting the development of Creative Services and Content businesses in rural areas.
Chapter 4 Endnotes

5. This quotation is actually taken from an article in the economic development trade magazine ‘Regeneration and Renewal’ (12/11/2006), reporting on the draft DCMS Creative Economy Programme ‘Infrastructure’ Report.
7. ‘Post-Fordism’ is a term used to describe the move away from the characteristic model of mass production for a society of mass consumers that dominated the first two-thirds of the 20th century, towards more flexible and specialised production, in smaller batches with shorter lead times, for different target groups of consumers. This change is also often associated with a move towards vertical disintegration in terms of industrial structure, as individual firms specialise in certain areas of expertise or competence (c.f. Amin (1994) for an overview).
9. This model was first published in NESTA (2006a) ‘Creating Growth: How the UK can develop World Class Creative Businesses.’ London: NESTA.
10. The inclusion of museums and other heritage activities (e.g. historic houses) is the only substantive change to the current DCMS definition. Similarly, while the statistics that the DCMS produces in its annual Creative Industries Economic Estimates contain some of the supply chain activities described above, the four grouping definition includes a more logical and elaborated set of supply chain activities.
11. In a number of related contracts to support the DCMS Creative Economy Programme, Frontier Economics has been investigating a ‘layered’ model of the sector based on how ‘creative’ each element of the creative industries is imputed to be (DCMS 2007c). This shares similarities with the model developed by KEA in its study for the European Commission on The Economy of Culture (KEA 2006), which was subsequently adopted by The Work Foundation’s (2007) ‘Staying Ahead’ report on the creative industries.
12. Earlier this year (2007) the consultancy companies BOP and Experian’s Business Strategies division undertook a multi-client study, ‘Creative Countryside’, which examines the role that the creative industries are playing within the wider transformation of rural economies in the UK. Unless otherwise stated, the statistical material in this section is drawn from this report. BOP and Experian (2007) ‘Creative Countryside: Creative Industries Driving New Rural Economies.’ Report for One NorthEast, Scottish Enterprise, Highlands and Islands Enterprise, East Riding Council, and Lancashire County Council.
15. The data presented above in the Figures from the ‘Creative Countryside’ project use data from the Government’s Annual Business Inquiry (ABI), which does not include self employment. While the Labour Force Survey allows for an analysis of self employment, sample size issues mean that it cannot be disaggregated below the regional level.
16. This includes the qualitative research within the Creative Countryside research discussed above, as well as previous BOP work on the creative industries in rural areas for the North Yorkshire Creative Industry Network (BOP 2005) and in the South West for SWRDA and Culture South West (2004), as well as many other studies such as Perfect Moment’s work in Devon and Torbay (2005) and Cornwall (Perfect Moment and Nottingham Trent University 2003), and Arts Council England’s national review (2005).
17. This is a phrase that has been used previously with reference to the environmental ‘stewardship’ role that the agricultural and land-based sector has often undertaken (Knickel and Peter 2005).
18. BOP (2005). The event organisers, Chrysalis Arts, sum up the new audience that the Open Studios event is now pulling into the area as “Tom Bloxham’s ‘loft bunnies’” – a reference to the residents of the new ‘loft-style’ apartments in Manchester that were pioneered by Tom Bloxham’s property development company Urban Splash.
19. For more information on the project see Robb Penn’s review in ‘The Observer’, Travel, July 10 2005. Available at http://www.guardian.co.uk/travel/2005/jul/10/culturaltrip.unitedkingdom.observersescapesceni
20. For more information, see http://www.welfare-state.org/index.htm
22. Sharon Zukin’s work in books such as ‘Loft Living’ (1982) and ‘The Culture of Cities’ (1995) is particularly noteworthy in this respect.
24. BOP’s collective research on creative industries in rural areas indicates that the pattern of in-migration varies in different areas, generally mirroring more general demographic trends. For instance, while many individuals working in the sector in rural areas of the South West are from outside the region (typically London and the South East) – reflecting general trends of inward migration into the region over the last ten years – there were far fewer in-migrants working in the creative industries in rural Northumberland. Instead, many of the majority of these individuals had moved within the North East region, from urban to rural areas, once again reflecting wider demographic trends (Shared Intelligence 2006).
36. This trend was also highlighted in several papers in this compendium, especially in Atterton and Ward (Chapter 2) and Williams (Chapter 3).
37. For a summation of this literature with regard to the creative industries and the wider knowledge economy, see Chapter 3 in the Work Foundation (2007) report ‘Staying Ahead: the Economic Performance of the UK’s Creative Industries.’ London: Work Foundation.
38. This quote was taken from a focus group of 12 creative businesses in Northumberland that was carried out as part of the Creative Countryside research, BDP and Experian (2007) 'Creative Countryside: Creative Industries Driving New Rural Economies.' Multi-client study for One NorthEast, Scottish Enterprise, Highlands and Islands Enterprise, East Riding Council, and Lancashire County Council.


Chapter 4 Bibliography


Chapter 5
Innovation in Small Rural Businesses

Rob Hindle
Rural Innovation
1. Introduction: Innovation in small rural businesses

The UK’s rural areas have changed from “places of primary production to become associated with a multitude of consumption and production activities”. They now host a wide range of commercial activities, representing all sectors of the UK economy. As we have seen in earlier chapters, rural and urban economies are intrinsically linked. So it is now more appropriate to consider economic activity in rural areas, rather than identifying a specifically rural economy per se.

Whilst the overall sectoral mix of businesses is broadly similar across rural and urban areas, the characteristics of rural businesses and the context in which they operate can vary significantly from those found in an urban setting. In general terms, there are more businesses in rural areas (pro rata per head of population) and a significant proportion of these businesses will tend to be smaller in scale (in terms of numbers of employees and turnover). Around one in three rural businesses employs fewer than four people and has a turnover of less than £250,000. As a result, these businesses tend to be more limited in their ability to invest and are more likely to be in private ownership. Hence, while this paper attempts to cover challenges affecting rural businesses in general, it takes a particular interest in small businesses given their dominance in rural economies.

2. Rural businesses

In England, 36 per cent of all VAT-registered businesses are in rural areas. Essentially there are two sorts of ‘rural’ business. The first group is those which are fixed by geography. These businesses reflect their rural home because they are based on natural resources or geography. These include farming, fishing, forestry and timber products, mining and quarrying, manufacturing, tourism, local food production, active recreation and adventure sports. Alternatively, they are part of the supply chain for these industries. This group includes both small businesses, often family-run, which provide few local jobs and have limited localised impact on economic output, as well as much larger concerns, often in third party ‘corporate’ ownership. These larger operations tend to dominate – or at least exert a significant influence on – local labour market and supply chains. It is these sectors and businesses within them which many people instinctively think of as making up the ‘rural economy’.

Yet these traditionally ‘rural’ industries no longer dominate the business stock or provide the main source of employment in rural areas. This role is taken by a second group of businesses: those fixed by choice. These businesses are not specifically rural, in that they are just as likely to be found in urban settings, but they are located within the rural area either because they are indigenous or because it suits the owners to locate there. They are likely to be in the services, retail, construction and manufacturing sectors.

So, the true rural economy comprises both these groups of businesses; they are all affected by government’s economic and spatial planning policy, and how it is applied to rural areas. Both groups contribute to economic and social outcomes. Both include advocates of, and those resistant to, innovation. Both groups can benefit from innovation to improve their performance. Hence we are interested in them both.

2.1 Characteristics of small rural businesses

At the most basic level, a business is a business; its purpose is to generate profit, and so provide a return on investment for its owners. For some business owners this return provides a living; for others it creates wealth. In this sense, a rural business is no different from an urban business. Both are reliant upon being able to sell something for more than it cost to produce. Both need to adapt, evolve and respond to changing conditions. Both benefit from new ideas and can profit from developing and applying them.

There are, however, some very real differences in the characteristics of businesses located in urban and rural areas. Rural businesses are smaller; their owners and managers tend to be older, and the businesses generate less GVA per employee. More rural businesses are owned by people for whom growth is not a driver (often referred to generically as ‘lifestyle’ businesses) than those in urban areas.
As a result of these factors, levels of investment tend to be lower amongst small businesses located in rural areas. The Annual Survey of Small Businesses has identified a cohort of businesses which reported that they had no wish to grow; when asked why, owners of rural firms were more likely than their urban counterparts to say that it was because they were happy with the present size of the business.10

2.2 The influence of geography
The economic conditions in which small rural businesses operate are heavily influenced by geography. There are still some significant differences between the UK’s rural areas: the Fens area in Lincolnshire and East Anglia continues to be dominated by agricultural and horticultural production; and consequently it operates in a low wage, low skill context. Some areas remain substantively influenced by the legacy of enforced structural change upon a dominant industry or sector, including the ex-mining areas of the East Midlands and some coastal areas of Yorkshire and Humberside. Other rural areas operate within the positive influence of a thriving ‘city-regional’ economy, and benefit from proximity and easy access to skilled labour markets, networks and high social capital.

Greater dependency on natural resources and land-based industries
Businesses located in rural areas operate in global, national and regional markets regardless of their size. However the relative ‘connectivity’ of rural businesses to some scale of economic mass seems to influence the markets in which they operate. Keeble et al. (1992)11 found that firms located in more remote rural areas were “significantly more specialised in niche markets created by rising consumer incomes, often serving retail, tourism and agricultural markets”. By contrast, “firms located closer to urban areas predominantly specialise in niche markets created by increasing business and technological complexity, while urban firms occupy more traditional sub-contracting and manufacturing niches”.12

Rice and Venables (2004)13 found that the relative productivity of UK counties could be explained to a large degree by their access to economic mass (measured as a large population of working size within 80 minutes drive time), and that the bigger the mass, the greater the effect.

Greater dependency on connectivity and location
Poor connectivity and location impact on the economic conditions in which small rural businesses operate, and their host areas’ subsequent economic output. This was demonstrated by a 2002 study of rural England by Defra14 which showed 44 rural districts with consistently poor economic performance (“Defra’s lagging rural districts”) largely located around the geographical periphery of England. This analysis seems to support Defra’s subsequent conclusion15 that location, and its impact on economic performance, is not only measured in terms of distance from urban centres, but also by the economic influence of the urban neighbour.

3. The changing rural business context

3.1 Changes in rural conditions

Industrial change
Rural areas have experienced substantial change in their economic functionality (see Chapters 2, 3, and 4). The ability of agriculture in particular (and its related supply chain) to sustain local economies has been significantly undermined in much of the country, especially in the uplands (see Chapter 2). In the more commercial arable heartlands, the shape of agricultural businesses has changed irrevocably, with a significantly reduced permanent and skilled labour force.16 Manufacturing and other primary industries, such as fishing, forestry and mining, have also declined.17 This has led to an increase in small business formation and self-employment in some rural areas, as local people have sought out new markets, and new residents have developed business ideas.

As we have seen, employment in the creative sector is among the fastest growing segments of the labour market (see Chapter 4); and farmers now derive a significant proportion (one-third) of their income from non-farming activities (see Chapter 2), especially from the rural tourism sector (see Chapter 3). This ongoing industrial change is generating waves of innovations across a wide range of businesses.
Demographics and migration
As has been pointed out, rural areas have experienced the biggest increases in population growth over the past two decades. Increasingly, people are attracted to the rural environment and the quality of life that it offers. Research suggests that nearly 40 per cent of rural in-migration can be linked to environmental quality and quality of life. These migrants are predominantly over 40 and tend to be families with children; younger people tend to prefer the better amenities and wider access to Higher Education, training and job opportunities that urban areas offer.

These incoming entrepreneurs – and other highly skilled migrants who choose to live in rural areas – bring with them the skills, culture and attitude to develop networks and create social capital. In this sense, they are a positive force for innovation: a 2003 Countryside Agency reported that throughout the 1990s in-migrants started up and owned up to two-thirds of all new businesses in the countryside.

The rural population is also older than that in urban areas; there are more older people in rural areas and fewer younger people, particularly in the 19 to 29 age group. In fact the total number of people under 40 in rural areas has declined since 1981, with this decline most strongly pronounced in areas with poorer economic performance.

But contrary to widely held beliefs, people aged 50 and over can be highly entrepreneurial. Recent research based on 361,800 start-ups in the UK revealed that a sixth of all new businesses are founded and run by people over 50, contributing £24.4bn to the UK economy every year. This supports an earlier survey conducted by SQW, a consultancy, of new knowledge-based and creative business start-ups in rural West Yorkshire, which showed that 52 per cent of those surveyed were started by people aged 45+ and 79 per cent aged 35+. More interestingly, 29.5 per cent of the respondents said that the main reason for starting their business was to develop an idea, reflecting a potentially high level of innovation.

3.2 Changes external to rural area

Climate change
The greatly increased public policy focus on climate change will have a significant impact on how business is carried out across the UK. The need to reduce carbon consumption will put pressure on individual mobility, especially in rural areas. It may also increase the future cost of business premises and housing as improvements in energy efficiency and emissions are imposed (either by fiscal or regulatory means).

However, as has been pointed out in Chapter 2, the need for the commercial development of renewable energy technologies will offer a significant catalyst for rural innovation, and create opportunities for small rural businesses within the supply chain. Such businesses are also active in the development and application of sustainable and energy efficient production techniques. About 60 per cent of rural businesses surveyed are actively working or planning to save energy, and cut down on waste. Some businesses are already adopting intelligent energy systems, investing in and developing viable commercial applications to recycle waste and by-products.

Spatial planning
Spatial planning is often mentioned as a barrier for business development and innovation. Many rural small business owners feel that the way the planning system operates acts as a constraint on growth and productivity. For instance, spatial planning can make finding business premises a major problem for many small businesses. This can hinder both expansion and ‘enterprise incubator’ plans that aim to pool business services resources for the benefit of rural businesses.

Central Government’s hierarchical approach to development has often meant that there tends to be a presumption against any new development beyond the main rural towns regardless of whether it is economically beneficial. Within these main rural towns, demand from competing uses such as housing and retail has often been allowed to displace economic activity, leaving the impression that such towns are not good places to do business. A particular problem is the unsophisticated application of generic ‘standards’ and ‘tests’ to rural development proposals, and the unwillingness of local planning authorities to take a flexible and pragmatic approach to proposals for development – often as a result of local pressure – even when they legally have the ability to do so.
However, planning policy may sometimes have the opposite effect. For example rural business owners might have to innovate to respond to such challenges, perhaps by adopting smarter spatial design on their premises, or by finding new construction and transport solutions for their development proposals. Yet the overall experience of local authorities and businesses\textsuperscript{32} suggests that a strict and rigid spatial planning regime may deter many would-be innovative entrepreneurs from considering rural areas as their home base.

### 3.3 Technological changes

Some research has indicated that small firms in peripheral areas are likely to be quicker to adopt technology.\textsuperscript{33} ICT has been a huge driver of social and economic change; access to the appropriate software and a high-speed broadband connection can substantially mitigate the negative impacts of geography on a knowledge-based business. In a recent work, Deakin\textsuperscript{34} concludes that innovation is influenced by three main factors: the extent and density of business networks; the extent of specialised training and support; and the technological infrastructure. It seems likely, therefore, that any limitations relating to these factors could restrict local businesses’ ability to adopt and pursue innovation.

However, a 2006 survey revealed that 70 per cent of rural businesses use ICT primarily for record keeping, accounts, word processing and email. While these uses can hardly qualify as advanced and complex, the survey also found that businesses in dispersed rural areas are significantly more likely than those in other areas to use ICT. Access to broadband was not a barrier to most rural businesses: only around one in 20 businesses in rural villages or areas with dispersed dwellings identified access to broadband as a problem.\textsuperscript{35}

### 3.4 Political and policy changes

**Central Government**

Central Government’s approach to the issue of ‘rural productivity’ has fundamentally changed since the 2004 Comprehensive Spending Review. The ‘PSA4’ target introduced in that Review, which required Defra to “reduce the gap in productivity between the least well performing quartile of rural areas and the English median by 2008”, has been abandoned. The Comprehensive Spending Review in October 2007 did not replace the target; rather Defra has become a co-owner of the new PSA7,\textsuperscript{36} a single target for improved productivity at regional level. Defra sees this as the ‘mainstreaming’ of rural productivity. It will effectively mean that investment in rural businesses and economic infrastructure will need to be secured through ‘mainstream’ routes rather than from dedicated ‘rural’ programmes.

**3.4.2 English RDAs**

In future, responsibility for regional productivity will rest with the Regional Development Agencies (RDAs), and it will be for them, in partnership with stakeholders and local authorities, to determine how best to achieve it. RDAs will also be responsible for delivery against a new PSA4 target dedicated to promoting world class science and innovation in (and so through\textsuperscript{37}) England.

Whether an RDA includes investment in rural businesses and the promotion and development of innovation in rural areas in its priorities will be entirely dependent upon debates within each region and the subsequent approach set out in the Regional Economic Strategy (and subsequent Integrated Regional Strategy). It is therefore critical that these debates are grounded in evidence, and that those with a stake in rural areas effectively advocate the contribution that their businesses, and the innovations that they offer, can make to each region’s economic performance.

**3.4.3 Devolved administrations**

Each devolved administration of the UK\textsuperscript{37} is responsible for determination of policies and priorities, and allocation of resources. These are influenced and informed, however, by the over-arching policy framework set by the UK Government. For example, the Scottish Government sets out four key areas of importance to rural communities which include a strong and diverse rural economy. It has also ‘mainstreamed’ the needs of rural Scotland within its policies, and expects all policymakers to “take the needs of rural areas seriously”.\textsuperscript{38} The devolved administrations for Wales and Northern Ireland have departments focused on rural affairs. However, they too target innovation and enterprise per se, rather than focusing on rural businesses (beyond the land-based and tourism sectors) as a thematic priority.
Each devolved administration is also responsible for the development and use of spatial planning policy within its territory. Each has more autonomy than the English regions, and is therefore in a powerful position to address, and positively influence, the conditions for innovation in its rural areas.

The role of local authorities in economic development and regeneration
The integration of regional spatial planning and economic development introduced by the Sub-National Review led to proposals to increase the role and powers of local authorities in promoting and delivering interventions to support local economic development. This offers them an excellent opportunity to include the creation of optimum conditions for innovation as part of their ‘place shaping’ role. Such an approach would encourage the public sector to understand, invest in, enable and facilitate innovation in rural as well as urban businesses.

4. The innovation performance of small rural businesses
A 2006 survey for Defra of innovation in rural businesses provided some interesting insights into the innovation performance of small rural businesses. Table 5.1 below gives an overview of some of the findings.

### Table 5.1: Innovation in the past 12 months by type of area, employers only

<table>
<thead>
<tr>
<th></th>
<th>Urban %</th>
<th>Rural, Town %</th>
<th>Rural, Village %</th>
<th>Rural, Dispersed %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduced new products</td>
<td>34</td>
<td>33</td>
<td>35</td>
<td>33</td>
<td>34</td>
</tr>
<tr>
<td>Introduced new processes</td>
<td>25</td>
<td>22</td>
<td>23</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1668</strong></td>
<td><strong>196</strong></td>
<td><strong>191</strong></td>
<td><strong>111</strong></td>
<td><strong>2166</strong></td>
</tr>
</tbody>
</table>

*Source: Small Business Service Analytical Unit *Unweighted in terms of their size

The survey showed that there was no major difference between different types of area in the proportion of businesses that introduced new products or processes. The difference between rural and urban areas varied between one and three percentage points.

Some recent research has indicated that small rural businesses often respond to pressures they face by the adoption, development and application of new ideas. This inference is supported by the author’s professional experience. Small rural businesses innovate in response to constraints but also to address changing market conditions. These innovations are not always specific to rural businesses nor are they developed indigenously (see Chapter 1). But they are taken up for one of three reasons: to improve their productivity; as a response to an opportunity to enter a new market; or to leverage a new technology. Different examples of the way that rural businesses innovate are offered below.

**Production innovation:** the adoption of new processes, systems and equipment to improve efficiency and productivity. For example, rural businesses, by specifying their demand, might act as important user-innovators in the development of large machinery for quarrying, or the adaptation of transport systems to move bulky materials. More recently there has been a growing demand for innovations for recycling waste products, and for the use of computerised systems in bottling plants and food packaging. Some rural businesses also demonstrate the use of innovation in supply chain collaboration. In the food sector, there are excellent examples of food producers forming partnerships with processors and primary producers to add value and secure process efficiencies (see Chapter 2).
Adaptive innovation: this type of innovation comes through modifications to existing business models or processes in response to changing circumstances and market conditions. Examples include: the change of use of buildings in workspace developments such as Staveley Mill Yard; changing focus from one market segment to another to sell direct to consumers and so bypass supply chain issues, as at Chatsworth Estates & Farm Shop; the blending of visitors and direct sales with primary industrial activity in Honister Slate Mines; and the use of landscape for different activities such as adventure sports, as in Forest Enterprise’s work in Grizedale, Ay, and Dalby Forests.

Marketing innovation: this includes the quick adoption and use of viral and network marketing techniques, and the use of electronic media to promote and sell products into distant markets. It also involves the commitment to collective campaigns such as those run by producer groups44 and destination management organisations,45 and adding value to basic products, such as the collaborative development of a branded Saltmarsh Lamb product by Holker Hall Estate and some of its tenant farmers.46

Modes of work practices: Many small rural businesses are pioneers and innovators in a number of areas related to the ‘doing’ of business. For example, many have enthusiastically embraced remote teamworking, homeworking and ‘homeshoring’47 as a logical and appropriate response to the inconvenience and expense posed by geography. This has led to the creation of a market for virtual reception and PA services.

These largely process and adaptive innovations undertaken by many small rural businesses across the country may not be recognised by policymakers as innovation per se. It is the sort of ‘hidden innovation’ that NESTA has documented across a number of sectors.48

4.1 Critical factors for supporting and facilitating innovation

Knowledge and skills in the workforce: a more highly skilled workforce can generate greater innovation, increase flexibility in the workforce and enable better adaptation to new technologies.49 The Defra small rural businesses survey did not find a particularly severe lack of managerial skills in rural areas, though it was slightly higher in dispersed rural areas.50 overall, 8 per cent of respondents said that ‘shortage of managerial skills” was an obstacle and 15 per cent cited “shortage of skills generally”. So, there is no indication that the absence of managerial skills is a serious problem; perhaps, given the micro-size of these firms, managers tend to be owners too. However, the proportion of respondents who were very satisfied with the skills available in their organisation decreased with decreasing settlement size.

Analysis by the Commission for Rural Communities of the National Employer Skills Survey 200651 showed that:

“While 35% of all respondents cited ‘low number of applicants with the required skills’ as the main cause for hard-to-fill vacancies, almost one in four of employers in rural villages and hamlets put their recruitment difficulties down to ‘insufficient people interested in doing this type of job’. This is 6% higher than the equivalent figure for urban employers. A further 16% of village/hamlet respondents quoted the company’s remote location, or poor public transport, as a contributory factor to their recruitment difficulties, a figure three times higher than the equivalent proportion of urban employers.”

Interestingly, survey respondents sought to mitigate the impact of this ‘skills gap’ by outsourcing. Thirty per cent of respondents engaged secured labour through outsourcing, a greater proportion than firms in urban areas.

Business networks: the contribution of formal and informal networks is consistently cited as a key driver of innovation. Such networks include both peer-to-peer and business-to-business support agencies, and owners and managers of businesses.52 A study for Defra53 has identified the role of networks in:

• The sharing and discussion of ideas.
• Shared learning around addressing problems and constraints to growth.
• Supply chain development.
• Addressing the negative impact of isolation.
The study also found that business networks and the sharing of knowledge by ‘mentors’ was considered particularly important by rural small and medium-sized enterprises (SMEs). A pool of people with entrepreneurial skills and experience is considered as important to providing the appropriate conditions to drive economic development and innovation.

The SQW study confirmed earlier findings which found that the lack of business networks was one of the characteristics in which rural and urban entrepreneurship differed. The work (Smallbone and North, 1999) also found that absence of such networks adds to the cost of delivering effective business support to rural businesses. Deakin concluded that innovation will be influenced by the “extent and density of business networks”.

The importance of networks to business performance and innovation has been recognised by business support agencies working with rural entrepreneurs. Evaluation of interventions such as Lancaster Businesses Schools’ LEAD programme found that business owners valued the opportunity to learn from others, and to share their experiences and challenges with like minded people.

Competition: levels of innovation have been linked to the intensity of competition that a business faces. Whilst some argue that limited competition will allow a higher pricing structure, so supporting re-investment in innovation, public policy is based on the principle that the removal of constraints to competition improves productivity.

There appear to be significant differences between the attitudes of businesses in rural and non-rural areas towards the competition they face. Cosh and Hughes report that urban firms cited competition when asked to cite their greatest obstacle to success, whereas rural firms said that regulation was their biggest challenge. It is possible that rural respondents felt that they were ‘on top’ of the competition: on average, rural SMEs have a lower average number of ‘serious competitors’ than their counterparts in conurbations.

Links to higher education: interaction between business and universities is widely regarded as important for the commercial application of and dissemination of innovation, particularly science-based innovation. For instance, Roper et al. (2006) found that the lack of Higher Education Institutions (HEIs) in rural Scotland meant that Scotland’s innovation system was confined to urban locations such as the Central Belt. They suggested that SMEs in rural locations, especially the Highlands and Islands and the South of Scotland, were excluded from this system (Roper et al. 2006, p. 73):

“Geographical factors, and the location of HEIs, create a profound distinction between the situation of the firms in the Central Belt and other rural areas. Firms in the Highlands and Islands, Borders and Dumfries and Galloway are excluded from any positive dynamic at the moment.”

Defra considered that the lack of Higher Education and research facilities in rural areas were likely to contribute to the lower incidence of ‘knowledge intensive’ businesses in rural areas. The influence of a university on a local economy is apparent from analysis of the relative performance of different economic zones. For example Lancashire’s Economic Strategy identifies the significantly improved performance of Lancaster and Preston (both of which host universities) compared with the remaining economic zones in the sub-region. The development of a ‘University of Cumbria’ is now a major objective of Cumbria’s economic strategy.

5. Conclusions

Respondents from a survey of small rural businesses in the North West have identified a number of issues that constrain their performance, which are more significant than those faced by urban businesses. While the survey was of a particular UK region, most of the issues identified resonate in other UK regions. These include: the availability and cost of suitable premises; the cost of accessing their market; skill levels within the local workforce; accessibility of business support services and networks; and even the adverse and unexpected impact of weather, disease and seasonality. These factors are often compounded by the disparity in economic infrastructure available. Hotels and conferencing facilities, car parking, railheads, ‘institutional
capacity’ and networks – which urban entrepreneurs might take for granted – are often not available, even in many market towns.

It seems possible to conclude, therefore, that a combination of the absence of the conditions to support innovation and the structural factors faced by many small rural businesses is likely to constrain their take-up of innovation and any latent ability to generate it. Indeed, Defra (2005) concluded that there were grounds to believe that businesses in rural areas are less innovative than their urban counterparts. The literature pointed to the proportion of total businesses within an area that are ‘knowledge-intensive’ and found that the most rural districts had a lower proportion of knowledge-intensive businesses than the English average. The same study also acknowledged that “rural firms in some sectors cater to specialised niche markets, where it is important to innovate in order to compete”. It identified that, “increasingly rural firms are able to take advantage of the new opportunities presented by broadband to reduce the constraints imposed by distance and to further expand their markets.”

How might these barriers be addressed, and the innovation performance of small rural businesses improved?

**ICT and skills:** the use of ICT can improve access to conditions that enable innovation (business support, labour supplier and peer networks, professional services and business applications). Access to broadband alone is not enough to ensure improved access however. Using it effectively requires the right combination of skills and the development of appropriate business processes. The focus of publicly funded investment in ‘digital development’ in rural areas should therefore shift from access and take-up to improving skills around the use and development of ICT and related systems by small businesses.

**Networks:** the importance of networks to promote and disseminate innovation – and their relative absence in rural areas – is consistently cited in the literature. Publicly funded business support agencies (and their partners) can play a key role in facilitating the development and operation of networks. This practice is well developed in the land-based sector, where consultants and colleges have run benchmarking clubs and producer groups for many years. Such activity should not necessarily be focused on specific sectors. Publicly funded agencies might be encouraged to develop Innovation Networks at district level in rural areas, and to develop a collective, rather than a ‘one-to-one’ approach to intervention.

**Place shaping and spatial planning:** the local economic context in which small rural businesses operate is materially influenced by how the local authority thinks about its ‘place’. Local planning policy can enable investment and entrepreneurial activity; for example, through positive policy around homeworking, change of use of buildings, and the role and functionality of settlements. Even a council’s approach to parking charges and restrictions can materially influence the way that entrepreneurs think about a town as a place to do business.

The policy recommendations below seek to improve the access of small rural businesses to the conditions that support innovation, and to ensure that their potential to innovate, and the opportunities that this represents to the economy as a whole, are achieved.

6. **Policy recommendations**

6.1 **Innovation active**

UK central Government should recognise small rural businesses as users, and developers of innovation. The Department for Innovation, Universities and Skills (DIUS) should encourage (or possibly even require) English RDAs and the economic development departments of devolved administrations to demonstrate how they have taken steps to ensure that rural businesses are made aware of, and can access, interventions and investment designed to deliver the PSA4 target around innovation-active businesses.

Regional Observatories should build evidence of the use of innovation within rural businesses in order to assess the incidence and characteristics of ‘innovation active’ businesses in rural areas.
6.2 Innovation strategy

RDAs and local authorities should not focus exclusively on specific sectors (such as those that are science- and technology-based), or in specific places (cities and science parks) to promote innovation within their economic and integrated strategies. Rather they should develop a strategic response to innovation that places it at the heart of improving productivity across their entire territory. This will then create a policy context that will enable local authorities and business support agencies to engage effectively with small rural businesses to improve their innovation performance.

6.3 Place making

Local authorities and Local Strategic Partnerships should include innovation as a key driver to secure sustained growth and prosperity and strong communities across their entire territory. A strong strategic lead will allow them to develop planning policies that enable innovation through enhanced investment and entrepreneurial activity. These might include policies to encourage homeworking and ‘livework’, 65 to increase the ability of rural businesses to expand their existing operations, and to improve investment in business facilities in rural towns.

Local Strategic Partnerships should focus on innovation as a key driver (within Sustainable Community Strategies and Local Area Agreements), and develop initiatives to promote and disseminate it that are appropriate to the scale, form and culture of all businesses within their territory. They should be encouraged to set local targets (at neighbourhood level) within Local Area Agreements to improve the innovation performance of the business stock in their territory.

6.4 Business support and skills

Publicly funded business support agencies should focus on facilitating the development and operation of networks, and the application of information technology beyond administration, as core means of improving the innovation performance of small rural businesses. Interventions to improve skills in rural areas should contribute to improved innovation performance by improving the IT skills of owners and managers, and improving links between local business support agencies, business networks and universities. Networks that connect small rural businesses with self employed sub-contractors should also be developed.

6.5 Higher education institutions

Universities and Research Institutes should target small rural businesses in their areas. They should also be encouraged to include them in their wider leadership and research networks, and to develop partnerships with business support agencies to build and facilitate innovation networks for small businesses.
Chapter 5 Endnotes

6. Typically in the farming, fishing, local food production, tourism, active recreation sectors.
7. Typically in the agri-business, food, mining and quarrying, manufacturing and forestry sectors.
12. Ibid.
14. In this instance measured by the earned income of resident taxpayers compared with the English median.
16. The proportion of the total workforce employed in farming has fallen from 2.8 per cent in 1984 to 1.8 per cent in 2003 (Defra 2004b).
23. Ibid.
25. Examples include projects such as The Rheged Centre (www.rheged.com), The Eden Project and The Edge (www.edenproject.com), large-scale wind farms e.g. Llandudno (Gwynn Y Môr) and the Isle of Lewis (www.lewisswind.com) and the development and trialling of wave turbine technology in Strangford Lough and by EDF in the Severn Estuary.
28. Ibid.
30. Those designated in spatial plans as ‘Key Service Centres’. Change of use development is often an exception.
31. Such as those around PPG13 and ‘sustainability’.
32. Evidence from business surveys previously referenced and work with Selby and South Lakeland Councils on Employment Land Studies.
36. Improve the Economic Performance of All English Regions and Reduce the Gap in Performance between regions.
37. Northern Ireland, Scotland and Wales.
42. See www.envirosystems.co.uk
44. See www.foodtourismscotland.com
45. See www.golakes.co.uk/taste
47. Dwelly, T., Maguire, K. and Truscott, F. (2005) ‘Under the Radar: Tracking and supporting rural home based businesses.’ Live Network Report to the Commission for Rural Communities. The term ‘homeshoring’ refers to the practice of moving the place of work of staff from office to their home. For example, BT has more than 12,000 home-based workers.


65. The term ‘livework’ is used to describe dwelling houses which include a separate and dedicated workspace. The use is ‘sui generis’ in planning terms and therefore different from residential.
Chapter 6
Innovation in Rural Public Services

Frances Rowe
Rural Manager, One NorthEast
1. Introduction: Innovation in rural public services

Public services are an important source of innovation. NHS Direct, Sure Start, Connexions and congestion charging are well known examples: new ideas that create public value and transform the services landscape.\(^1\) In rural areas, public services innovations are both significant and vital. Not only can innovation help to overcome the challenges of delivering services, but the services sector is a significant entity in its own right and therefore an influencer of innovation in the wider economy.

In rural England, the 47,000 firms and organisations in the public administration, education and health sectors account for nearly a third of all workplaces.\(^2\) Whilst not all these organisations are in the public sector, they still make an important contribution to economic well-being and quality of life in rural areas. Hence, they are a valuable resource for the generation of innovative ideas and solutions for the provision of services.

Policymakers at a recent OECD conference on rural development reiterated that: “innovation is not just about new products; it is also about processes and thus about doing old things in a new way”.\(^3\) So, any analysis of innovation in rural public services not only has to consider new services delivered in new ways, but must also look at new approaches to delivering traditional services. Of equal importance are how innovation relates to new ways of working across the public, private and community sectors, and how modern rural service solutions can be created by the pooling of resources and the sharing of expertise and knowledge.

1.1 The public services sector

Put simply, public services are public goods provided by the State (and generally paid for out of taxation) that benefit society at large. The rationale for state intervention is that the market would not provide these services if left to itself – or at least not universally. Familiar examples include national defence, health, education, social services, transport, the police; but we should also include business support, planning, economic development, housing, environment and municipal leisure facilities like parks and swimming pools.

1.2 The rural services challenge – between efficiency and equity

Earlier chapters have highlighted some of the factors that make delivering public services in rural areas a challenge: a lack of critical mass of population, geographic remoteness and an ageing population. Combined with a low tax base to finance services, these make for a significantly different policy landscape from that in urban areas.\(^4\) In particular, these challenging conditions raise an important policy challenge: what is the trade-off between efficiency (maximising the use of scarce resources) and equity (fairness for all citizens)? This delicate balancing act has led to a variety of policy responses, some of which have set minimum standards or service entitlements for rural areas.\(^5\)

In 2000, the UK Government’s Rural White Paper\(^6\) delineated the minimum service standards people living and working in England’s rural areas could expect. Its Rural Strategy 2004\(^7\) committed the Government to an annual Rural Services Review with revised and improved rural service standards, together with a commitment to regular reviews of progress. These include, by 2010, wrap-around child-care for all schools in rural local authorities and a target of 50 per cent of rural people living within ten minutes walk of an hourly bus service. In 2003, the Scottish Executive published a progress report on how services in rural Scotland had improved\(^8\) following its Rural Services Scotland paper two years previously. In Wales, the Welsh Assembly Government is committed to establishing a set of national service standards that can be accessed by the public to see what core services they can expect, wherever they live, and to an annual report on public services performance.\(^9\)

In Defra’s second rural services review, published in 2006,\(^10\) the then Rural Affairs Minister, Barry Gardiner, reiterated the Government’s commitment to rural needs remaining at the heart of policymaking and to concern for services for all, including the disadvantaged in rural areas. He also articulated the need for local people to become involved in tailoring services to local circumstances, underpinned by minimum standards and against a better understanding of need.
1.3 Tackling the services challenge by putting local communities in charge

There are important clues here to the future direction of policy. Policymakers are looking increasingly to place-based solutions to service delivery, where local communities will identify need, commission – and sometimes deliver – services, and influence budgets. Public authorities would need to demonstrate local accountability and responsiveness, against a rigorous and relentless efficiency agenda. In effect, the trade-off between efficiency and equity would be devolved to regional, sub-regional and local levels of governance to sort out. Seldom has innovation had a more crucial role to play.

2. Changing rural conditions

Five main drivers of change will impact on rural areas and the services their residents will require. Some are profound and disruptive; others are more incremental and subtle. There are drivers from within rural areas, and others from outside.

2.1 Demographic change

It has already been mentioned in several papers in this collection that the rural population in England is growing and ageing. Rural areas are ageing faster than urban ones, with sparse rural areas ageing at the fastest rate of all. By 2028 some 35 per cent of the rural population will be over 50; in the remotest rural areas this will be nearer to 50 per cent. This demographic trend will increase the pressure on many public services – from healthcare to housing, leisure to law and order. With fewer residents of working age, and more people living longer, public service providers will have to find innovative ways to deliver core services, such as medical care, at the same time as securing greater efficiencies and new forms of investment.

The trend for in-migration from urban to rural areas in England has been clear for some time. Most in-migrants are of working age, aged between 30 and 65. But what is the significance of in-migration into rural areas in middle- to late-middle age?

Recent research from the United States on rural retirement migration has thrown up interesting insights that could apply equally here. The ageing and in-migration trends in some parts of the USA are similar to those in the UK. In-migration at age 60 or above has been a significant source of rural population growth over the past 30 years, with favoured destinations such as in the Pacific North West offsetting population declines in other parts of rural America. Older in-migrants generally promote employment and income, and add substantially to social capital through activities such as volunteering. Their presence also leads to enhanced medical care services and facilities in some locations. The trend is also for rural in-migrants to “age in place” – not to move away when they become elderly and frail and need more intensive care services. This raises the question of how services respond to their needs as they get older. It also raises questions of how services support the less elderly volunteers in the community helping with the delivery of services to more elderly residents.

2.2 Decline in numbers of young people

As has been highlighted already in this collection of papers, rural areas are losing their young people. Meeting young peoples’ needs and retaining or attracting them to rural areas remains a profound challenge. It is one that is likely to intensify without innovative service provision. For example, poor public transport provision compounds the difficulties some young people face in accessing employment, education and training. In some parts of rural England, the numbers of young people not in employment, education or training (NEET) are increasing. In counties such as Northumberland, there are more NEETs than the average for England.

Affordable housing is a significant challenge for rural young people – it is a worse problem in rural areas than in urban ones. The Commission for Rural Communities has found that areas where housing is most unaffordable also have higher levels of in-migration and a higher than average number of homes that are sold for cash. South Hams District on the south coast of Devon has a number of natural advantages, including fine landscapes and a good climate. Consequently, it attracts in-migrants looking to retire or commute; and there are significant numbers of second or holiday homes. In South Hams, wages are about 75 per cent of the national average, whilst the district is the 18th least affordable local authority in Great Britain.
Britain. Average house prices doubled between 2000 and 2004. If young people are to be able to live and work in rural areas, then innovation in housing provision is essential. In the case of South Hams, an innovative approach to planning policy is being used to help secure the 600 affordable homes that are needed each year. Using its Local Development Framework Core Strategy, the council has established a headline target of 50 per cent affordable housing. Furthermore, its policy aims to secure two affordable homes for every open market one on all sites identified for residential development – the highest such target in the country.

2.3 Spatial contrasts in economic performance
Despite examples like South Hams, average income levels between urban and rural England tend to be similar, with income levels overall in rural England being slightly higher. But spatial differences reveal some important variations in economic performance.

Rural areas with lower incomes tend to be found in the more peripheral areas furthest from cities – these areas also tend to exhibit weaker economic performance. A survey for Defra that looked at the implications of city-regions found that economic performance and growth prospects within city-regions were better than in rural areas outside. It also found considerable evidence of “two speed” economies within city-region areas – with the juxtaposition of more traditional employment, often with low pay, against newer, high value, economic activities.

More peripheral areas are often associated with low skills, low pay, poor access to services and seasonal and part-time employment. It is perhaps, then, the more peripheral areas that face the biggest public services challenges – and where the potential for innovation is greatest. But policymakers should not ignore the challenge of equitable service provision across all rural areas, where general affluence can mask pockets of social and economic disadvantage that affect accessibility to services.

2.4 Weak transport networks – a persistent market failure?
Transport is one of the main barriers in rural areas to accessing essential services and transport provision, or the lack of it, has bedevilled rural areas for years. Graham Russell of the Commission for Rural Communities eloquently summed up the rural transport paradox thus:

“With the growth in car ownership and the decrease, in real terms, in the cost of motoring relative to public transport fares, there has been a decline in the use of rural public transport. Car ownership is, often out of necessity, higher in rural areas than in urban areas. This, not surprisingly, ultimately, leads to the withdrawal of poorly used transport links.”

The result is that high levels of car ownership are unsurprisingly higher in rural England, and even the lowest income households are reliant on a car. Over 30 per cent of those on the lowest incomes in more isolated rural areas run two or more cars. Innovation in this area is therefore crucial to improving access to a range of rural services, and particularly to assisting disadvantaged members of rural communities.

2.5 Climate change
The challenge of climate change provides a new impetus – both within and beyond rural areas – for the provision of services that can respond to this new global and social imperative. As the climate changes and extreme weather events occur more frequently, a range of service responses are needed.

Some are obvious, such as additional investment for flood management and mitigation. The Stern Review pointed the way to the substantial increases in planned spending on flood management, along with work by the Foresight Programme. These have informed the recent announcement by Defra in the latest Comprehensive Spending Review of a growth in spending on flooding from £600m in 2006/7 to £800m by 2010/11. But services such as education, health and even law and order will all be tested in the event of a natural disaster – and the response of services in rural areas may pose the greatest challenge of all.

Looked at another way, dealing with climate change is an opportunity. Crops produced in rural areas can be used locally for decentralised energy provision. The know-how of farmers and land-managers can be harnessed to develop new approaches to flooding and climate change mitigation. New technology can help reach dispersed customers and develop decentralised provision in recycling and waste management. These
are all areas where new services will not only be needed, but where solutions originating in rural areas can be made available to urban areas as well.

One innovative response to climate change, where rural areas play a prominent part, is the Transition Towns initiative. Towns such as Totnes in Devon and Penwith in Cornwall are adopting this community-led model as a response to limited global oil supplies (‘peak oil’) and climate change. Facilitated by the Transition Network – an embryonic charity set up to network the model and provide support – the emphasis is on community-defined and -led solutions, implemented locally, underpinned by a clear community of interest. The towns are linked by a shared website.28

3. Changes outside rural areas

Rural areas are neither self-contained nor are they immune from the wider forces that are shaping the future. The next section considers some of these ‘big picture’ drivers and the effect they may have on public services in rural areas.

3.1 Globalisation

Globalisation has been described as “a marked increase in the movement across national boundaries of goods/services, investment, people and information”.29 Its effects are being felt in the world of service provision, through increased competition and choice for consumers. Has the marketplace for services become the whole world? For the more affluent, digitally enabled consumer, it may well be. Newspapers report how some consumers seek medical operations overseas at lower cost or with reduced waiting times. In a globalised world, services are increasingly being provided remotely from call centres accessed online, or by telephone. Consumers may choose to retire to countries where social services and provision for old-age are perceived to be better – moving to the services, rather than seeking out those services where they retire. But, what impact does globalisation have on service provision in rural areas and for those people for whom exercising choice is not an option?

One consequence of a globalised economy is greater labour mobility. This issue is increasingly manifesting itself in rural areas and throwing up new service challenges. Between 2002/3 and 2005/6, rural authorities in England saw a threefold increase in migrant workers.30 The highest growth occurred in the remoter rural areas. A foretaste of trends elsewhere perhaps is the example of Herefordshire where the increase was nearly tenfold, bringing with it challenges to existing housing and transport provision.31 Language can also be an issue – for example in schools where English isn’t the first language of some temporary immigrants from the new A8 countries.32

Again, innovative approaches are needed from agencies working together – helping to overcome capacity issues and to provide an appropriate and effective response.

3.2 Technological change

There is no doubt that growth of the Internet and other technologies such as interactive digital television and the availability of broadband infrastructure are transforming the rural services landscape and will continue to do so. Increasingly, services are available online – anything from buying car tax to banking, or accessing benefits advice.

Internet access has spread rapidly throughout rural England so that there is now no longer any real digital divide between rural and urban areas (although it has not entirely disappeared, with some areas still unable to access high-speed broadband33). In the North East of England, for example, public sector investment has helped rural Durham and Northumberland to provide ADSL broadband coverage throughout their areas, whilst plans are underway to provide ‘next generation’ broadband that will provide high speed (10MB/second+) broadband access to businesses, communities and the public sector.34 The Scottish Government has launched a £3.5 million open procurement process to ensure that all rural areas can get access to broadband.35
Broadband availability facilitates easier dissemination of information from other IT-based tools, such as GIS (Geographic Information Systems) which can enable the better targeting of rural public services. For example, the Scottish Government in-house GIS service has produced an updated report on the potential economic impact of flooding using a variety of GIS datasets at a level of detail that enables local authorities to know where the most affected properties might be in the event of a major flooding incident. This will allow for better emergency planning and the targeting of interventions.

### 3.3 Cultural change

Changing consumer expectations, coupled with the demographic trends referred to earlier, will increasingly place very different demands on rural services, spurring on the need for innovation.

The Post Office is a stark example of how changing habits and lifestyles, coupled with new technology, are impacting on rural services. Online services and greater mobility mean that fewer people are visiting the Post Office than ever. Nationally, 8.7 million out of 12 million pensioners get their pensions paid into a bank; in 2006, three million people renewed their car tax online. In 2005, four million fewer customers visited a Post Office each week than two years earlier. The network is losing £4 million a year, with 80 per cent of the 5,000 rural Post Offices now considered unprofitable. Plans for radical restructuring are underway against clear access criteria – with impacts being felt most acutely in remoter rural areas.

Technology and lifestyle changes mean that some people are changing the way they work – and services will need to respond innovatively to their needs. Research into the future of home-working in rural England cited evidence from the 2001 census to show that home-working in rural areas occupied more than 16 per cent of the economically active residents compared to 12 per cent in urban ones. It further found that economic development agencies, and critically, business support organisations, were unaware of the growth and had therefore not started to address the service needs of these new kinds of workers – some of whom will be self-employed, others working remotely for a range of employers. Their needs will range from technology and IT support to access to information, learning and networks, and even time-management, child care and health and safety issues.

Looking further ahead, but not that far away, is the possibility of accessing services – and information about those services – via social networks and open source or free software. How people communicate already represents a profound cultural shift, especially in young people, who readily access information about products and services on their mobile phones and are linked to extensive Internet-based social networks. Already, people can access interactive information about services and blogs about the quality of services. Social networks of citizens empowered to provide community-led services are likely to emerge online. These will bring further challenges and opportunities to rural service providers.

### 3.4 Political/policy changes

The vision for public services as set out in the Local Government White paper is of responsive services and empowered communities, effective and accountable local government with strong leadership, and greater efficiencies leading to a transformation of local services. There will be a simplified, localised performance framework based on Local Area Agreements – with binding targets for local authorities, working on their own or in partnership, to deliver what local communities want. The recent review of sub-national economic development and regeneration has underscored this new direction of travel and emphasised the focus on place-based solutions and the devolution of power and resources to the lowest practicable level.

Public authorities and RDAs have long been judged against a comprehensive performance framework. But the Government’s efficiency and reform agenda exerts a squeeze on authorities to perform better with fewer resources and with greater accountability to local communities. Indeed, the Gershon review envisaged that more than £21.5bn worth of efficiency savings by the public sector would be needed by 2007/08.

This shifting political, technological, and social landscape, coupled with the ongoing challenge of balancing equity and efficiency in rural service provision, moves innovation ‘centre-stage’. Innovation is integral to the new ways of working required, and the future will be as much about how the public, private and community sectors work together, including with new models of governance, as it will be about what gets delivered.
4. Examples of innovation in rural public services

Responding to the rural services challenge requires some smart strategies that include shared service points, multi-service outlets, one-stop shops, mobile facilities and remote access. It will require providers to pool resources and increase co-operation. All of this should be underpinned by the availability of broadband technology.

Innovation may be simple or complex, technological or social – and may be about providing new services in new ways or old services in new ways. In transforming services, the prospects for communities and places are also changed; sometimes in subtle ways, sometimes more dramatically.

4.1 Multi service outlets

The Plunkett Foundation is working with the Village Retail Services Association (VIRSA) and other partners to examine how village stores can be developed into multi-service outlets, as part of the Carnegie Trust’s Action Research Programme. The Foundation’s ‘Store is the Core’ project is working with three community shops – in Sulgrave, Northamptonshire, Uig on the Isle of Lewis, Scotland, and Killeen in Co Mayo, Ireland – to develop sustainable models that can be used by other communities.

In the Massif de Mouthoumet – a remote, mountainous area of France – local parishes have worked together with other partners to create ‘Les Points Multiservices’ or POMs, in response to declining postal and other services, and concern over rural depopulation. The services of each POM are tailored to local need. They include postal, financial and administrative services, a library, transport booking and a housing marketplace performing the function of an estate agent.

The first seven POMs were piloted in post offices in 2001, with an eighth following in 2005 in the offices of the Association of Development of the Hautes Corbières (ADHCO) – the local development organisation running the project. ADHCO also acts as a social centre. The project was staffed by a co-ordinator, an IT specialist and eight officers, some of them part-time. In addition to providing services, the staff also provided information and guidance on local health prevention and social services provision, and welcomed newcomers to the area. The POMs programme is funded by the Departmental Council and the State. The challenge for the future is to secure ongoing funding for the employment of the project’s agents.

In both these examples, the revitalisation of essential services and the engagement of the local community have boosted the social networks and social interactions that help sustain communities. In the French case studies, one tangible outcome has been the increased number of people living in the area, some of whom are new-comers. In Sulgrave, Northants, the local community came together to tackle the challenges faced by the decline of services by forming themselves into a social enterprise to run the shop as a co-operative venture, making a commitment to support local food producers and boosting the retail side of the business at the same time.

4.2 Remote access to services

Broadband technology has enabled remote service provision in innovative new ways. For example, Shropshire County Council is making a clear commitment to rural service provision and its work was recognised with Rural Pathfinder status in 2005 and Rural Beacon status in 2006. Its Rural Pathfinder remote service pilots include working with the Citizens Advice Bureau to provide video conferencing between local communities and the Bureau. Local co-ordinators arrange appointments with advisers and set up equipment for the virtual appointments.

Another pilot involved electronic Customer First Points using innovative video-conferencing facilities that enable customers to access a range of council information and services remotely via a secure video link. These include the remote scanning of customer documents, electronic signature and form completion and form printing.

During the six-month pilot, seven ‘Telly Talk’ units, allowing people to speak to advisers via a television link, were set up at libraries and village halls around the county, linking with the County Council’s Customer Service Centre. Taking services to communities in this way is of particular benefit to those without access to transport or who are excluded in other ways from accessing mainstream services. The Council is actively
evaluating its activities and has made a commitment to learning from the pilots in order to mainstream innovation into core service delivery. It is now installing ten Telly Talk Information points in community locations following the evaluation of the earlier pilots.50

In the municipality of Skellefteå, in northern Sweden, Monitore51 – an e-health project – has successfully improved health outcomes for elderly patients and reduced the costs of healthcare provision. Sweden has adopted a National E-Health Strategy to improve citizen choice and participation and provide user-friendly IT systems for health professionals.

Research at one Skellefteå hospital had shown that most day patient and care staff needs could have been solved by video-conferencing and specialist doctors. In many cases, hospital visits were unnecessary, yet they often involved staying for a day or more. Some patients were spending a day on a hospital visit simply to have their blood pressure monitored because they lived so far away.

Nurses now use video-conferencing to monitor blood pressure, blood sugar and weight and report the results to doctors back in hospital on a dedicated website. This innovation was possible because the area had a good broadband infrastructure. There were also private companies that had developed new technologies to measure blood pressure and blood sugar levels. So the project involved partners from the public and private sectors pooling know-how and resources.

An initial pilot involving 15 patients from a care home for the elderly has now been extended to private homes involving 75 elderly people. Patient monitoring has improved and access to a doctor made easier. Patients are treated in their own homes, which helps to reassure relatives quickly. The project hopes to scale this project up with a 24-hour service centre.

4.3 One-stop shops
Rural businesses need access to the right support if rural areas are to develop their economies and remain sustainable. Web portals enable a one-stop shop for services providing easy access and links to information and services. Peak Directions52 is an example in the Peak District, England of a one-stop shop covering a range of sectors and business requirements including farming and land, local government, creative industries, training and employment. Learningworks Highlands and Islands53 provides a one-stop shop to learning services across the Highlands and Islands, including e-learning, workforce development, news and information, and a virtual conferencing facility.

4.4 Pooling resources
An innovative pilot in North Northumberland has been looking at new ways of solving the old problem of access to transport – through the lens of service design. Service design is defined as: “Design for experiences that reach people through many different touch-points, and that happen over time”.54 Put simply, it is about the design of services, as opposed to the design of products.

Design innovation has been identified as a strength in the North East of England, and specialist service designers have been working on several prototypes in the region through the Design Innovation and Education Centre (DIEC). These include looking at how the passenger journey can be improved at Newcastle Airport; how business support services can be improved in Tyne and Wear; and tackling the worklessness agenda in Sunderland by modelling the ‘journey’ from long-term inactivity to activity and a return to work, to change how services respond.

An opportunity to test this approach in relation to healthcare access arose around Berwick on Tweed in North Northumberland. The resultant Rural Access and Mobility Project55 (RAMP) brought together One NorthEast, Northumberland County Council, North East Ambulance Trust, Northumberland Strategic Partnership and Northumberland Care Trust. Service designers live|work looked at the range of different journeys undertaken by local residents to access healthcare. They identified where there was a duplication of routes or under-utilised resources – and ultimately any spare capacity – amongst providers. They also worked with key stakeholders to reveal unmet needs in the community. By mapping and analysing the journey data and unmet needs they found that in one sample data set, 36 journeys could be reduced to 13 if vehicles and journeys were pooled. In practice, this might mean not leaving minibuses idle all day whilst patients were in day care, but making them available for other journeys during this time.
The resultant model of delivery aims to create “transformational change in rural accessibility, understanding and meeting citizens’ needs, [by] connecting disaggregated demand with disaggregated supply” using an interactive transport brokerage. The new model will also bring community transport operators into the pool of available resources, giving them an opportunity to access markets and improve their own sustainability. The brokerage requires dedicated staff to run it, a sophisticated IT-based journey planner, rules of engagement (service level agreements and core contracts) and vehicles. Service providers commit all or a portion of their provision to the brokerage, thereby ensuring the long-term financial sustainability of the brokerage organisation.

Early indications are that every £1 invested in the creation of RAMP will return £1.65 worth of ‘triple bottom line’ benefits: financial (reduced running and management costs); social (improved access to services); and environmental (reduced numbers of vehicles and emissions). A business model for the RAMP brokerage is currently being developed. The partners aim to procure one or more organisations to deliver it. Key to RAMP’s future will be a transformation in how partners pool resources and work together, which will require changes in organisational cultures as well as changes in how transport services are delivered.

A spin-off project has recently been completed as part of Designs of the Time, a sustainability initiative in the North East of England. The ‘Move Me’ project explored how service design might help rural communities to identify and use spare transport capacity. Live|work spent time with the children, staff and parents of Scremerston First School, as well as a range of other stakeholders including school and private bus operators, the Sure Start programme and the Community College.

The resultant community transport toolkit will help communities to access more journeys. Templates allow posting of activities at a central point, such as the local school; lift-exchange cards make sharing visible; and bespoke timetables for both the community and individuals can be created. The kit is being trialled at the Scremerston school, Berwick Community College and through the Berwick Borough Sure Start programme. They are hoping to replicate the scheme in a further 50 schools across North Northumberland. The sustainability of Move Me comes from its community roots and ownership, its use of existing infrastructure at a low cost and its ability to be replicated in different areas for different purposes.

**4.5 Community action**

Innovative models of service delivery are being developed by communities and in community organisations. Good examples include community land trusts to increase the supply of affordable housing, community energy solutions and community participatory budgeting mechanisms. On the Scottish island of Gigha, Gigha Renewable Energy Ltd set up the first grid-connected community-owned wind farm in 2004. It supplies all of the island’s energy, and exports any surplus to the national grid, earning an annual income of around £80,000. Innovative financing mechanisms included loan and equity funding, with Highlands and Islands Enterprise (HIE) taking an £80,000 shareholding. HIE has now created a subsidiary community energy company to spread further energy solutions. The Highlands and Islands Community Energy Company provides free facilitation, advice, project management expertise and access to funding for community energy projects, including social enterprises and housing associations.

**5. Recommendations for policy and practice**

Without innovation in rural services – in the services themselves and how they are financed – the picture for rural areas could be bleak, especially in remoter areas.

A recent report into mapping rural needs has considered the consequences of these needs not being met. The list is familiar: financial disempowerment, lack of affordable rural housing, increased homelessness, migrant workers’ needs not being met, lack of transport impeding access to learning, key services like Post Offices and shops being too few and too far away, unmet health needs, loneliness and isolation – an altogether unattractive, and one could argue unjust, vision of the future.

In a way, though, this is an out-of-date perspective on rural areas and rural communities, without wishing to diminish the challenges. The mindset of policy and practice needs to shift, to embrace the new ideas of
opportunity and assets, to bring about a different kind of future and to harness innovation in order to do it. Nowhere would this bear fruit more productively than in the provision of rural public services.

Speaking at the Rural Innovation Summit in Manitoba in 2002, the former Canadian agriculture minister, the Hon Andy Mitchell said: “Innovation can happen anywhere…the innovation dialogue cannot stop here. It must be an ongoing partnership between government and its citizens…This will ensure that rural communities are shaping their own destiny.”

The Commission for Rural Communities has argued that the job of policy is to make all places sustainable, and not just some of them. Without an acceptable level of rural services, that aim cannot be met. Innovation in its broadest sense is needed to overcome obstacles and unlock potential – to deliver the best outcomes for equity and efficiency in rural service provision, and to capture the potential of rural places.

The idea that innovation is everywhere (and not just in cities and science parks) is an increasingly compelling proposition. Innovation policy needs to move beyond the narrow focus of technology and R&D to a broader understanding that embraces social and local innovation. Experience from the LEADER model of rural development has revealed that social innovation (with a focus on building the capacity of local communities and on the sharing of knowledge) rather than innovation based on science and technology, has been an important outcome.

Policy needs to recognise the interplay between different kinds of innovation in places, how these innovations occur, and how they can be made mutually reinforcing. Equally, innovation policy must recognise and capture the benefits of urban/rural interdependencies to overcome inequalities and to find new ways to solve problems and realise potential in both rural and urban areas.

Rural services underpin much of the quality of life attraction of rural areas, and failure to invest in rural social innovation will have an opportunity cost that policymakers may wish to take more seriously. The ethos of public service provision is fast becoming one of how public authorities work with local communities, and not what they do to them. New models of dialogue and engagement will be needed. New forms of service delivery must be developed. A new culture of empowerment and ‘letting go’ will need to be created. New governance arrangements will need to evolve. And the good practice that exists elsewhere should be drawn in and shared, to help foster innovation in new places.
Chapter 6 Endnotes

4. Ibid.
18. The Commission for Rural Communities was established under the Natural Environment and Rural Communities Act 2006 to provide independent advice to government on the needs of people living and working in rural England.
20. Ibid.
28. See http://www.transitiontowns.org
32. The ‘accession eight’ (A8) countries are those that joined the European Union in 2004: Poland, Hungary, Lithuania, Latvia, Estonia, the Czech Republic, Slovenia and Slovakia.
34. See http://pscm.northumberland.gov.uk/portal/
35. See http://www.scotland.gov.uk/topics/People/BroadbandforScotland/SEBroadbandInitiatives/LatestNewsAnnouncements
42. See http://www.defra.gov.uk/reports/index.asp
47. Rural Pathfinders were created as part of Defra’s Modernising Rural Delivery Programme to test out and analyse new approaches to rural delivery challenges.
48. The Beacon Council scheme was set up to recognise good practice in local government. Shropshire County Council was awarded Beacon status by the Improvement and Development Agency in 2006 under the theme of Improving Rural Services, Empowering Communities. See http://www.idea.gov.uk/beacon
50. See http://www.shropshire.gov.uk/ruralservices.nsf
52. See http://www.peakdirections.co.uk/
53. See http://www.hie.co.uk/learningworks
54. See http://www.servicedesign.org
56. See http://www.dest07.com


63. LEADER is a bottom-up approach to rural development employed successfully across the EU that is now being ‘mainstreamed’ as part of the delivery of the Rural Development Regulation. In England LEADER is a cross-cutting approach to the delivery within the Rural Development Programme for England.


Biographies

**Sami Mahroum** is a Senior Policy Analyst at NESTA where he heads the ‘Innovation and Place’ research programme. Sami’s main area of expertise is the international mobility of human resources and innovation policy, and has worked in this area for many organisations in various countries, including the Institute for Prospective Technological Studies in Spain, the Ontario Government, large contract research organisations like the TNO, RAND Europe, and the Austrian Research Centres.

**Jane Atterton** is a Lecturer in Rural Development at the Centre for Rural Economy, at Newcastle University. She has also worked for periods at Aberdeen University and the Countryside Agency. Her recent research has focussed on networking among small businesses in remote rural areas and on the rural development implications of demographic ageing.

**Neil Ward** is Professor of Rural and Regional Development and Director of the Centre for Rural Economy at Newcastle University. He has also worked for periods at University College London, Leeds University and the Cabinet Office. He is a human geographer specialising in rural economic development and environmental management.

**Allan M. Williams** is Professor of European Integration and Globalization at London Metropolitan University. His current research focuses on the relationship between international migration and knowledge transfer, and tourism innovation.

**Richard Naylor** is Research Director at Burns Owens Partnership (BOP). He leads the Creative Industry Practice at the company, including major projects for clients such as DCMS, UNESCO’s Institute for Statistics, Skillset, the LDA and The British Council. Richard has over twelve years of research experience gained within both the private sector and academia. He holds first and second degrees from the University of London and York respectively.

**Rob Hindle** is a leading rural analyst and public policy consultant. Professionally qualified as a chartered surveyor, Rob advised land-based businesses and their owners for 13 years before developing his rural policy consultancy Rural Innovation.

**Frances Rowe** is Rural Manager with One NorthEast, the North East Regional Development Agency. She is in charge of the rural team and programme within the Agency. A former agricultural and environmental journalist, in 2006 Frances won a Winston Churchill Travelling Fellowship to look at local food development in the United States of America.