

REPORT FORGOTTEN OPPORTUNITES THE DYNAMIC ROLE OF THE RURAL ECONOMY IN POST-BREXIT BRITAIN

Ed Cox, Chris Murray and Anna Round

February 2017 © IPPR North 2017

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ACKNOWLEDGMENTS

The authors are very grateful to Andy Cochran of Lloyds Banking Group, and to his colleagues Rob Hailey, Paul Griffiths, Rob Cook, Geoff Hall, Stephen Harris, Judith Hunter, Martyn Kendrick, David Knight, Ben Makowiecki, Nigel Mann and Andrew Naylor. We would also like to thank the staff at Lloyds Banking Group, at York, North Yorkshire and the East Riding, Cumbria and New Anglia LEPs and at the North Wales Economic Ambition Board who helped to organise and host the roundtables and interviews for this project. We are grateful to the experts who participated in the interviews and roundtables. At IPPR we would like to thank Jimmy Aldridge, Miatta Fahnbulleh, Phoebe Griffith, Michael Jacobs, Marley Morris and Ash Singleton. We owe a special thanks to Sarah Longlands, senior research fellow at IPPR North, whose work was crucial in originating this project and steering its original research direction.

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Citation

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Cox E, Murray C and Round A (2017) *Forgotten opportunities: The dynamic role of the rural economy in post-Brexit Britain*, IPPR North. <u>http://www.ippr.org/publications/forgotten-opportunities-the-dynamic-role-of-the-rural-economy-in-post-brexit-britain</u>

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Britain's rural areas represent a forgotten opportunity. Their economic contribution – 16.6 per cent of GVA – derives from diverse activities; 'traditional' rural sectors such as agriculture and tourism operate alongside a growing presence of agri-tech, energy generation, and manufacturing. The latter accounts for the same proportion of the rural and the urban economy.

However, challenges arise from remoteness, lack of investment, mistaken or outdated assumptions about rurality, and the application of policies designed primarily for urban areas. Different elements of the rural economy are closely intertwined, relationships to urban neighbours are important, and rural places themselves are highly diverse. Policy for the rural economy in the 21st century needs to recognise this integration of issues and the importance of place.

For several decades the direction of rural policy has been substantially determined by tradition and by the Common Agricultural Policy (CAP). Withdrawal from the EU brings the chance to take an innovative and transformative approach, updating agricultural policy and addressing new opportunities and challenges. A place-based approach to rural policy offers the best mechanism to deliver rural policy which both addresses national and global issues and responds effectively to local need and diversity.

We recommend 'rural devolution deals' in which central government sets 'minimum obligations' which local areas with a substantial rural component must meet. These should relate to food production and sustainability; environmental protection including flood prevention and decarbonisation; participation in the industrial strategy; and capital spending to support infrastructure and economic development. Local and combined authorities, working with local enterprise partnerships, should demonstrate how they will use devolved budgets to meet their obligations and add value.

KEY FINDINGS

Sectors in the rural economy

Agriculture is at the heart of the rural economy. It accounts for a small proportion of rural GVA (2 per cent), but shapes the landscape and produces more than half of the food consumed in Britain. Yet farmers face multiple challenges, including an ageing workforce; reliance on EU migrant labour; low food prices; availability and affordability of land; and the need to innovate to make the sector sustainable and prepared for future shocks.

Increasingly British farms provide the 'raw materials' for both the wellestablished food processing sector, and a growing '**agri-tech**' presence which unites scientific and research capacity with traditional agriculture. Universities and industry are important drivers, and the government's 2013 agri-tech strategy represents a strong commitment to this area.

Manufacturing (especially advanced manufacturing) accounts for the same proportion of the economy in rural as in urban areas, even more in certain counties. Space to expand and a good 'quality of life' offer to potential employees attract manufacturers to rural settings. Similarly, **energy generation** has strong presence, encompassing nuclear, renewable and fossil fuel businesses. Both industries rely on a good supply of skilled workers.

Tourism and leisure build on the 'quality of place' of rural Britain. These sectors have seen great innovation in both their offer and their marketing approach, but can struggle with poor connectivity (digital and physical) and some skills issues.

Challenges

The modern rural economy faces various challenges including the following.

- The focus of rural policy on agriculture and environmental management in relative isolation; the need to integrate policies for economic growth across sectors, and 'join up' approaches.
- Poor connectivity in some areas; superfast broadband coverage is patchy, despite acute needs and reliance on remote working and long-distance relationships with customers, clients and suppliers.
- Opportunities to increase skills and innovation are unevenly spread.
- Road and rail links, especially 'east to west' and north to south in Wales, are often slow, sparse, or unreliable.
- Rural communities are often strong and constitute an asset for business as well as an attractive feature of rural life; recent figures show net migration to rural areas from urban ones. However, some social issues present threats, including income inequality, housing shortages, reductions to services, and an ageing population.

The rural economy is also central to managing potential challenges that go far beyond its 'obvious' reach – the following, for instance.

- Food sustainability and security: Britain needs a sustainable, sufficient and safe level of food production for domestic consumption, and to grow food exports. However, the impacts of new trade agreements, low food prices and changes in exchange rates remain unknown.
- Environmental management and decarbonisation: climate change and the imperative to decarbonise demand a new approach across *all* sectors and places.

RECOMMENDATIONS

Rather than one 'separate' rural economy, we found a characteristic set of ways in which the general economy operates in, and relies on, rural areas. These are diverse and their manifestations across rural England and Wales depend strongly on the characteristics of particular places. We therefore recommend an *integrative* and *devolved* system of 'rural devolution deals' in which stakeholders negotiate with central government, setting out how they can best use their natural assets to contribute to national priorities and add value locally.

The Common Agricultural Policy (CAP) has effectively operated as an 'industrial strategy' for agriculture, including environmental management. Withdrawal from the EU represents an important opportunity for reforms integrating the diverse elements of the rural economy and fitting it for the modern global context.

- Central government should convene an advisory group to develop and regularly review a framework of short-, mediumand long-term goals for the rural economy. This framework will also guide negotiations for rural devolution deals with devolved areas. These will include defined 'minimum obligations' which local areas must meet, and 'maximum entitlements' of funding. Obligations will relate to food production and sustainability; environmental protection including flood prevention and decarbonisation; participation in the industrial strategy; and capital spending to support rural infrastructure and economic development, with superfast broadband as a priority. Funding under these deals will effectively replace the CAP *but* also relate to broader and integrated aspects of the rural economy.
- 2. Local and combined authorities, working with LEPs, should negotiate 'rural devolution deals' with central government, demonstrating how they will meet minimum obligations and add value with the funding and other support which they seek. Deals should include payments to producers which support farm sustainability, incentivise good environmental practices, innovation and skills development, and support the wider rural economy. Other support for agriculture should include access to opportunities for innovation, skills training and collaboration. Deals should also support wider rural growth including full participation of rural areas in the national industrial strategy (see below).
- 3. 'Minimum obligations' should be informed by; a position on agricultural outputs, including food sustainability and security, agricultural exports and agri-tech; the new industrial strategy; and wider strategies for decarbonisation, skills, broadband and infrastructure.
- 4. Environmental protection should be considered at local and national levels; the framework for devolution deals should include requirements for neighbouring areas to work together on key issues such as flood protection.
- 5. The 2013 agri-tech strategy should be revisited and strengthened in the context of EU withdrawal and the industrial strategy.
- 6. Universities in rural areas and neighbouring cities should be incentivised to establish 'spin out' offices to boost agri-tech opportunities.
- 7. The potential of rural areas as centres of excellence in advanced manufacturing and high-tech fields (e.g. energy) should be included in the industrial strategy.

- 8. Improvements to rural connectivity should reflect the needs of both rural *trading* and *workforces*; superfast broadband provision is a priority.
- 9. Workforce and skills issues should be addressed at sector level to meet the needs of particular places.
- 10. Business support in rural areas should reflect distinctive business populations, e.g. numerous isolated small and micro-businesses and reliance on digital skills.
- 11. Rural devolution deals should include an element of 'placemaking', which considers how communities and quality of life support economic growth and demand in local economies; this would include access to services and housing.

1. INTRODUCTION

1.1 DEFINING THE RURAL ECONOMY

What is the 'rural economy'? The phrase may conjure up 'tractors and tourism', but today many rural businesses operate in high-tech or digital sectors, and manufacturing contributes a similar proportion of GVA as in urban regions. Stereotypes often cast the countryside as affluent, idyllic, isolated, or old-fashioned, and a 'world apart' from cities or towns, but rural and urban economies are interconnected and have many features in common (FrameWorks 2008¹). Here we treat these connections as fundamental. Rather than identifying a separate 'rural economy', consisting of specific sectors, we examine how the UK economy operates in rural areas and how rural areas contribute to the UK economy.

Of course this includes a focus on sectors which make up a greater proportion of rural than urban economic activities. Agricultural production is one; less 'traditionally', energy supply is another. Both are important beyond the countryside for their contribution to GVA, employment and the UK's material and practical needs, and both shape rural landscapes and communities. Other industries operate to a comparable extent in rural and urban settings but have different characteristics and challenges in each; tourism and advanced manufacturing are examples. Finally issues which are crucial throughout the economy – connectivity, planning, skills and productivity – are as pressing in rural parts of Britain as they are elsewhere.

The official definition of an area as 'rural' (Bibby and Brindley 2013) refers to three factors: density of population, or of dwellings per square kilometre of land; composition of settlements; and proximity of settlements to one another. In this 'Rural Urban Classification' (RUC), economic function is *not* specifically included, which 'allows the economic function of the rural domain to be explained and measured rather than presumed' (Bibby and Brindley 2013: 32). However, the Welsh government proposes that 'there are many sensible ways to consider rurality' and rather than offering one approach suggests that different questions and purposes demand different measures (Welsh Government 2008).

Here we draw on both kinds of classification, considering also *interconnections* and *natural assets*. Rural areas are often highly diverse even within quite a small administrative boundary; therefore we recommend local and devolved approaches to rural growth which offer the opportunity for joined-up, place-based policy.

¹ Although developed in an American context, the FrameWorks Institute's analysis of models which are unhelpfully applied to discussions of rural issues applies well to the UK. For example, they describe the tendency to think in terms of either a 'Rural Utopia' populated by hard-working, simple and virtuous occupants, or a 'Rural Dystopia' which is backward and isolated.

1.2 OVERVIEW OF THE RURAL ECONOMY

1.2.1 Rural GVA and productivity

GVA and business population

Britain's 'predominantly rural' areas generated around 16.6 per cent of total GVA for the UK in 2015 (Defra 2016i), and urban areas with a significant rural component generated around 17.5 per cent. Figure 1.1 shows GVA growth for different types of area in the UK between 1997 and 2014. Although the absolute sums for rural GVA are relatively low, areas which are mainly or largely rural have enjoyed rates of GVA *growth* which are slightly higher than for urban areas outside London, or areas with both urban and significant rural elements. This is particularly marked since the recession; average annual GVA growth since 2010 was 3.8 per cent in 'largely rural' areas and 4 per cent in 'mainly rural' ones. By comparison urban areas outside London grew by 3.3 per cent.

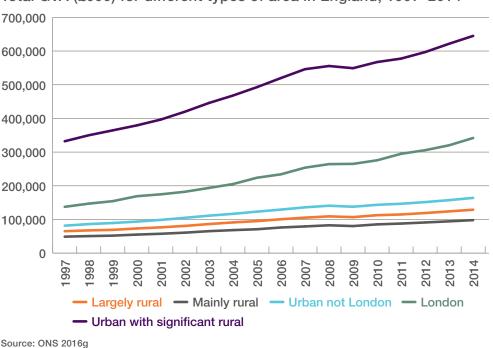


FIGURE 1.1

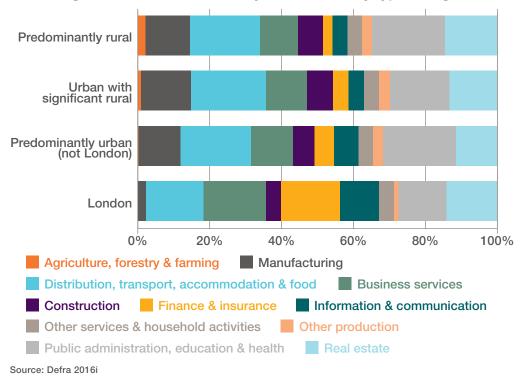
Total GVA (£000) for different types of area in England, 1997–2014

GVA growth since the end of the recession has been *higher* in rural areas than in urban ones outside London, with 'mainly rural' areas performing particularly well. In the period 1997–2007, average annual GVA growth proceeded at a very similar rate in all parts of England except for the capital; rural areas lagged only very slightly.

The contribution of different sectors to GVA in rural and urban areas shows some important differences, but also some striking similarities. Figure 1.2 shows the percentage of GVA in different kinds of area which was accounted for by each broad sector in 2015. In predominantly rural areas, agriculture makes up just over 2 per cent of GVA, compared to less than 1 per cent in other types of areas. Agriculture is *more* important in rural than in urban England, but it does not account for a very large part of the rural economy. By contrast, in rural England manufacturing makes up 12.4 per cent of GVA and in urban areas with a significant rural element, the figure is 14 per cent. In urban areas, 11.6 per cent of GVA is accounted for by manufacturing.

It was not possible to disaggregate a figure for GVA accounted for by tourism and leisure. However, the category 'Distribution, transport, accommodation and food' includes a significant proportion of businesses in this sector. It accounts for a very similar proportion of GVA in all kinds of area (around 20 per cent) except for London (where it is lower, at 16 per cent). Rural areas generally have a *lower* proportion of GVA which is accounted for by what might be called 'knowledge industries' (information and communication, finance and insurance, and business services). By contrast GVA from production other than manufacturing (which includes energy generation) is somewhat higher.

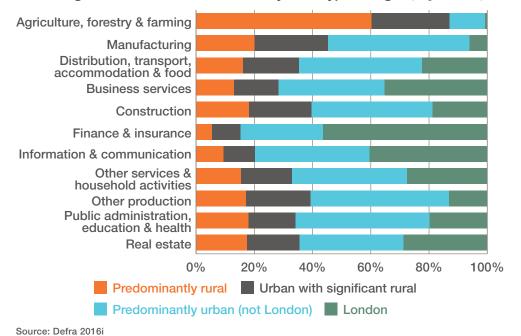
FIGURE 1.2



Percentage of GVA accounted for by each sector, by type of region, 2015

Another way to consider the economic contribution of rural areas is to consider the proportion of GVA in key sectors for which they account. This is shown in figure 1.3. The 60 per cent of Britain's agricultural GVA accounted for by 'predominantly rural' areas is not surprising, and much of the rest of the value of this sector is generated in areas with both urban and rural elements. Perhaps less expected is the 45 per cent of *manufacturing* GVA accounted for by these two groups of areas, with twenty per cent generated in the most rural parts of the country. The contribution of predominantly rural and partly rural areas to the production and construction sectors also stands at around forty per cent.

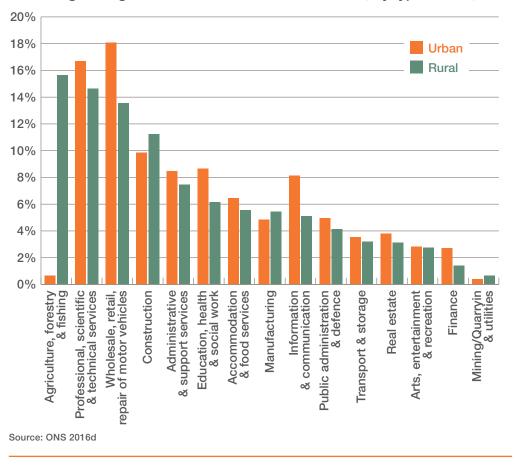
FIGURE 1.3



Percentage of total GVA accounted for by each type of region, by sector, 2015

FIGURE 1.4

Percentage of registered business units in each sector, by type of area, 2015



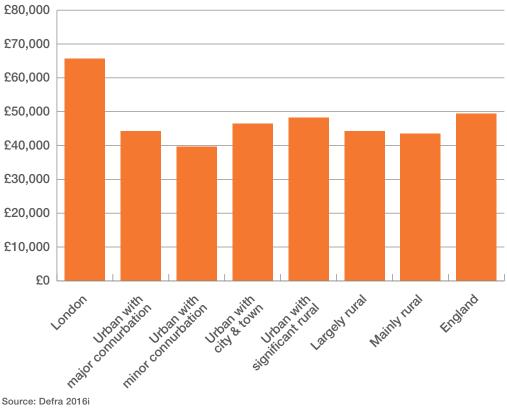
In general, rural areas have a high proportion of small business compared to towns, cities and conurbations. The count of enterprises per 10,000 of population is 365 in urban areas, compared to 560 for rural England. This rises to 689 in sparse rural settings (Defra 2016i). These trends are reflected in the high proportion of business *units* which operate in some key sectors for the rural economy. Agriculture, generating around 2 per cent of rural GVA, accounts for nearly 16 per cent of rural businesses. This is the only sector in which there is a substantially greater presence of business registrations in rural areas, although construction and manufacturing businesses are also slightly more common. By contrast rural areas have fewer businesses registered in professional, scientific and technical fields, wholesale and retail, information and communication and public services fields (figure 1.4).

Productivity

Rural areas have lower levels of productivity than urban ones, at around 89 per cent of the national rate compared to 91 per cent for urban areas other than London (Defra 2016i). However, these headline figures mask considerable differences within these broad categories, as shown in figure 1.5. In fact, the highest rates of productivity are seen in areas with a mixture of urban and rural environments, and 'largely rural' areas have similar levels of productivity to those for major conurbations (excluding London). 'Mainly rural' areas do slightly less well on this measure.

FIGURE 1.5





Analysis of the drivers of productivity identified four key variables and a further four 'additional' variables (Defra 2011), and '...whilst the "key variables" include... no spatial elements, all of the additional variables are location related'. Key variables include the proportion of business startups in an area, the number of employees per business unit, and capital investment per workforce job; the latter two (see above and below, also Defra 2016i) tend to be lower in the rural economy. However, the 'additional variables' all reflect factors which emerged from our roundtable research. These were the percentage of an area's population which lives in 'large market towns' (rather than, presumably, isolated areas), proximity to the City of London, percentage of population living in villages, and centres of major employment which are easily accessible by car.

Capital investment per employee is also low in rural parts of the country. In 2013, the latest year for which figures are available, it stood at around \pounds 3,100 compared to \pounds 3,600 in urban areas outside London. In London, the figure is \pounds 5,500 (Defra 2016g).

Employment and earnings

Rural areas have relatively high rates of employment:

- **77 per cent** of rural residents of working age are employed (the urban rate is **73 per cent**, ONS 2016c)
- Unemployment in rural areas is 3.5 per cent compared to 5.1 per cent.²

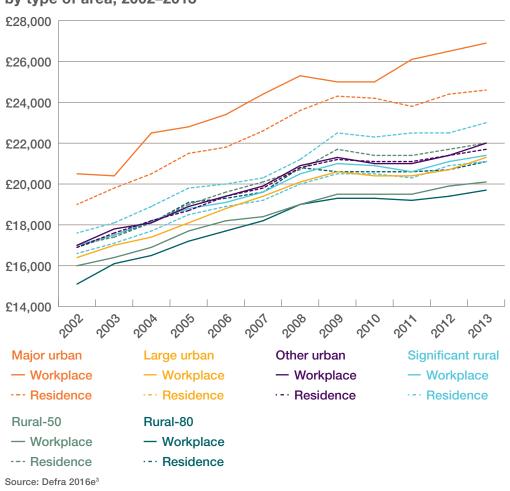
Perhaps more surprisingly, economic inactivity is very slightly lower in rural England (at 20 per cent compared to 22 per cent). Rural populations may include a relatively high number of early retirees, but these figures suggest that any such tendency is balanced out by people who work in urban areas but are attracted to rural dwellings for their quality of life, who take up rural job opportunities (including entrepreneurship), and by dynamism in the rural economy.

Patterns of work, however, do vary. Most notably 'home working' is considerably more common in rural areas, which may reflect both a high level of self-employment and small businesses, and of opportunities for remote working, telecommuting, etc. Twelve per cent of urban workers spend at least half their working time at home but 22 per cent of rural workers do so, and this rises to 32.8 per cent in the most sparsely populated areas (Defra 2016f).

Rural earnings are generally rather lower than those in urban areas. The wages earned in workplaces located in 'mainly rural' areas are the lowest in the UK, and even for workplaces in areas with both urban and rural elements they remain lower than for predominantly urban areas. Earnings for rural *residents* are slightly higher, with the incomes of commuters perhaps raising the average. Figure 1.6 shows how annual earnings changed in each type of area between 2002 and 2013.

² These figures are calculated on the basis of *where people live* rather than *where people work*. Thus some of the rural residents in employment will work in neighbouring urban areas – those who live in 'city hinterland' areas, for example.

FIGURE 1.6



Workplace and residence-based median gross annual earnings (£), by type of area, 2002–2013

Unfortunately it was not possible to examine in detail the extent of income inequality in rural England. However, the gap between earnings for rural *dwellers* and rural *workers* suggests that this may be marked in some communities. In major urban areas, earnings identified by workplace are considerably higher than those identified by residence; in 'large urban' and 'other urban' areas, the figures are very similar. The 'gap' is greatest in 'Rural-50', or 'mainly rural' areas (averaging 1,940 in 2009–2013), and tends to be higher in 'urban with significant rural' (averaging \pounds ,1,940) than in 'Rural-80' areas (\pounds 1,580), perhaps reflecting easier commuting distances and therefore a higher commuter population in the former. This gap has grown more quickly in rural areas since the recession, while earnings growth has slowed.

³ The area categorisations used here relate to a slightly earlier articulation of the Rural Urban Classification, the only format in which this data is available. 'Significant rural' areas are roughly equivalent to 'urban with significant rural' areas, 'rural-50' to 'mainly rural' ones, and 'rural-80' to 'largely rural' ones.

1.2.2 Population and migration

Around **17 per cent** of the UK's population (9.3 million people) live in rural areas, with 9.2 per cent of people inhabiting rural towns and their fringes, and a further 7.8 per cent living in villages and hamlets (Defra 2016c).

Population growth in rural areas includes some **internal migration**. The past ten years have seen a general trend of net migration to 'predominantly rural' areas, and net migration from predominantly urban areas. Net inward migration to predominantly rural areas in 2014/2015 increased their population by around 0.6 per cent, higher than for previous years. At the same time net outward migration reduced the urban population by 0.3 per cent (Defra 2016i).

This does *not* simply represent 'retiring to the countryside', as net internal migration to rural areas is seen across *all* age bands except for 17–24-year-olds. This latter figure is probably distorted by student mobility. The *highest* rate of migration to rural areas is among those aged 30–39, an age group for whom work opportunities accompanied by good quality of life are likely to be strong motivating factors (Defra 2016i).

However, the rural population does remain relatively elderly. Of those 9.3 million people, **23.5 per cent** are aged 65 or above, compared with about 16.3 per cent of urban dwellers, and the proportion of the population which is aged 45–64 is around five percentage points higher in rural areas than in urban ones (ONS 2016d).

1.2.3 Rural land and rural land use

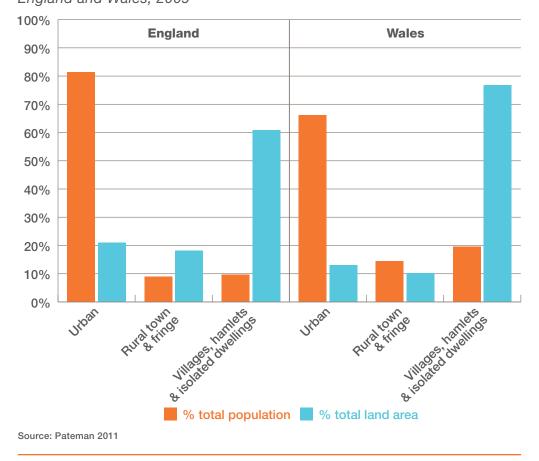
Population, industry and GVA are important, but these figures only tell part of the story of Britain's rural economy. The economic opportunities, natural assets and risks – discussed in more detail in Section 4 below – are distinctive primarily because of the relationship between the land and its inhabitants. In rural areas the impact of human activity may be less immediately obvious – after all, the terms 'rural environment' and 'natural environment' are sometimes used interchangeably. But the relationship is just as important as it is in a built-up area, for all it may be less visible.

Rural areas may account for a smaller percentage of the population and GVA generated, but they occupy around 80 per cent of the land area (figure 1.7). This is even more marked in Wales than in England. Within rural areas, the vast majority of land (45.3 per cent of the total area) falls into the category 'Rural-80', corresponding roughly to 'mainly rural'; 22.8 per cent falls into the 'Rural-50' category, and relatively little (16.5 per cent) is 'urban with significant rural'. By contrast just 6 per cent of England's land area is occupied by major urban areas, including London. In Wales the figure is 3.7 per cent (Pateman 2011).

And land use is dominated by agriculture. This sector, while accounting for less than 1 per cent of the UK economy and less than 3 per cent of the rural one, nevertheless accounts for 70 per cent of land use (ONS 2016a). Forestry accounts for around another 13 per cent (Khan et al 2012). By contrast urban and developed land occupies just ten per cent (ibid). The agricultural economy, in other words, has implications well beyond and different from the GVA which it generates.

FIGURE 1.7

Percentage of population and percentage of land area accounted for by each type of area England and Wales, 2009

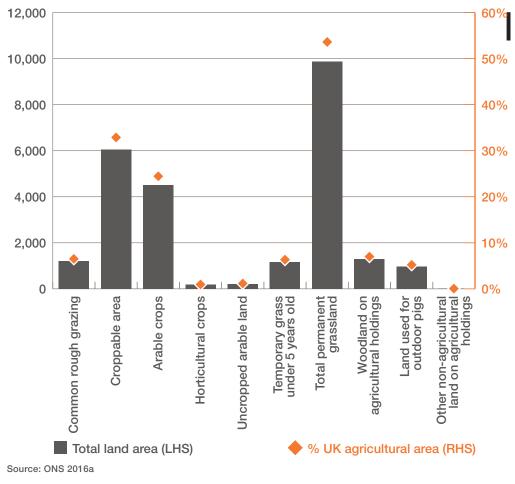


Farming itself is highly diverse. Agricultural land use includes arable and horticultural cropping, grazing, and land used for outdoor rearing of other animals such as pigs and poultry. Figure 1.8 shows the proportion of agricultural land used for different kinds of farming activity in 2015 (ONS 2016a).

Within most administrative regions, there is a mix of types of farm. This is true even despite an *overall* trend for arable and pig farming to cluster on the east coast while farming of sheep and cattle is more concentrated in the west (Defra 2010a, 2010b). For example, in our case study areas one LEP geography included both large areas of hill sheep farming and also lowland dairy production, while another had major cereal cropping, horticultural and poultry farming businesses. This diversity means that farms in close proximity to one another may face very different challenges and opportunities. In 2015, different parts of the industry saw a fall in the productivity of cereal farming, following a sharp rise in the previous year. At the same time the productivity of livestock farming rose. Horticultural productivity remained relatively stable (ONS 2016a).

FIGURE 1.8

Total land area (thousand hectares) and percentage of agricultural land used for each type of activity, 2015



1.3 RELATIONSHIPS AND LINKAGES

1.3.1 Broadband, digital and mobile

High speed, reliable broadband is essential; this is noted by virtually every writer on the subject and it was mentioned again and again in our roundtable discussions. Longlands and Hunter (2016) discuss the importance of digital enablement and good mobile connectivity right across rural economies. Every kind of business demands this service: the entrepreneurial tech start-up owned by a 'former' Londoner, the small engineering firm trying to join a virtual 'cluster' or national supply chain, the bed and breakfast whose owner knows that international guests spend more, on average, than domestic ones, the farmer attempting to negotiate changing legislation, submit online forms, and order supplies.

Yet rural broadband and mobile provision is poor. Among respondents to a recent NFU survey, 52 per cent reported that they had a reliable signal in only a few outdoor locations and 16 per cent had no indoor signal at all; 4 per cent did not have access to the internet at all (NFU 2016). This is despite the fact that good digital and mobile connectivity is important for productivity, diversification, and the health and safety of agricultural workers (ibid).

Broadband speeds, where the service is available, also continue to lag those of urban areas. In 2014, the latest year for which data is available, speeds in the most sparsely populated areas of rural England were just over 5 Mbit/s, compared to around 8 Mbit/s in villages, and around 16–17 Mbit/s in rural towns and their fringes. By contrast, the figure across England was around 24 Mbit/s, with speeds over 25 Mbit/s in urban areas (Defra 2016i).

Good digital connectivity can reduce the impacts of sparsity and 'peripherality' (Turner 2014, RSN 2015), facilitating access to information, markets, and support, collaboration and innovation. As more processes become 'digital by default' rural areas risk exclusion if connections are lacking. Broadband also offers access to 'face to face' encounters which are invaluable in establishing relationships and in training, development, and 'blue skies' research and development activities which drive innovation. Of course, it benefits communities and individuals as well as business.

Approaches to improving broadband need to be tailored for rural areas. Rollout must take into account rural geographies and populations. And the mix of technologies which best serves a rural setting and cities may be different. For example, satellite or 'fibre to the remote node' may offer the best option and digital only services may not be suitable (Bradshaw 2015). In some areas 'community broadband' schemes have a strong track record and could usefully be supported more widely.

1.3.2 Transport

Transport infrastructure is vital, to get workers to jobs and goods to markets. Good links improve the quality of access to both work and services for rural dwellers, and support the economies of small and medium-sized 'hub towns'. The substantial agriculture and food sector relies heavily on roads to bring their goods to wider markets via national road, rail and shipping nodes.

People living in the most rural areas of England tend to travel much greater distances that town dwellers, by a factor of around 50 per cent compared to those in England as a whole, and 63 per cent compared to those living in towns and cities. However, the *time* which they spend travelling is very similar (Defra 2016i).

Particular challenges around road connectivity include road maintenance, quality and access in isolated agricultural areas, even more acute in bad weather. Communities with only 'one road in, one road out' are especially vulnerable because a single incident can disrupt every aspect of local travel.

Public transport for sparse populations may struggle to be viable – even if it is indispensable for its regular users. Problems with rural bus services include unreliability (sometimes due to road quality), and route planning which does not reflect current economic geographies or allow convenient changes. One roundtable participant described a 12-mile journey which could occupy more than three hours by bus – not much longer than it would take to walk the same distance. Busses are especially important for people on low wages, young people accessing education and training, and older people who need alternatives to driving. Yet just 49 per cent of rural dwellers lived close to a regular bus service in 2012 (Defra 2016i).

Major roads can themselves become 'hubs' for business. For example, many companies have established premises close to the A1 in Yorkshire, which offers links to markets, other companies, and partners such as the University of York and its campuses. The opportunity to establish a unit close to an arterial route is important both for the movement of goods and the creation of effective 'clusters' which support innovation and skills.

Perhaps surprisingly, poor transportation was mentioned as a challenge for the *tourism* sector in only one of our four roundtable discussions. All the case study areas had a strong tourism sector, but it appears that visitors can usually access the kinds of transport they desire for their holiday or trip. This may reflect the widespread use of private (including hired) cars, and the leisurely pace of tourist travel. Poor connectivity might even contribute to the attractiveness of the countryside, as a place which is quiet, 'different' from the city, and free from crowds.

1.3.3 Coasts and ports

All our case study areas included extensive coastlines. Cumbria provides a good example of the different ways in which coastline offers economic assets, with a strong presence in manufacturing and energy generation alongside a tourism and recreation sector which relies on preservation of the area's natural beauty – and on safe and unpolluted environments. Ports also provide jobs and demand good transport connections; this was especially important in the New Anglia region.

1.3.4 Communities

Although technically outside the remit of this report, the nature of rural communities was discussed in all our roundtables. Mutual support, between individuals, businesses and neighbours, is a defining feature of rural life. It encompasses formal collaboration, for example in initiatives to improve facilities and services, and a culture of informal support and 'coming together', for example to overcome challenges which arise from geographical isolation, bad weather and poor connectivity.

Collaboration contributes to the quality of relationships and the attractiveness of the countryside as a place to live, but it also operates as a direct asset to rural businesses. For farmers in particular, mutual support between people working side by side was described as an *essential* part of their way of working. Businesses which on paper are competitors – such as providers of tourist accommodation of a similar kind and price – cooperate regularly, sharing resources and pooling opportunities.

Community-led, 'grassroots' initiatives emerged as a potentially powerful source of ideas and momentum for rural development. Community broadband schemes are one example; these are important in providing connectivity in some areas. In one case study area a partnership has been set up between stakeholders from different businesses, places and communities, to develop strategies which promote local businesses, preserve the natural environment and campaign for local services.

1.4 TYPOLOGY OF RURAL AREAS

1.4.1 Developing a typology

The picture of rural England and Wales which emerges from this account is one of diversity. Agriculture is key to shaping the landscape, but rural areas also play an important role in Britain's manufacturing, tourist, and other industries. And rural communities include people who choose to live there while working elsewhere; they in turn create demand in the rural economy and help to shape its places.

The measures of population distribution and sparsity used in the Rural Urban Classification (RUC) is fundamental to the diversity of rural England. Our research suggested that *relationships* and *natural assets* are also important, as these present economic opportunities and challenges to be overcome.

On this basis we developed a typology using three dimensions:

'Hinterland' or 'independent': rural areas which are close and wellconnected to a major city may come to act as its hinterland, home to commuting workers and satellite business units. Rural areas at significant distance from a major city are more likely to depend on networks of interconnected small towns and villages, or 'hub' towns that are not major economic centres.

Inland or coastal: coastal areas offer natural assets which can support manufacturing, high-tech and leisure sectors. However, they may also be isolated from opportunities for growth and development. Some UK coastal areas have been identified as having high levels of deprivation, while others are comparatively affluent.⁴ Coastal areas are particularly likely to rely on tourism and leisure, but this can bring challenges such as a high number of 'second homes' and associated distortions of the housing market.

Population distribution: we followed the classifications of the RUC, 'Urban with significant rural', 'Largely rural' and 'Mainly rural' (Bibby and Brindley 2016).⁵

The following detailed definitions are used:

Hinterland/Independent – a local authority district is classified as a 'hinterland' if the majority of the area is 40km or less from a Core or Key City with a university, and more than one A-road leads from the area to that Core or Key City, and there is a railway link to the Core or Key City with at least two stations in the area. Other areas are classified as 'independent'.

Inland/Coastal – a local authority district is classified as 'inland' if it has no coastline, or less than 1/3 of its border consists of coastline. Areas with a border of which 1/3 or more consists of coastline are defined as 'coastal'.

[•] Population density – the ONS definitions of population density are adopted unchanged.

⁵ The ONS definitions of areas based on population density and type of settlement are as follows:
An area which is 'Urban with significant rural' includes an area defined as 'urban' on the basis

of population density, but between 26 and 49 per cent of the area's population are classified as living in 'rural' areas, including dispersed populations and hub-town dwellers. In an area which is 'Largely rural' between 50 and 79 per cent of the population are classified as

In an area which is Eargely rural between 50 and 79 per cent of the population are classified as living in 'rural' areas, including dispersed populations and hub-town dwellers.

[•] In an area which is 'Mainly rural', 80 per cent or more of the population are classified as living in 'rural' areas, including dispersed populations and hub-town dwellers.

This typology was applied to all English *local authority* areas which fell into the categories 'Urban with significant rural', 'Largely rural' and 'Mainly rural' in the 2011 ONS analysis. As noted above, the ONS definitions of population density and rural/urban dwelling were adopted unchanged and applied in our analysis.

Figure 1.9 shows how rural areas are categorised using this typology.

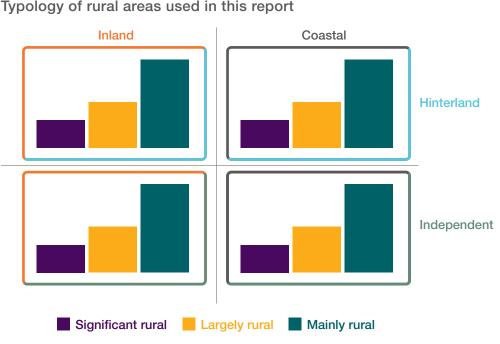


FIGURE 1.9

Typology of rural areas used in this report

Most LEP areas include a mixture of local authority areas of different types, as classified on this basis. The heterogeneity of LEP areas means that it was *not* useful to conduct an amalgamation at this level of geography similar to that applied for NUTS3 areas; most LEPs are simply too diverse to make this meaningful.

However, the three English LEP areas where we conducted case studies were relatively unusual because none includes more than two 'urban' areas (although North Yorkshire includes two key cities with universities and New Anglia includes one). Table 1.1 shows the composition of the English case study areas by the classification of their constituent local authorities.

TABLE 1.1

Local authority classifications in English case study areas⁶

A	Hinterland/	Inland/coastal	Urban/rural classification	
Area Cumbria	independent	iniand/coastai	classification	
Allerdale	Independent	Coastal	Mainly rural	
Copeland	Independent	Coastal	Mainly rural	
South Lakeland	Independent	Coastal	Mainly rural	
Eden		Inland	,	
	Independent		Mainly rural	
Carlisle	Independent	Inland	Significant rural	
Barrow-in-Furness	Independent	Coastal	Significant rural	
New Anglia				
North Norfolk	Hinterland	Coastal	Mainly rural	
Great Yarmouth	Hinterland	Coastal	Significant rural	
Waveney	Hinterland	Coastal	Significant rural	
Breckland	Hinterland	Inland	Mainly rural	
Forest Heath	Hinterland	Inland	Mainly rural	
St Edmundsbury	Hinterland	Inland	Largely rural	
Mid-Suffolk	Hinterland	Inland	Mainly rural	
South Norfolk	Hinterland	Inland	Mainly rural	
King's Lynn & W. Norfolk	Independent	Coastal	Largely rural	
Suffolk Coastal	Independent	Coastal	Mainly rural	
Barbergh	Independent	Coastal	Mainly rural	
Ipswich	n/a – urban	n/a – urban	n/a – urban	
Norwich	n/a – urban	n/a – urban	n/a – urban	
North Yorkshire				
East Riding	Hinterland	Coastal	Largely rural	
Hambleton	Hinterland	Inland	Mainly rural	
Ryedale	Hinterland	Inland	Mainly rural	
Selby	Hinterland	Inland	Mainly rural	
Harrogate	Hinterland	Inland	Significant rural	
Scarborough	Independent	Coastal	Significant rural	
Craven	Independent	Inland	Mainly rural	
Richmondshire	Independent	Inland	Mainly rural	
York	n/a – urban	n/a – urban	n/a – urban	

1.4.2 Applying the typology

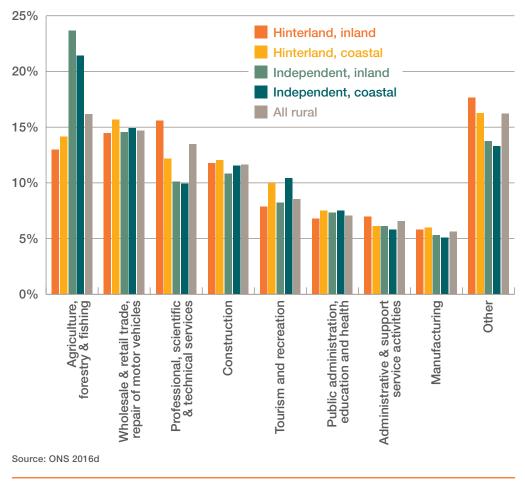
We applied this typology to two factors: the mix of sectors which make up a local authority's business population, and GVA per head of population for NUTS3 areas.

Figure 1.10 shows the sectoral mix of registered business units for local authority areas in each category.

⁶ Note: Carlisle is home to a university but is not itself a core or key city.

FIGURE 1.10

Percentage of registered business units in each sector By local authority characteristics (rural areas only)



This analysis suggests that the *sectoral* distribution of businesses relates to rural area characteristics as follows:

- 'Independent' areas have more businesses in agriculture, with the highest levels of all in independent inland areas.
- Coastal areas have more tourism and recreation businesses, especially 'independent' coastal areas.
- 'Inland hinterland' areas have more professional, scientific and technical business units than any other type of rural area; in fact the proportion is almost the same as that for urban areas. Coastal hinterland areas also have a fairly high proportion of businesses of this kind. They account for a smaller proportion of the business population in independent areas, inland or coastal.
- Manufacturing businesses are fairly evenly distributed between types of rural area.

When the definition of rurality by population density is considered, further differences emerge (as shown in figure 1.12). Although hinterland areas have fewer businesses in agriculture, forestry and fishing, those which lie

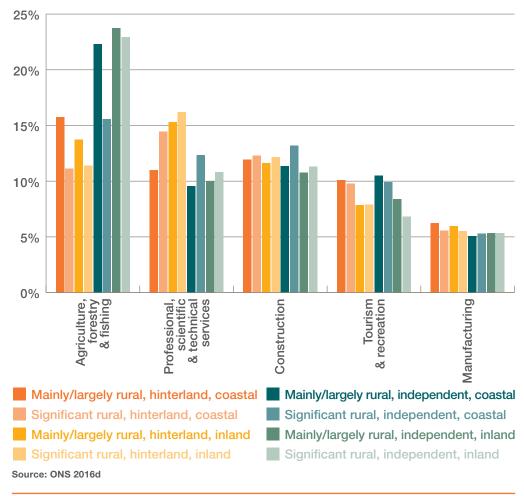
in coastal areas which are 'mainly' or 'largely' rural have more than those which are 'urban with significant rural'.

Firms providing professional, scientific and technical services are more concentrated in hinterland areas, but those which are 'urban with significant rural' areas are *more* likely to be home to firms of this kind. The exception to this is in 'independent coastal' areas which have significant rural elements alongside some urbanisation. This may reflect a presence in energy generation or advanced manufacturing (taking advantage of nearby ports) in areas of this kind.

When the concentration of tourism businesses is considered, coastal areas of all kinds have a similar pattern. However, in 'independent' areas these businesses are *less* likely to be found in areas which are 'Urban with significant rural', rather than mainly or largely rural.

FIGURE 1.11

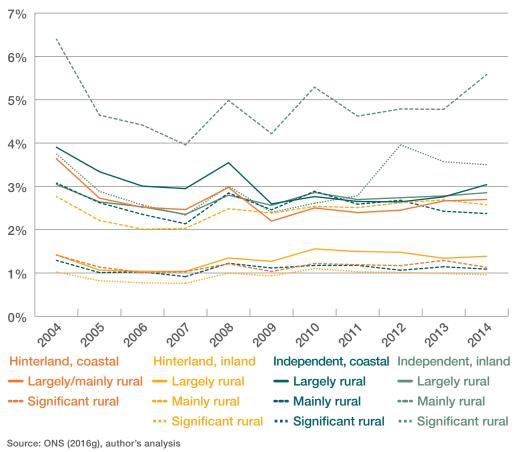
Percentage of registered business units in each sector, selected categories, by local authority characteristics including rurality as defined by population density (rural areas only)



This provides a *rough* indication of the kinds of industry which may thrive in areas of each kind, and of the kinds of sectoral 'mix' which feeds into policies for economic development and approaches to the economy following the EU referendum.

Data on GVA for local authorities is available only at a fairly coarse sectoral grain. However, it is possible to identify some patterns which generally mirror those for mix of business types. Figure 1.12 shows the percentage of GVA accounted for by agriculture forestry and fishing in each type of area between 2004 and 2014.

FIGURE 1.12



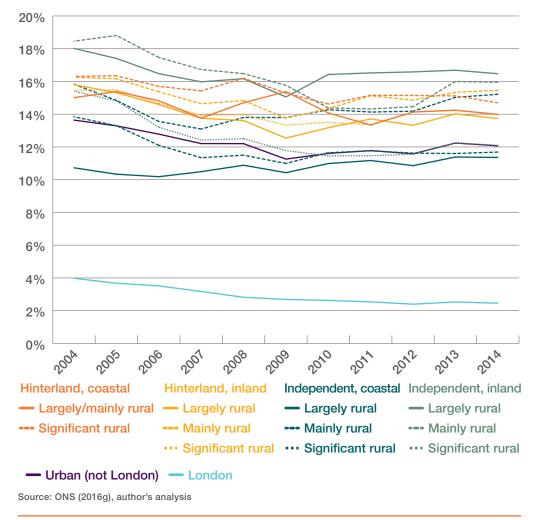
Percentage of GVA accounted for by agriculture, forestry and fishing, rural areas, 2004–2014

Not surprisingly these industries are more important elements of GVA in areas which are largely or mainly rural than in areas with both urban and rural elements, with the exception of independent inland areas with this mix. Agriculture is most important as a proportion of GVA in independent inland areas which are 'mainly rural' or 'largely rural', with the exception of hinterland inland areas of this type.

The proportion of GVA accounted for by manufacturing also varies considerably between types of area, as shown in figure 1.13.

FIGURE 1.13

Percentage of GVA accounted for by manufacturing, rural areas and urban areas (aggregated), 2004–2014



Two *different* groups of 'largely rural' area have the highest and the lowest percentage of GVA accounted for by manufacturing. The figure is over 16 per cent for independent inland areas, and just below 12 per cent for independent coastal areas of this type. Manufacturing makes up a greater proportion, in general, of GVA in 'mainly rural' areas than largely rural ones, or than areas with a significant rural component; these are more similar to one another than mixed urban and rural areas, or areas whose population lives mostly in a rural setting.

Figures for productivity are not available at the local authority level. Therefore these categorisations were amalgamated to provide composite categorisations for NUTS3 areas, the lowest level at which GVA is published.⁷ Most NUTS3 areas include several local authority areas, and this exercise inevitably involved a high degree of aggregation. However, it was possible to obtain some broad analyses of economic trends.

⁷ LEP areas are larger than NUTS3 regions, which correspond roughly to counties. It was not practical to apply an amalgamation of this kind .to LEP geographies, because their internal diversity is in most cases too great

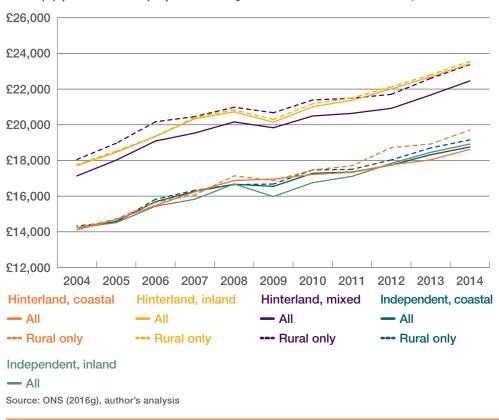
NUTS3 regions were included in the analysis if half or more of their constituent local authorities were classified as 'Urban with significant rural', 'Largely rural' or 'Mainly rural' on the basis of the ONS classifications. If fewer than 50 per cent fell into these groups the NUTS3 area was excluded from the analysis. Each of the included NUTS3 areas was then classified according to each of the following dimensions:

- Rurality: NUTS3 areas are sub-categorised as:
 - Semi-rural half of the constituent local authority areas are rural.
 - Rural more than half of constituent local authority areas are rural.
- Connectivity: NUTS3 areas are sub-categorised as:
 - 'Hinterland' more than 50 per cent of rural areas are 'Hinterland'
 - 'Independent' more than 50 per cent of rural areas are 'Independent'
 - 'Mixed' equal number of areas are rural 'Hinterland' and 'Independent'.
- Inland/Coastal: NUTS3 areas are sub-categorised as:
 - 'Inland' more than 50 per cent of rural areas are 'Inland'
 - 'Coastal' more than 50 per cent of rural areas are 'Coastal'
 - 'Mixed' equal number of rural areas are 'Inland' and 'Coastal'.

GVA per head of population varies considerably between NUTS3 areas with different levels and types of rurality, as shown in figure 1.14.

FIGURE 1.14

GVA (£) per head of population by NUTS3 characteristics, 2004–2014



Hinterland areas which are entirely or primarily inland have consistently had higher GVA per head of population than independent ones, and this is even *more* marked in areas with a majority of constituent local authority areas categorised as sparsely populated. By contrast independent areas and hinterland areas with a substantial coastline have markedly lower GVA per head of population. Again, areas which are *primarily* rural have slightly higher GVA per head.

These analyses are – as discussed above – *relatively* crude but they provide an indication of the kinds of economic characteristic and challenge which may be associated with different kinds of rurality. In the context of this report they are of most value *not* in understanding the economy of a whole area, but rather of teasing out issues affecting sub-areas within a LEP. Devolved approaches should consider the mix of ruralities and the potential relationships between them rather than using a blanket definition for a large geography which risks missing some of the important distinctions within it.

2. KEY ISSUES FACING THE RURAL ECONOMY

2.1 POLICY CONTEXT

Policy for the rural economy is at a crossroads. Withdrawal from the EU and the development of a new industrial strategy bring an opportunity to shape its future in innovative ways. Growing interest in place-based policymaking and ongoing devolution provide mechanisms which could maximise the impact of a new approach. However, like any major shift in policy and power dynamics this also brings a risk that vested interests and anti-progressive voices could damage prospects for smaller businesses, farmers, environmental protection, and small or isolated communities. These stakeholders may find it harder to access and exploit key tools for influencing the policy process, such as financial resources and 'political clout'.

2.1.1 The Common Agricultural Policy and EU membership

The Common Agricultural Policy (CAP), introduced in 1962 but continuously revised, was intended to enable farmers across Europe '... to provide a stable and safe food supply at affordable prices for consumers, while ensuring a decent standard of living for farmers' (European Commission 2016). Aims for domestic policy echo this:

Britain needs to ensure a sustainable supply of food for the UK market and export. Supporting and developing British farming, and encouraging sustainable food production (including fisheries) will ensure a secure, environmentally sustainable and healthy supply of food with improved standards of animal welfare.

UK Government 2016

Between 2007 and 2013, **€29.9 billion** was invested in British farming and rural areas under the CAP:

- Pillar 1 direct payments subsidise farm income and are broadly conditional
- Pillar 2 subsidies incentivise good environmental practice (for example promoting biodiversity and flood prevention), diversification and 'rural development'.

In 2015, Pillar 1 direct support to English farmers totalled **€3,084 billion** (**€235 per hectare**). Around **€5.2 billion** is available in Pillar 2 support between 2014 and 2020.⁸ The management of CAP support in Wales is devolved to the Welsh Assembly, where EU funding arrives with a firm

⁸ These figures are taken from the NFU website, <u>http://www.nfuonline.com/news/eu-referendum/eu-referendum-news/qas-the-eu/</u>

distribution agreement for the rural pillars. There is an ongoing debate in Wales about how agricultural support will be taken forward following withdrawal from the EU. At present it is likely that this will be included in the block funding received under the Barnett Formula.

CAP investment is credited with:

- sustaining the sector.
- supporting food exporting, which grew by an average of 5.3 per cent annually over the past decade.
- supporting growth and jobs in rural areas, including vocational training for 114,000 people, improved services available to 5.1 million people, and schemes which enhance biodiversity, protect water and improve soil quality (European Commission 2014).

2.1.2 Growth in rural areas

As noted above, many of the issues facing rural economies are the same as those which affect the whole of the UK, but the particular circumstances of rurality mean their impacts are different, more acute, or harder to address. A continual tension in rural policy making is between promoting growth and maintaining the character and quality of the countryside and 'cherished landscapes' (CRE 2014).

The 2015 '10-point plan' for boosting rural productivity (Defra 2015a) addresses connectivity, skills, enterprise, housing and governance, all of which would appear in a list of growth enablers for *any* type of area. Specific provisions which are especially urgent for rural growth include:

- Extensive, fast and reliable broadband services.
- Improved mobile communications.
- Better transport connections.
- Expanded rural apprenticeships, trebled in food and farming, and more high quality apprenticeships in small tourism enterprises.
- A 'preference' for enterprise zones in rural areas and small towns, with improved access to high speed broadband.
- A review of the impact of planning legislation on rural businesses, and fast-tracked planning certificate processes for minor development proposals.
- Measures to improve housing supply.
- Better childcare in rural areas and encouragement of rural childcare providers.
- More devolution in rural areas (Defra 2015).

Support for business growth and job creation needs to take account of high levels of self-employment, small businesses, 'multi-tasking' by business owners, and sole trading. Devolution, and the increasing role of LEPs and combined authorities in determining local policy on economic development, will support this.

The 2013 agri-tech strategy (HM Government 2013) represents an example of a cross-cutting initiative which integrates a 'historic' area of the rural economy (agriculture) with science and innovation, and with support for trade and investment. It aims to establish infrastructure

for applying innovation (and investment in innovation) to agricultural problems and established strengths, establishing the UK agri-tech sector as a major exporter and 'world leader'. Relevant initiatives played a major role in all our four case study areas.

2.1.3 Planning, housing and energy policy

The National Planning Policy Framework (NPPF) includes a commitment to 'support economic growth in rural areas in order to create jobs and prosperity by taking a positive approach to sustainable new development'. This includes encouraging diversification and business development (for agriculture and other land-based businesses), supporting tourism and leisure while 'respecting the character' of their settings, and promoting retention and development of local services (DCLG 2012). It also recognises the need for special consideration of rural issues, for example transport which improves access to services and businesses.

Participants in our primary research mentioned that planning can inhibit swift responses (for example to environmental crises), and that the scale of a project may sometimes not justify the burden of work involved. This is particularly true for sole traders and small companies whose business involves extensive and complex land use, such as farming.

Across the UK, house prices are generally higher and affordability lower in rural than urban areas, and there is less social and affordable housing available (Rural Housing Policy Review 2015). This impacts on quality of life and community, and also on the availability of workers (Rural Coalition 2015). Problems include a lack of available land and the often unrealistic expectations of landowners about the potential return from housing investment. Community opposition can *block* some developments but where a community voice supports housing development this is 'a significant plus factor' (Davis and Dean 2012).

Energy policy will be crucial in shaping the future of England's rural areas, for example with:

- the extent to which low-carbon energy generation is prioritised, for example through planning legislation for construction of wind farms, the 'mix' of renewables, infrastructure support, and so on
- potential increases in nuclear generation as a 'low carbon' option, and funding opportunities for nuclear
- growth of community energy schemes, and support for these in further devolution deals
- new developments in biofuel use and production
- central and local government policies on fracking, and public attitudes to this.

2.1.4 Policy needs

The economy in rural areas is characterised by the distinctive natural assets which they provide, and the ways in which these are used. The risks which the rural economy faces, or the particular urgency with which general risks are felt there, relate to distinctive features of rurality such as sparse populations and sparser services, tension between the need to preserve the natural environment and the need to grow the economy. For these reasons, policy needs to take a more holistic approach to apparently disparate issues. A more joined-up approach could potentially bring considerable benefits to Britain's rural areas and indeed the wider economy that rural areas serve.

The CAP has shaped policy for agriculture, food production, and much of rural land management. Britain's withdrawal from the EU offers an opportunity to develop a new approach which reflects and supports the modern economy of rural areas, in which advanced manufacturing is increasingly important, innovative agri-tech sits side-by-side with traditional farming, and small businesses are equally likely to start up in the 'knowledge economy', tourism, or artisan food production. This policy also needs to take account of contemporary challenges such as climate change and decarbonisation, the modern housing market, and the demand for 21st century skills. Uncertain exchange rates and numerous unknowns around future import tariffs mean that food production also needs clear policy post-CAP.

Devolution potentially makes possible genuinely place-based approaches which integrate the economic potential and needs of rural areas. We argue that this is the most effective approach to developing a new policy approach for rural areas in general and for CAP replacement policy in particular.

2.2 EMERGING PRIORITIES FOR RURAL POLICY

This discussion illustrates the diversity of rural areas, and differences within areas which are predominantly classified as rural on the basis of their population. The impact on rural economies of a combination of factors peculiar to places with sparse populations and distinctive natural assets also emerges. However, it is possible to identify some priority areas for rural policy:

Sectors

- Agriculture is important to rural economies, communities, and rates of employment, but it faces a number of challenges including high numbers of small businesses and relatively low productivity.
- An emerging sustainability tension between minimum wages, or the minimum wage at which labour can be recruited, and the low price ceilings which result from supermarket pricing approaches. This challenge has grown in recent years and will become significantly tougher if restrictions to free movement of labour have a significant impact on the available workforce for agriculture.
- Manufacturing is an important part of the rural economy with a large presence of firms in advanced manufacturing, agri-tech and high-skilled work demanding a strong STEM-qualified workforce.
- Tourism and hospitality, like agriculture, provide a relatively high number of jobs in rural areas but may not drive high levels of productivity or good wages.
- Rural businesses rely both on 'quality of place' and on natural assets which make possible key industries; preserving these qualities while raising rural productivity are not always compatible goals and may even conflict.

Populations and communities

- Rural areas face a number of social problems which may be conventionally thought of as applying more often to towns or cities, for example income inequality, reliance on low-wage sectors, and poor levels of investment and productivity.
- Rural areas are more affected than urban ones by trends of population ageing; however overall there is more migration to rural areas from towns and cities than the reverse.
- Community cohesion and 'spirit' is an asset for rural areas both in quality of life and as it supports business in the countryside.
- Technological developments and changes in standard workplace operations in the past ten years have greatly increased the capacity for people to work remotely or at a distance, or base their business outside urban areas, vastly increasing the proportion of the workforce who will be capable of living in rural areas. (This was an important issue in New Anglia – many people who would otherwise have to live in London can now live there.)

Connections

- The nature of connection between rural areas and their more urban neighbours is important in shaping rural economies.
- Connectivity is vital for rural economies, and most rely on a range of different kinds of connectivity for different purposes. Broadband is increasingly important for a range of different industries.

3. AREA CASE STUDIES

3.1 METHODS AND OVERVIEW

Four case study regions were chosen, to reflect different kinds of rurality within England and Wales. Key economic statistics for the case study areas are shown in table 3.1. In each region we held a roundtable discussion to which regional stakeholders were invited; these included representatives of business organisations, local governance, LEPs and community groups. We also conducted interviews with a small number of local business leaders. Alongside this primary research we analysed key texts including the relevant Strategic Economic Plans, and scholarly and policy literature examining the regions in more detail. The following case studies reflect findings from this process, as well as data analysis.

TABLE 3.1

Key economic statistics for case study areas

	North Yorkshire	Cumbria	New Anglia	North Wales*		
Land area (county)	11,087km ²	6,768km ²	9,478km ²	5,071km ²		
Population density (county)	150 per km ²	74 per km ²	167 per km ²	136 per km ²		
Total GVA (LEP, 2014)	£23,859m	£10,747m	£56,550m	£12,598m		
Percentage manufacturing	12.9%	24.4%	13.6%	22.9%		
Percentage agriculture	3.4%	2.0%	1.8%	0.8%		
Percentage tourism-related**	5.0%	5.2%	2.8%	17.3%		
Annual GVA growth (LEP, 2010–14)	2.8%	3.6%	3.4%	3.9%		
Productivity – GVA per filled job (NUTS2)	£43,066	£43,175	£48,704	£36,691–£37,982		
Employment rate (LEP, 2015/16)	79.8%	76.3%	76.6%	73.3%		
Self-employment rate	17.3%	16.0%	14.4%	16.0%		
Mean gross weekly wage (2015)	£481.30	£522.80	£492.20	£433.50-£500.20		
Median gross hourly wage (2016)	£11.93	£12.82	£12.07	£12.00-£14.07		

Sources: ONS 2016e; ONS 2016f; ONS 2017; ASHE 2016; Census 2011 data accessed via <u>www.Nomisweb.co.uk</u> *Note: Figures for North Wales relate to: Gwynedd, Anglesey, Conwy, Denbighshire, Flintshire and Wrexham (land area and population density), NUTS3 statistical geographies for Isle of Anglesey, Gwynedd, Conwy and Denbighshire and Flintshire and Wrexham (GVA and productivity); and the counties of Conwy, Denbighshire, Flintshire, Gwynedd, Wrexham and the Isle of Anglesey (employment and self-employment rates and wages) ** This is the category 'distribution; transport; accommodation and food service' used in ONS 2016f

3.2 CUMBRIA

3.2.1 Characteristics and sectors

Cumbria is a large and diverse region. Just over half the population (53.6 per cent) live in rural areas (ONS 2014), and it has no large city; the biggest town is Carlisle, home to around 75,000 people. Nor does Cumbria 'look towards' one major centre; different parts of the region are closest to the conurbations of Preston, Manchester, and Newcastle-upon-Tyne. It has an extensive coastline, and is home to the greater part of the Lake District National Park. According to our classifications it is a rural 50-80 area, independent, with both coastal and inland areas.

Key sectors in the Cumbrian economy include the following.

Manufacturing

- Manufacturing accounts for almost a quarter of GVA (more than double its share of the UK economy) and employs 16.7 per cent of the workforce.
- GVA and job growth are high (2,500 more manufacturing jobs in 2014 than 2009) and manufacturing means West Cumbria has one of the best productivity rates in the North.
- Major sites include: BAE Systems at Barrow-in-Furness; plants for many subsea and marine companies (including Siemens) and for multinational food and household equipment companies including GSK, Eastman Chemicals, Pirelli Tyres and Kimberly-Clark; a small number of major companies headquartered in the region.

Energy

- Nuclear: Sellafield employs over half of the UK's nuclear workforce (around 10,000 people) and is surrounded by a major network of supply chains and specialisations. Numerous global companies have a presence (for example Babcock, Carillion, Amec and Doosan) and some local companies have grown to become international market leaders.
- Renewable: some of Europe's largest offshore windfarms are located in the Irish Sea; onshore wind and hydropower are both growing, supported by regional infrastructure.
- The energy sector does not generally suffer from skills shortages in Cumbria but there is some concern over regional infrastructure to grow and sustain innovation, research and development.

Agriculture

- Agriculture employs around three times the proportion of people as it does nationally (Cumbria Intelligence Observatory 2014) and 30 per cent of registered businesses in Cumbria work in 'agriculture, forestry and farming' (ONS 2014), rising to 44 per cent in the Eden district.
- Dairy farming is important in lowland areas, while sheep farming dominates the uplands; both face downward pressures on farm-gate prices.
- The viability of farming is a major concern in the region with great uncertainty over the impact of post-EU arrangements.

Tourism and hospitality

- The Lake District, Hadrian's Wall and the coastline are major attractions with both day trips and longer visits contributing to the market.
- In 2015 this sector was estimated to have generated £2.34 billion in four districts of Cumbria, creating around 31,700 jobs; GVA growth has been high since the end of the recession.
- There are some skills issues for this sector, in sales, marketing, customer services and digital areas.
- Infrastructure for 'joining up' tourism activities could be better, and means that areas outside the Lake District which have the potential to perform well may be overlooked.

3.2.2 Strengths and challenges

Cumbria's main strengths include:

- Quality of place, unique natural assets and heritage sites which support the tourist industry.
- Strong manufacturing base and growth including an international profile.
- Strong and growing profile in nuclear and low-carbon energy sectors.
- Good quality of life and fairly low costs of living can attract skilled workers.
- Good levels of small business formation and growth and entrepreneurship.
- Strong communities and placemaking in local areas.
- *Relatively* good transport connectivity.

Threats and weaknesses include:

- Financial challenges to pastoral farming; uncertainty over impacts of withdrawal from the EU.
- Environmental threats and climate change, particularly flooding.
- Very poor broadband connectivity in some areas; this limits opportunities for small and remote businesses.
- Limited research and development capacity outside narrow sectors.
- Large and diverse geographical area; some areas can be 'forgotten' or 'left behind' when Cumbria is considered as a whole.
- Some low-wage job groupings with limited opportunities for advancement.
- Lack of affordable housing in some areas, especially where there is substantial second home ownership and holiday accommodation.
- Cuts in services in remote or sparsely populated areas *threaten* quality of life 'offer' (and attractiveness to skilled workers).

3.3 NORTH YORKSHIRE

3.3.1 Characteristics and sectors

North Yorkshire's sparse population is spread across a large geographical area and highly diverse landscape. To the west, the coastline extends from north of Whitby to the tip of Spurn Head. There are extensive moorlands, dales and networks of market towns. Some parts are close enough to Leeds to function as a hinterland while York is a substantial hub with a

Russell Group university and major research presence. There are also strong historical and business links with the Tees Valley.

North to south connectivity is good. The East Coast Mainline carries passengers from York to London in two hours or even less, while the A1 offers excellent road links. However, east to west rail links offer relatively infrequent and slow services, with limited electrification and no wifi. Many smaller communities have 'one road in, one road out' and bus services are often slow, poor, and badly coordinated.

Key sectors in the North Yorkshire economy include the following.

Agriculture and food production

- Agriculture, forestry and farming employ 3 per cent of the workforce, more than treble the proportion for the UK as a whole. There are large concentrations of sheep, pig, and mixed farming (FBS 2016).
- Food and live animals account for 5.2 per cent of Yorkshire's exports compared to 3.8 per cent of England's; animal and vegetable oils account for 0.8 per cent compared to 0.1 per cent.
- Food processors and manufacturers range from large international companies such as McCain and Nestlé (which has its product innovation centre in York), to small 'artisan' businesses making highvalue products; some farmers have diversified into this area.

Agri-tech

- This history of farming and food production comes together with scientific and business expertise at York University and in the region's businesses (especially its chemicals sector) to support a growing agri-tech presence.
- Key areas include: improvements to agricultural productivity and sustainability in the UK and elsewhere (for example the Food and Environment Research Agency (FERA) at Sand Hutton); biorenewables, supported by a subsidiary company of York University (for example developing techniques to generate energy from farm waste); and nonfood agricultural products (for example enabling Yorkshire Lavender to produce lavender oil domestically).

Tourism and hospitality

- North Yorkshire has a slightly higher rate of employment in the 'Distribution, hotels and restaurants' sector than England as a whole.
- Traditional tourism (associated with the coastline, the city of York and the Dales) is being supplemented by innovations, for example ecotourism and cycling (following the 'Tour de Yorkshire').
- Challenges include relatively high numbers of low-wage jobs and poor digital connectivity.

Engineering and manufacturing

- Strong presence, with clusters around transport links (for example the A1), and close to Scarborough, Thirsk and Malton.
- Specialisms include aerospace, engineering, defence, metal fabrication construction.

• The Boulby potash mine is the largest private sector investment in the North; its potential annual turnover is around £2 million and it will create around 1,000 jobs.⁹

3.3.2 Strengths and challenges

North Yorkshire's main strengths include:

- Innovation for agri-tech and advanced manufacturing.
- Quality of place and attractive lifestyle offer.
- Good north-south connectivity.
- Good quality tourist destinations, reasonably close to transport nodes and bigger cities.
- Ambitious small businesses, keen to engage in innovation and exporting.
- Strong sense of community with businesses and neighbours supporting one another; much of this is 'under the radar' and could benefit from greater awareness and policy interventions to ensure that it is sustained.
- Excellent centres for agricultural skills development and training.
- Resilient businesses, as demonstrated by relatively *minimal* impacts on the local economy of crises such as the recession and the recent flooding.

Threats and weaknesses include:

- Poor levels of skills for manufacturing and industry, especially at higher levels.
- Social inequalities, with low wages in some types of work and limited affordable housing.
- Continued need for some lower-skilled and lower-paid workers in agriculture and tourism, many of whom are at present recruited from eastern Europe.
- Poor east-west connectivity, especially as this impacts on freight from Yorkshire producers seeking to export through ports on the Tees and Tyne.
- Poor local transport including slow and badly coordinated bus services.
- Risks of climate change.
- The sustainability of upland farming.
- Very high levels of small (with 10–250 employees) and micro (with fewer than 10 employees) businesses, and sole trading; these may not always benefit from standard models of business support.
- Some over-localised working and collaboration, missing national opportunities.
- Poor broadband connectivity.

⁹ https://www.lepnetwork.net/news/2016/city-and-rural-must-work-together-in-the-age-of-theu2018global-nomad-u2019/

3.4 NEW ANGLIA

3.4.1 Characteristics

The New Anglia LEP area is made up of the counties of Norfolk and Suffolk. This region has an extensive coastline which includes both substantial areas where tourism of different kinds is important to the local economy, and also major ports at Harwich, Felixstowe, Lowestoft, King's Lynn and elsewhere. Inland extensive parts of the region are used for agriculture, with a particularly large concentration of arable farms (this is a feature of the east of England, compared to the predominance of livestock farming on the west coast). In the northern part of the LEP area the principal towns are Norwich and King's Lynn, while in the south a substantial proportion of the population commute to the greater London area and the 'A1 corridor'.

Key sectors in the New Anglian economy include the following.

Agriculture and food

- These sectors employ 13 per cent of its workforce and generate £2.2 billion in GVA annually. The region accounts for 12 per cent of England's cereal production and 20 per cent of the UK's vegetable production, including 20 per cent of its potatoes and 50 per cent of its sugar beet. Food processing grew by 13 per cent between 2007 and 2010, agriculture by 25 per cent.
- Some of Europe's major food and drink companies have a presence in the region, for example Adnam's Breweries, Bernard Matthews Turkeys, British Sugar, Greene King, Colman's (part of Unilever), Kinnerton's, Marel, Munton's and Linda McCartney. There is also a concentration of innovative, dynamic small-to-medium-sized companies, for example Frank Dale Foods, Dodman Ltd and Micronizing.
- The Royal Sandringham Estate is also a substantial employer and major economic force. This is an example of the ways in which highly distinctive natural assets and historical circumstances lead to very particular economic conditions in rural areas.
- The *quality* local food offer, which supports the preservation of the local natural environment and brings 'green growth' to the area, is important in the New Anglia area and complements its tourism industry.

Agri-tech

- The agriculture and food sector has low value added and agritech represents an opportunity to improve its productivity and sustainability.
- Agri-tech is worth £2.2 billion in annual GVA, almost 10 per cent of GVA; this represents growth of around 25 per cent between 2007 and 2010 particularly in research into drought-resistant crops and high-tech foods.
- Cross-LEP collaboration with the Greater Cambridge Greater Peterborough LEP has established the Eastern England Agri-Tech Growth Initiative, using £3.2 million of regional growth funding to support start-ups and bring products to market, as well as a new 'translation centre' to facilitate collaboration between farmers and scientists.

• This is seen as a major growth sector for both jobs and GVA; with goals to create or safeguard 7,500 jobs and add up to £30 million in net GVA annually.

Tourism and culture

- Tourism is worth around £1.3 billion in GVA, and provides around 68,000 jobs (around 10 per cent), as well as additional 'indirect' employment. Over 1,000 businesses operate in the culture and heritage sector, with 'direct' employment for 5,800 people and GVA of £83.6 million; it is estimated that tourism spend increases this by around 50 per cent.
- The area benefits from very diverse tourism assets including the Broads, the 'heritage coast', and traditional seaside resorts such as Great Yarmouth which is the third largest of its kind by value in England. Day visitors (for whom Norwich is the 6th most popular destination in the UK) are also important. The area is home to specialist destinations such as Newmarket race course, Center Parcs at Elveden, and major festivals for different genres of music, including classical, folk and rock. Suffolk is marketed as 'Constable and Gainsborough country'.
- Partnership organisations such as Visit Norfolk and Visit Suffolk work together and with multiple partners to market the region as a tourist destination and the LEP supports the cultural sector with the aim of increasing visitor numbers by around 5 per cent annually.

Energy

- New Anglia's energy sector is worth £994 million and employs around 7,700 people. The sector has a fifty-year history with expertise in oil, gas and nuclear and the potential to transfer many of these to renewables.
- Energy is one of the region's most productive sectors with a relatively high rate of GVA per filled job.
- Great Yarmouth and Lowestoft form one of the UK's six Centres of Offshore Renewable Engineering, and constitute one of the best-performing enterprise zones in England.
- New Anglia hosts numerous global companies in this sector including 3 Sun, Gardline, Seajacks and SLP, and £14 billion of investment is anticipated over the next decade to expand EDF's nuclear capacity at Sizewell. The local Bacton Terminal processes between 15 and 50 per cent of the UK's natural gas and OrbisEnergy is the regional innovation centre of excellence for renewables.

3.4.2 Strengths and challenges

New Anglia's main strengths include:

- Its industries have benefited from innovation and collaborations between science, industry, and traditional sectors such as agriculture. There is a strong knowledge-based economy which is distributed right across the region.
- Numerous digital and technological businesses in a growing sector.
- A vibrant small business and start-up community; for example, there are numerous small businesses in financial and other business

services. It may be hard to *attract* businesses of this kind to the region but once they are established they tend to stay.

- New Anglia has excellent 'land assets', including large landowners who can invest at scale; a relatively high supply of buildings which can be adapted for business; and space to allow small firms to survive which might have less of a chance in a retail park.
- Quality of life is high, with 'idyllic' countryside, areas of relatively low property prices, and opportunities for a good work–life balance.
- Transport infrastructure is relatively good; ports are highly accessible for exporters, there are several new roads, and the journey to London from the north of the area is only two hours by train.

Threats and weaknesses include:

- The potential impact of changes to legislation on free movement of labour when the UK withdraws from the EU. The region's agriculture and tourism businesses rely heavily on workers from central and eastern Europe and some major employers in food processing run schemes to recruit directly from the continent to supplement the domestic workforce at seasonal peak times.
- Some high-GVA and high-skilled sectors rely on attracting skilled workers from outside the region and from overseas.
- High levels of unemployment; around 60,000 unemployed people are looking for work in the region.
- Infrastructure is poor in some areas, particularly broadband; the LEP has a current target of winning funding to reach 95 per cent superfast coverage by 2017, but this still leaves five per cent of a large geographical area without access to this service.
- Coastal erosion and flood defences bring heavy current costs which are likely to rise further in future.
- Reliance on EU funding; New Anglia was due to receive around £94 million of EU funding between 2014 and 2020, matched by local contributions. Short-term protection is in place but there are fears for the future.
- Social polarisation, with pockets of substantial wealth and poverty in relatively close proximity.
- Low skills levels in the indigenous population, and competition with relatively nearby London for high-skilled staff.
- Image and perception: as the other side of the coin from the 'rural idyll', the counties are sometimes seen as 'backwaters' rather than a great place to do business.
- Adapting to central government priorities: when central government prioritises poverty reduction or challenged areas, the area not only cannot compete with depressed urban areas in that regard, but damages its own positive image with relocators and retirees if it emphasises the impoverished parts of its economy.
- The stuttering progress of devolution, and the potential for polarisation between parts of the area.

3.5 NORTH WALES

3.5.1 Characteristics and sectors

North Wales is a relatively small rural region in comparison with other case study areas but has a very varied topography and economic geography, characterised by coastal tourism in the north, upland hill farming in the west and significant manufacturing industry in the east. Productivity rates are low, even compared with other rural areas, which is not surprising given the heavy dependency on tourism which accounts for over 17 per cent of regional GVA – more than three times that of any of the other case study areas. But the region is experiencing more rapid GVA growth than other areas largely on account of a manufacturing revival in Wrexham and Flintshire.

Key sectors in the North Wales economy include the following.

Tourism

- Tourism accounts for 17.3 per cent of regional GVA, which explains the relatively low levels of productivity in some parts of the region.
- The tourist industry is concentrated along the coastline and suffers from some of the problems faced by many traditional seaside resorts in the UK. However, there is a burgeoning innovative 'adventure tourism' sector (mountain biking, climbing, zip wires etc.) in areas previously associated with hill farming, and this is typically higher value.
- The area has a small number of highly distinctive tourist destinations such as Portmeirion and Abersoch. It is also very close to Chester Zoo, the biggest UK paid-for visitor attraction outside London.

Agriculture

- Agriculture accounts for a very small proportion of the regional economy (0.8 per cent GVA) but hill farming covers a significant proportion of the land area and contributes greatly to the amenity value and attraction of the region.
- Many small farms have diversified into tourism, opening farm shops and cafes and providing bed and breakfast accommodation to visitors from the Midlands, the North West and beyond.
- Hill farmers depend heavily on CAP and Welsh government subsidies and therefore face considerable uncertainty about the future.
- Lowland dairy farming in places like Anglesey also faces significant threats with increasing volatility of milk prices.

Energy

- The region is to become home to the Wylfa Nuclear Power Station (on the tip of Anglesey). Following £12–14 billion investment by Hitachi and GE, construction will begin in 2019 and the power station is due to open in 2026. Construction will have a peak requirement of around 8000 jobs although in the long-term the facility will employ only 800 people.
- There are opportunities for small modular nuclear generation at the former nuclear power station site at Trawsfynydd.
- There is significant potential for developing renewable energy including a major tidal lagoon scheme in Colwyn Bay that would bring wider regeneration benefits to the area, smaller tidal schemes involving tethered kites, and widespread micro-generation across

North Wales. Much of this work is linked to the Menai Science Park on Anglesey linked to Bangor University.

Manufacturing

- Manufacturing accounts for nearly 23 per cent of GVA and has grown rapidly in recent years. This is largely concentrated in the east of the region with Flintshire having the highest percentage of people involved in manufacturing in the UK.
- Much of this centres around engineering with some of the bigger firms located in the region including JCB, Airbus and Siemens but these are well supported by a significant number of SMEs.

3.5.2 Strengths and challenges

North Wales' main strengths include:

- Its quality of place, unique coastline and mountains combined with the growing number of destination offers linked to agricultural diversification.
- Burgeoning engineering cluster in Deeside and Wrexham including companies such as JCB, Airbus and Siemens and associated SME supply chains.
- Opportunities for development of marine energy sector including a large tidal scheme across Colwyn Bay that could bring significant regeneration benefits and other renewable micro-generation schemes.
- Anchor site opportunities including Wylfa Nuclear Power Station, Wrexham prison site, Bangor University and the Menai Science Park.
- Links to Cheshire and Warrington and the North West England economy more broadly.
- Strong regional and Welsh national identity alongside local community spirit. This is closely related to the Welsh language; in Gwynedd and Anglesey Welsh is the first language for around half of the population and a further 20 per cent have a working knowledge of the language, which is more prevalent in rural than in urban parts of the devolved nation.
- Possible space centre near Barmouth.

North Wales' main threats and weaknesses include:

- The huge diversity within the region brings challenges for strategic planning, which is also hampered by cross-border issues (see below).
- Despite strong economic linkages and commuting between the North West of England and North Wales (led by the Mersey Dee Alliance), the institutional and policy context can inhibit maximising collaborative advantage. Some local stakeholders reported that the Cardiff-based Welsh government is perceived to be partial towards South Wales and reluctant to devolve.
- Poor digital connectivity (especially broadband and 4G coverage) and poor rail connectivity, with heavy dependence on the A55 to the north of the region.
- Peripherality, particularly in the west of the region, and dependency on hill farming which is particularly reliant on CAP and Welsh government subsidies. These are now highly contingent and uncertain.
- Significant skills gaps in engineering and agriculture, alongside challenges retaining and attracting younger workers.

4. RURAL FUTURES

4.1 A UNIQUE OPPORTUNITY FOR RURAL POLICY

The future of the rural economy hangs on the policy decisions the UK takes, and will be compelled to take, in the aftermath of the EU referendum. We are at a moment of significant opportunity, but also significant risk to some of the progressive values that have become embedded in our rural strategy, such as environmental protection, community spirit, wildlife protection, sustainability, climate change.

However, the decisions taken at this point can also bring transformative, long-term and positive change. Ministers have effectively been handed a 'blank sheet' on which to develop a new national vision for rural places and their role in the economy and society. Agriculture is fundamental within this and the CAP has effectively operated as a *de facto* industrial strategy for agriculture and a policy on food production, self-sufficiency and sustainability. With its withdrawal the UK government has:

'the first opportunity in decades to better match policy and public funds to urgent farming issues in England – now we can shape a new national vision and policies for farming.' CPRE 2016

But as our findings demonstrate, farming is not the whole story of the rural economy. At present the CAP operates relatively separately from other areas of policy and funding, in a potentially unhelpful 'silo by sector' approach. As a UK industrial strategy is developed, it makes sense to ask 'how does the whole economy operate in and depend on our rural areas?'.

Any reform to the CAP will be disruptive with huge local impacts that in turn could have major national ramifications (for example on food prices and availability). Central government should provide a clear, effective *national* framework of obligations where cross-issue and crosssectoral approaches are needed, for example on flood management and food sustainability. But then devolving the relevant powers would allow decisions to reflect the diversity of rural Britain and respond to the specific needs of places, with powers passed to bodies close (and accountable) to the communities involved.

Policy needs to address how people are incentivised to use land (for farming and to preserve the natural environment), and the skills, aspirations and opportunities needed to make the most of that use. It should also consider how people will live in rural communities in the 21st century in ways which are fair and sustainable, socially and economically. And policy decisions must be underpinned by a holistic strategy for Britain's rural areas within the global economy and contemporary society.

4.2 FARMING, FOOD AND THE FUTURE

4.2.1 Agriculture

Overview

Agriculture is not the whole rural economy, but its role is crucial. Farming practices shape the landscape, and thus affect tourism, environmental management, and the amenity value of the countryside. It is also culturally important; particular kinds of farming are strongly identified with places and communities. In our case study areas this was true of 'growing food' (North Yorkshire and New Anglia) and pastoral farming, notably sheep (upland Cumbria and North Wales) and cattle (lowland Cumbria).

But farming faces serious challenges and many farms are not profitable (CPRE 2016).

- Farming incomes vary due to factors beyond local or national control. Income from farming fell **29 per cent** and farming GVA fell **15 per cent** between 2014 and 2015 because of international commodity prices and poor exchange rates (ONS 2016a). Weather and climate bring continual uncertainty.
- Farming is an *ageing profession* with **30 per cent** of farm managers aged 65 and above in 2013; around 4 per cent are aged 35 or under (Defra 2015b).
- Farming depends heavily on young people 'following their parents' into farming; limited opportunities for skills development and high land costs make this a difficult industry to enter (Defra 2013).
- Despite increasing demands for farming skills, 61 per cent of farm managers have no agricultural education except practical experience. Just 18 per cent have full agricultural training (Defra 2015b).
- Many farmers feel that food prices are 'driven down' by large retailers; farm costs are rising but cheap food is a priority for consumers. Many participants in our roundtable discussions felt that this relates strongly to increasing reliance in the agricultural sector on cheap labour from other parts of the EU. The farmer's share of income from the sale of a 'basket' of food in 2015 was 15 per cent lower than in 1988 (ONS 2016a).

Experts on the rural economy are agreed that a coherent and radical alternative to the CAP is needed, and that this should consider how farming can deliver 'improved health, wealth and environment for the British people' (NFU 2016). There is a consensus that post-CAP approaches to farming must go beyond food production.

The CPRE's *New Model Farming* report identifies five key areas where policy can 'increase the diversity, sustainability and resilience of the farming sector on which so much of our countryside depends' (CPRE 2016):

- *Land availability* and transparency in land ownership to encourage new entries into farming and new forms of farming and farm holdings.
- *Public funding* which is progressive and publicly accountable.
- *Supply chains* which support equitable and diverse farming and high quality.
- *Sustainability*, building resilience to climate change and targeting public funding to deliver public benefit and address market failures.

• *Innovation*, supporting farmer-led development and appropriate technology.

Trade and subsidy post-CAP

Both the form of post-CAP subsidies and the trade agreements which succeed Britain's EU membership will have a profound impact on the agricultural sector. Franks (2016), in a comprehensive analysis of potential scenarios for its future suggests that '... [a]griculture would have little claim to the Brexit "dividend", and may not be supported to current CAP levels'. The need to compete with overseas producers could lead to lower standards of animal welfare, removal of some 'greening' measures, and falls in land value which could lead to 'farm abandonment in marginal areas' (Franks 2016).

Current subsidy levels have been secured until 2020 but after that farm incomes will depend on how the UK government develops policy post-CAP, and on the trade deals which are negotiated. These latter could result in 'a lot of cheaper imports entering the UK [food] market', which will incentivise some UK farmers to innovate, diversify and reduce production costs to maintain income parity (Franks 2016, Elliot 2016). Some farms will almost certainly cease to operate; cost reductions in order to restore profitability are estimated at around 10 per cent for livestock farms and 20 per cent for crop producers (Elliot 2016).

Modelling of the impacts of post-EU membership scenarios (van Berkum et al 2016, conducted for the NFU) examines how different scenarios might affect farm income.

- Full abolition of direct payments under *any* trade scenario could affect the viability of between 15 per cent and 20 per cent of farms.
- *Any* reduction in direct support payments would offset the positive price impacts from a WTO 'default' position or a free trade agreement with the EU.
- General trade liberalisation would have a negative outcome for farm income *regardless* of whether direct payments are maintained, largely because of increased food imports and downward pressure on farm prices.
- Sheep and cattle farms, mixed farming and field crops are particularly vulnerable; pig and poultry farming are less so *unless* full trade liberalisation is introduced and horticulture is relatively robust.

'Leeway' for cost reduction and innovation varies between farm types. The range of options available to lowland dairy farmers may not be practical for those farming sheep in remote hill and moorland. Innovation and diversification involves some risks and costs, and demands a high level of skills and knowledge (Cao et al 2009). Higher skill levels will be important in keeping the future farm industry – whatever its shape – sustainable (Defra 2013).

The EU workforce in farming

EU membership also shapes a significant part of the agricultural *workforce* in the UK. In particular arable farming and horticulture employ a large number of EU nationals. It is difficult to gauge the size of this workforce but ONS estimates suggest that in 2015 **around 22,000** EU-

born workers were employed in UK agriculture. This represents a rise of **41 per cent** since 2011, and around **20 per cent** of agricultural workers (Horizon 2016).

Use of migrant labour in farming predates Britain's EU membership but free movement of labour has made it easier to recruit from right across the EU. Migrant labour is sourced in a variety of ways, including the Seasonal Agricultural Workers Scheme (SAWS), direct recruitment overseas, and working with 'gangmasters'. Even in areas of higher unemployment relatively few British workers take up this kind of employment; its seasonality may be one factor (MAC 2013).

Depending on the terms of Britain's withdrawal from the EU, farming (and potentially also tourism, see below) would need to replace this workforce. New SAWS-like schemes could allow migrant workers to enter the UK while limiting the length of their stay and the kind of work they can do. Yet this is not entirely straightforward. Such a seasonal worker scheme is likely to have an impact on migrant workers' integration; for example, an enforced limitation on length of stay would reduce incentives to learn English and integrate into communities. The Leave vote in the EU referendum had been highest *not* in areas with high migration, but instead in those where overseas-born populations have risen sharply following a long history of very little migration – that is, where integration has been hardest. There is a risk of responding to concerns around migration by stoking their causes, in a bid to maintain access to employees.

4.2.2 Food production

Changes to agriculture mean changes to how Britain eats, and policymakers must answer the question: does it matter where our food comes from? With high levels of urban living and the convenience of supermarkets, consumers may not care where their food comes from as long as it is cheap and easy to buy. After all, few people scrutinise the origins of their t-shirts, dishwashers or printed books.

But is this a good long-term basis for food sustainability, security and quality? Should food be regarded as 'a unique class of commodity' (Foresight 2011) which impacts health, wellbeing, social life, culture, community and family relationships and issues beyond economics or even nutrition? As such it demands 'integrated policymaking' in a way which is true of few other categories of production (ibid 2011).¹⁰ The NFU stresses the importance of financial viability for producers to underpin food quality and security, and to support the UK's food and drink industry. Food production is economically important; in 2014 the 'agri-food' sector contributed £106 billion to GVA, and employed 13.5 per cent of the UK's workers, *not* including agriculture and fishing (Defra 2016a).

The UK's 'food production to supply ratio' in 2015 was 62 per cent; this represents the farm-gate value of raw food production, divided by the value of raw food consumption, and offers a broad indicator of how

¹⁰ Arguably energy might also be considered a 'special kind' of commodity. While its cultural significance is less potent than that of food, energy *security* and the question of whether a nation needs to control as much of its energy supply as possible are important considerations.

well UK agriculture can meet consumer demand (Defra 2016a). The UK supplied 52 per cent of the food consumed here; a further 29 per cent came from the EU (ibid).

Food and drink exports grew between 2004 and 2013, although within this only beverages (led by the Scottish whisky industry) have a trade surplus (Defra 2016a). There has been a slight fall in overall food exports since 2013, although some categories of product have seen increases (cereals, vegetables and fruit, and animal feed). The potential for food exporting as a growth area should be considered in planning replacements for the CAP.

And British producers also provide important inputs to the value chains of food processing. This subsector makes up the highest proportion of British manufacturing output, at 16 per cent (Rhodes 2015). Changes to incentives for food production will have knock-on impacts elsewhere in the economy.

Consumer priorities for food include price – there is a 'de facto cheap food policy' (CPRE 2016), and UK households spend a relatively low proportion of their income on food compared to other Europeans. However, quality and safety are powerful considerations and 'food scandals' can have a major impact on customer behaviour. Even so, it is probably fair to say that they represent isolated instances rather than a holistic interest in the sources of food.

4.2.3 Agri-tech

'Agri-tech', or the application of science and technology to agriculture, is a rapidly growing industry globally and in the UK. A sector-specific strategy to nurture growth in this area was introduced in 2013 (HM Government 2013); at that date the estimated GVA of agricultural activities *other* than core production was estimated at around **£4.3 billion** annually.

The strategy seeks to integrate established strengths in science and in farming, and to link these to wider policies for trade, investment and international development (ibid). Measures include:

- an Agri-Tech Catalyst offering a single fund for all projects, including dedicated funding for those which support international development.
- government-funded (£90 million) centres for agricultural innovation to develop new technologies and processes.
- a focus on data and informatics in agriculture; skills and workforce development; alignment of industry and public sector research funding; and measures to increase UK export and inward investment performance.

Well-embedded knowledge and expertise in 'practical' farming underpin this burgeoning sector, which in our case studies was seen most strongly in North Yorkshire and New Anglia. Universities and research centres play a crucial role, as does a large established business base with strong infrastructure for key sectors such as chemicals. Effective partnership development and working opens up opportunities for SMEs and farmers who otherwise would lack the time, resources and knowledge to innovate and embed new practices. 'Grassroots' farmers and SMEs are in contact with scientists who can apply their expertise to issues and develop solutions which are then scaled up. Yet there are significant geographic 'gaps' in university or higher education provision in the UK which 'match' with rural areas (RSN 2015).

4.3 HIGH-TECH INDUSTRIES

4.3.1 Advanced manufacturing

Manufacturing accounts for almost exactly the same proportion of GVA in rural areas (**13 per cent**) as in predominantly urban ones outside London (12 per cent). This is only slightly higher 'urban with significant rural' areas than in predominantly rural ones. In our case study areas manufacturing showed strong GVA growth.

Food manufacturers often locate plants in rural areas, supporting farm income and creating employment. Opportunities to link agricultural technologies and food processing could help to make British production more reliable (for example by using 'big data' to plan crop planting systems, or biological science to reduce the incidence of animal disease). With a weak pound, domestic agriculture may be an even more important supplier of raw materials for food manufacturing.

However food is not the only product of rural industry, and many 'advanced manufacturing' companies have sites in rural areas. Incentives include:

- Land availability, relatively low operating costs and access to transport hubs such as ports.
- Proximity to natural assets, for example in Cumbria the relatively sheltered coastline is home to the Barrow-in-Furness shipyards operated by BAE Systems, and to a substantial subsea and marine cluster.
- The offer to skilled workers of a high quality of life, a pleasant living environment, and lower living costs than in many major cities.

There are some challenges for advanced manufacturing in rural areas:

- Connectivity can be poor, limiting access to export opportunities, domestic trade, and supply chains.
- For smaller companies poor digital connectivity is a major problem.
- Plants can be isolated from industry clusters which support innovation, workforce development, and competition. Links with universities, 'catapults and catalysts' and research centres are valuable but vary between regions.
- Skilled workers may be unwilling to move to areas where it could be difficult to build a whole career outside one business.
- Access to growth opportunities and business support can be limited; rural areas need models which are tailored to their needs, especially for SMEs (see also HM Government 2015).

4.3.2 Energy generation

The natural assets of rural areas make them important sites for energy generation. This is a topic which again raises key questions about the future role of rural areas in the whole economy. Just as we need a sustainable food supply, how will we make sure that energy supplies are sufficient in the long term? How will we meet carbon reduction targets and manage climate

change? And how can we protect the quality of the rural environment while generating both clean power and economic growth?

In Cumbria the UK's largest nuclear site (Sellafield) is a major employer, and its presence has allowed a relatively isolated part of the region to grow a cluster of world-leading specialist companies with international reputations and export markets. This in turn brings a skilled, relatively well-paid population to remote Copeland, creating demand in the local economy. As nuclear becomes an important low-carbon energy source, the value of this asset will only increase and increasing the 'nuclear portfolio' of rural England could bring jobs and prosperity. However, the cost of new installations is very high and public opposition may also be a problem.

Renewable energy draws on natural assets; wind farms, tidal energy and hydroelectric schemes. These do not carry the same perceived risks – or huge financial costs – of nuclear plants, but public objections on aesthetic and some environmental grounds (for example danger to birds and wildlife) are frequent.

Biofuels are the focus of many agri-tech projects and may offer opportunities for diversification to some struggling lowland and arable farmers. Other schemes use the waste products of farming in generating energy. The UK government has committed to phasing out coal-fired power stations by 2025, and conversion to biomass will support this. A UK government outside the EU might be freer to invest and direct policy for changing sources of energy generation.

Even more controversial than nuclear energy is 'fracking', for which there are several proposals in rural areas. Several local authorities have pledged not to allow fracking in their areas, and public opposition is vocal. The extent to which national government overrules local government to allow fracking will be key in determining how it affects rural economies – especially where that local government holds additional devolved powers and is accountable to a local electorate.

4.4 PLEASANT LAND

4.4.1 Environmental management

Under the CAP many aspects of environmental management are placed in the hands of farmers, effectively becoming 'by-products' of the agricultural practices which are incentivised. But if some farms become effectively unviable without CAP subsidies, these could become 'core' activities for large parts of the countryside.

Cao et al (2009) modelled the impact of a system where *all* farm support is shifted to Pillar 2-type schemes and allocated in response to environmental practices, with an increase in land 'out of agriculture' due to unviability without Pillar 1-type subsidies. They estimated the costs of operating such a system efficiently as being between £1 billion and £3 billion, a very substantial increase above current levels.¹¹ Active environmental management demands a good science base and a high

¹¹ These calculations do not take into account the impact of Pillar 1 removal on farm viability, wider socioeconomic costs for rural areas, or the advice and training needed to support a Pillar 2 only framework.

level of expertise for those involved, whether they are currently also farming or not.

Environmental management is important for more than purely aesthetic reasons. Flooding has had a devastating impact on rural and urban economies in the past decade and effective responses are urgently needed. Making flood prevention the 'main thing' in at least some of the crucial upland areas could have considerable wider benefits. Promoting biodiversity has less visible but equally important functions, for example ensuring that pesticides are used responsibly to maintain bee and other populations, and sustaining soil quality to ensure the future of farming. And good environmental management protects the natural assets on which the tourism sector and the amenity value of rural England and Wales depend.

The environmental impact of activities in rural areas goes beyond the agricultural sector. Energy generation and manufacturing help to generate GVA, but can also change the visual character of an area and bring other changes, such as increased traffic flow. And a range of factors, including high levels of road traffic to remote places, mean that rural areas tend to have a relatively high 'carbon footprint' resulting from vehicle emissions and domestic use (Pateman 2011, ONS 2011).

4.4.2 Tourism

Tourism is a major sector across all kinds of rural area. International visitor numbers are on the increase; 2015 saw the highest number of visits since records began (1961), with **36.1 million** overseas residents coming to the UK – the vast majority of whom were on holiday. Rural areas rely on both international and domestic tourism, which creates wealth and jobs in sectors including accommodation, hospitality, leisure, transport and retail. Seaside areas and larger towns within rural settings have the highest proportion of overnight visits, while towns in a rural setting have the highest number of day trips (ONS 2011).

The 'character' of rural land use, including agricultural land use, is an important part of what brings tourists to rural England and Wales. The environmental management practices of farmers and the core activities of farming itself are among the things which 'sell' the countryside as a place to visit. For example, traditional farming activities such as herds of heritage breeds of sheep and cattle may become tourist attractions in themselves as well as the source of local, high quality products.

Many rural tourist businesses are small and 'independent', and also innovative; in our case study areas new enterprises were being established in ecotourism, recreation and sports, and artisanal food production. However, the size of these businesses and their small employee numbers could bring challenges:

- Entrepreneurs who are busy running a business may miss opportunities for promotion and expansion, lack time to access business support, or use poor management practices.
- Diverse skillsets needed to run a successful business (for example customer service skills, financial management, marketing and promotion, 'core' activities such as craft or cooking); these may not be available or affordable.

 Micro-businesses in tourism need good links to one another and to organisations which can promote the value of a whole area as a destination.

Digital connectivity, including 'superfast' broadband, is important. Customer expectations are often shaped by the 'offer' of cities with well-resourced tourist offices and expert digital marketing teams. That means high-quality, informative and reliable websites, with booking systems which are easy to use and the opportunity to book accommodation, travel and activities at the same site. Rural businesses keen to compete with cities and international destinations need the skills and good connectivity to offer these, especially if they seek the more lucrative overseas visitors.

The workforce in tourism also includes a relatively large number of migrants; it is estimated that EU nationals make up around 27 per cent of employment in accommodation and in food and beverage services (Horizon 2016; these figures relate to the whole economy rather than just to rural areas). Again these are often highly seasonal jobs (Janta et al 2011).

4.4.3 Amenity value

Rural areas offer many attractions as places to live: more space and less traffic than towns, leisure opportunities and close-knit communities. These will underpin at least some of the trend of internal migration to the countryside. Skilled workers and wealthy retirees create demand in rural economies and – in the former case – make rural areas more attractive as locations for businesses which in turn boost growth and employment. However, these residents also seek good quality and accessible services; cuts to these pose a potential threat to the attractiveness of rural living.

Rural areas have relatively high rates of self-employment (Defra 2016d) partly because of entrepreneurs who are keen to live there and plan to support themselves by setting up their own business in 'something you can do anywhere'. They rely heavily on digital connectivity. Rural entrepreneurs may be less likely than urban ones to create jobs for others if their primary motivation for starting a business is to gain independence and have the option of living where they most want to.

Residents who have been attracted by the 'amenity value' of the countryside may oppose moves to improve the infrastructure or making the innovations to promote growth. People who chose a place to live because of its natural beauty are unlikely to welcome a wind farm, factory or new road, or farming practices which potentially change its character. Once again, the balance between preserving character and natural assets, and assuring a viable economic future comes into focus.

This becomes very concrete when planning systems for rural areas are considered. Many of the actions which support growth and viability involve contact with planning. In our case study areas the planning system was mentioned as a barrier to business growth and development, even where proposals are developed with sensitivity.

4.5 SUPPORT FOR BUSINESS AND COMMUNITIES

4.5.1 Business support for rural areas

Rural areas need different kinds of business support. Priorities include promoting innovation (especially in highly 'traditional' industries such as farming and tourism) and supply chain development. As the sector mix of the countryside changes radically with withdrawal from the EU all of these will only become more important.

High rates of self-employment, business births and micro-businesses demand different approaches to job creation. Rather than attracting major employers to set up a plant in one part of a large geographical area, a key route to job creation may be via high quality support which gets small businesses started on a sound footing and helps them to survive. Similarly there may be considerable impact if a LEP helps a hundred businesses with two or three employees to add two or three more.

Business support, including access to skilled staff, training and mentoring is important for rural growth (Turner 2014). Yet rural small businesses may encounter difficulties in accessing this in its conventional forms. There is some track record of success with 'mobile' workshops and advice visiting rural 'hubs', or facilitation of clusters and collaboration in sectors which are vulnerable to isolation – again, agriculture and tourism are examples. Engagement and information present real challenges for LEPs and others where geographical distances are large, and hard-pressed business owners struggle to keep going – let alone learn, innovate and change.

4.5.2 Sustainable and fair rural communities

The percentage of people living in income poverty is lower overall in the countryside than in urban areas, but deprivation and inequality still exist. Rates of *pensioner poverty* are very similar to those in towns, although child poverty is much lower in rural areas and household poverty is slightly less common (Defra 2016b). Overall the percentage of rural households and pensioners in relative low income before housing costs has *increased* recently, the percentage which remains in relative low income *after* housing costs remains stable (Defra 2016i).

Relatively low wage levels in parts of some key sectors may contribute to aspects of rural poverty. Although an end to the free movement of labour could open up additional job opportunities, some of these may be seasonal or relatively low-paid. Changes such as investment in business development and skills will bring benefits in the long term rather than the short term (de Hoyos and Green 2011).

The average rural house price is around £25,000 *above* the average urban one, at £297,800 compared to £272,000, which represents the latest point in a long trend of higher house prices in rural areas (Defra 2016c). Rates of house *building* are slightly higher in rural areas but housing is less affordable; the average lower quartile house price was 7.9 times the average lower quartile earnings, compared to 7.1 in urban areas. Private rents are also slightly higher in rural areas (Defra 2016i).

In highly desirable locations both quality and prices are high. Demand is driven by higher-paid workers, including commuters, and well-off retirees. Second home ownership and holiday lets might also play a part. At the same time low-paid workers may struggle to find affordable or good quality properties. One outcome of these housing issues could be highly visible inequality, with 'pockets' of affluence and deprivation which are geographically close but socially segregated.

Some rural areas with a high volume of second home ownership have proposed planning regulations which seek to mitigate the impact on local housing markets, and in particular the problems in access to housing ownership and affordable rents for first time buyers and low earners. For example in St Ives, Cornwall, residents recently voted for measures which would effectively restrict purchase of newly built homes to full-time dwellers, a decision which was upheld following a legal challenge.¹²

Some expenses specifically associated with rural living may be 'worth it' for wealthier residents, but drive those on low wages further into poverty. Travel costs can be high especially where public transport is limited, or the only option is to run a car (Tinson et al 2010). Access to services and work is a significant factor for people living in poverty in rural areas, and may be a barrier to taking opportunities which would support improved skills or work-readiness (McSorley 2009).

4.6 CONCLUSIONS

Arguably all of the principal sectors of the rural economy are in periods of transition, even without the disruption of Britain's withdrawal from the EU. Agriculture faces challenges on many fronts, around its workforce, its productivity, the price it can demand for its products, its practices and the availability of land. Yet at the same time there are new opportunities for diversification away from primary agricultural activities, and for producing crops which supply the burgeoning food processing and agritech sectors.

The latter is growing quickly and represents an important destination for agricultural production and an important creator of value in its own right. However, like other high-tech industries it depends on skills, links between innovators and opportunities, and funding to undertake research and bring products to market.

Food production is also at a crossroads. The UK currently imports around half of the food consumed in the country, with cheap imports making this viable and even an attractive option for a population seeking cheap food. However, the short-term impact of a weak pound and uncertainty over what tariffs might apply once Britain is no longer an EU member may make this position less sustainable.

Advanced manufacturing of various kinds is an important part of the economy for many rural areas; in fact it tends to account a very similar proportion of GVA in rural and urban areas. A range of factors, including land availability, proximity to transport links, and the opportunity to attract skilled workers make the countryside a good place for manufacturing businesses. And the presence of large companies in a rural setting can lead to the development of clusters and supply chains; the same effect can be seen in the energy generation sector.

¹² http://www.bbc.co.uk/news/uk-england-cornwall-37938885

Manufacturing relies on good digital and physical connectivity, and sufficient 'amenity value' of rural places (and services) to build a workforce which can keep companies competitive. Manufacturing employers therefore need to build growth and add value with as little impact as possible on the natural environment. This is even more important for companies engaged in energy generation, which is also an important sector for many rural areas. Indeed, proximity to energy producers may be an additional draw for manufacturing firms.

Just as dependent on the quality of rural settings and the diversity of rural places is the tourism, leisure and culture sector. Many of its businesses depend on tradition and heritage, but this is a sector where innovation is important; in extending the range of activities and attractions on offer, increasing the productivity of a service sector, and in using digital marketing and management to present a 'modern' offer to visitors from around the world.

Finally, rural areas need distinctive kinds of support for businesses and communities. High numbers of micro- and small firms, as well as geographical dispersion, mean that conventional approaches to business support may not be effective. And 'quality of place' depends on the social as well as the physical environment. Distance may bring challenges for service provision, and add an additional element to the 'poverty premium' faced by workers on low wages.

5. RECOMMENDATIONS

5.1 EIGHT PRINCIPLES FOR THE FUTURE OF RURAL POLICY

Our recommendations are informed by two key observations. One is that the modern rural economy needs an approach which integrates policy for different issues and sectors in a place-based model. The other is that withdrawal from the EU and the Common Agricultural Policy brings an opportunity to achieve precisely this.

Without the CAP, Britain will need a new policy for agriculture and land management. Many countries subsidise their agricultural sectors, and direct payments are a core part of this in comparable cases to that of the UK (Allen 2016). We propose that a system of approaches to farming subsidies should be based on the following principles.

- *Principle 1*: Subsidies should be designed to achieve a farming sector which can sustainably meet the UK's needs in food production, environmental quality, supply chains for existing and emerging agri-tech businesses, and rural places which support the needs of non-agricultural businesses and rural communities.
- *Principle 2*: Policy should be aim to achieve a level of food production which is sustainable in the post-EU trading environment, for farmers and consumers; this must be based on a thorough analysis of food needs and future food needs, and the likely impact of different regimes for tariffs and standards.
- *Principle 3*: Environmental protection and sustainability issues, including flood management, should be given high priority and policy should encourage multi-agency working across political and economic geographies where this can address specific issues.
- *Principle 4*: Policy for agriculture and other rural sectors should be shaped by the need to support decarbonisation right across the economy, including in rural areas.

As noted above, agriculture is a key part of the rural economy but by no means the whole story. We suggest that, rather than a 'like for like' replacement for the CAP, the UK should work towards an innovative approach for the rural economy which integrates support for agriculture with measures addressing the full range of needs of rural *places*, including both the sectors on which these depend and wider issues such as infrastructure, communities and skills. This approach will demand a carefully planned transition framework, which will almost certainly cover several years or even as much as a decade. However, the opportunity and also the need for transformative changes is too important to be missed.

The development of a 'place-based industrial strategy' brings a further opportunity, because of the unusual relationship between sectors in rural areas and their 'places'. Many sectors which predominate rely heavily on particular kinds of place, and their impact on those places is immediate and far-reaching. However, this is an extreme case of the same kind of relationship which all industries have with places, and not a different kind of relationship altogether.

- *Principle 5*: Agriculture and land use neither define the rural economy nor stand in isolation within it, although their impact on land use and management and their uniqueness to rural England and Wales give them a special status. However, they are part of a diverse and diversifying rural economy, including manufacturing, energy generation, tourism and other sectors which depend on how agriculture shapes the landscape.
- *Principle 6*: The rural economy depends on many of the same drivers as the wider economy (for example connectivity, skills training, housing), although these may encounter challenges which are specific to the rural case.

Rural areas are highly diverse with different needs in different places. Their complex histories, internal and external relationships, and *mix* of rural types and factors all contribute to this. Therefore devolving a large proportion of the relevant powers will provide solutions which are tailored to local conditions, agile in the face of rapid change, and effective in providing information, data and learning to improve ongoing policy development and learning in an environment of dynamic change.

However, matters such as food sustainability, environmental management and decarbonisation clearly need decisions at a national level – they relate not only to national, but to international developments. We propose the following framework.

- *Principle 7*: Clear *national* guidance is needed on issues which cut across local borders, and which link the rural to the general economy. These include an approach to food self-sufficiency and sustainability within the trade deals struck on Britain's exit from the EU, future energy needs, the potential and role of rural areas within the new industrial strategy, new frameworks for vocational skills, mitigation of climate change (including meeting our international obligations), and flood management.
- *Principle 8*: Local authorities should work together across broad functional economic areas in order to draw down powers to shape policy and allocate funding locally, demonstrating how their decisions will contribute to the national goals and imperatives which have been established and how they will make a contribution which reflects their distinctive assets and opportunities.

It is too early to propose actual levels of funding or approaches to key issues; these depend on many areas of policy which are still emerging, including the nature of Britain's settlement with the EU and attendant trade deals, the new industrial strategy, and policy on energy generation. However, it is important that underpinning questions (for example on the future of food and farming) are addressed earlier rather than later, and that the most effective structures of central and local decision-making are established.

5.2 RURAL DEVOLUTION DEALS

5.2.1 Aims for rural devolution deals

To best meet this balance between *national* priorities and policy which reflects the diversity of and within the rural areas of England and Wales, we propose the development of 'rural devolution deals'. The overarching aims for these are as follows.

- The UK needs a supply of good quality, affordable food and other agricultural outputs. This should meet the country's needs for consumption, for export, and to supply the expanding agri-tech industry. Its production methods should be sustainable over the long term, in relation to environmental impact, workforce, and rural community.
- 2. Rural areas can make a unique contribution to the UK industrial strategy and rural populations. Therefore they should benefit from equitable economic growth and from opportunities to participate in the modern global economy. Some sectors have a clear relationship to rural assets and traditions (for example energy generation and agri-tech); others rely on or have a particular relationship with rural areas (for example advanced manufacturing, digital). Plans for the services sector must also reflect rural issues, for example for tourism and for business services in rural areas.
- 3. The ways in which land is used and managed in rural areas impacts directly on their 'asset value' for agriculture and other rural businesses, on the quality of life of rural residents, on the preservation of culture and traditions, and on nature conservation. However, impacts go beyond the rural areas themselves, for example in relation to flooding, 'carbon footprint', and the conservation of soil, air and ecosystems.
- 4. The rural economy depends on strong communities and the attractiveness and sustainability of the countryside as a place to live (or to choose to live).
- 5. Issues which are important for economic development everywhere may be particularly challenging in rural areas; these include connectivity (physical and digital), skills, housing, (in)equality, and service provision.

5.2.2 A framework for rural devolution deals

Rural devolution deals will depend on a strong relationship of information sharing and trust between central and local government, and also between diverse stakeholders in the rural economy. We propose a framework for initial dealmaking, and for the ongoing review, renegotiation and update of rural devolution deals to reflect national and global developments.

These proposals draw to some extent on the model used in Norway, where regional and rural policy are brought together in a range of policy institutes. Recent reforms mean that

'...the policy is less shaped by direct involvement from above, and more focussed on the capabilities and willingness of communities and regions to base their development on the physical, human and intangible resources that are indigenous to that locality.' Angell et al 2016 This reflects a shift, initiated in the 1980s, away from rural policy instruments which focussed on specific sectors to 'more industry neutral instruments' and greater local control of funds. Over subsequent decades responsibility for regional development has been delegated to Norway's county councils (in 2003). Policy addresses places rather than sectors and considers broad regional development issues including population, labour market, living standards and services, infrastructure and transport, environmental protection and innovation. Levels of potential subsidy are set nationally, but sums are allocated locally to businesses of specific sizes including, but not limited to, agricultural enterprises. The country's 'Agricultural Agreement' has an explicit goal of securing 'agriculture all over the country' through direct support, innovation and diversification (Angell et al 2016).

1. Advisory group on the rural economy

Central government should establish an advisory group consisting of national stakeholders in the rural economy, and representatives from devolved regional administrations. The group will also include representatives of BIS engaged in formulating industrial strategy, and experts in agri-tech and decarbonisation.

This group should establish a framework for setting short- mediumand long-term minimum obligations and maximum entitlements to be included in rural devolution deals.

The group should convene initially to establish the framework and then annually to review it, monitor its progress, and update it as required.

Smaller working groups should meet more frequently, as required to address specific emerging issues.

2. Framework for rural devolution deals

The framework should set out 'minimum obligations' and 'maximum entitlements' for devolved areas under rural devolution deals. These will be informed by the following elements:

- A position on agricultural outputs, reflecting sustainable and strategic levels of food production, food exporting, and supply chains for agri-tech and food processing.
- Identified opportunities for innovation, especially where these relate to the aims set out above or can help to resolve identified issues, manage emerging ones, boost growth and exporting, or strengthen local supply chains. Innovation which supports decarbonisation should be a priority.
- Ongoing, emerging and urgent (or potentially urgent) issues in environmental protection, conservation and sustainability.
- A strategy to decarbonise the rural economy and maximise the potential of the rural economy to support decarbonisation overall.
- A position on the role of the rural economy in the UK's industrial strategy.
- An up-to-date and comprehensive analysis of rural needs in relation to infrastructure (including digital infrastructure), skills and housing, taking account of rural issues which arise from the business community in rural areas and from other characteristics such as remoteness, sparsity of population, and so on.

• Goals for rural development, growth and outcomes.

This framework should include provision for collaboration between areas and identify key collaborations which may be needed throughout the life of rural devolution deals. It should also set out how a national response can be made in emergency circumstances (for example natural disasters, a major disease outbreak, etc.).

Devolved regional administrations, working with their LEPs and other local stakeholders, should produce a characterisation of the rural aspects of their regions. This will guide the 'offer' which they make to central government in their rural devolution deal negotiations. It will also be used by national advisory group to gain an accurate and up-to-date picture of the rural economy across the UK.

The characterisation should include information about the following.

- Sectoral mix in the rural economy, including current levels of contribution to agricultural outputs, engagement in agri-tech, the prevalence of other sectors such as tourism, energy generation, advanced manufacturing etc.
- The proportion, type, mix and use of rural land within the area.
- Population distribution; services and skills issues.
- Internal and external links, for example hub towns, coastal facilities and ports, and commuter belts for neighbouring cities.
- Key threats (economic, environmental, and so on) and opportunities.
- Infrastructure needs, including digital infrastructure.

3. Negotiating rural devolution deals

Following guidance set out in the national framework, devolved regional administrations should work closely with LEPs and other regional stakeholders to develop an 'offer' to central government, indicating how the area will:

- Use the support available to meet their minimum obligations and add value in the following areas: agricultural production; environmental protection and decarbonisation; placebased industrial strategy as this relates to rural areas; rural development and placemaking; and infrastructure.
- Collaborate with neighbouring areas (as required by the national framework and additionally) to meet outcomes.
- Contribute to regional and national growth and goals.

A key part of rural devolution deals will be a framework of payments which effectively replaces those currently made under the Common Agricultural Policy. However, what is proposed here is *not* a 'like for like' replacement.

Rural devolution deal negotiations will be conducted between central government civil servants and officers in devolved regions; the advisory group will not participate directly in negotiations.

4. Elements of rural devolution deals

Rural devolution deals will include the following financial and other elements.

- Subsidy payments to active agricultural producers, comprising:
 - A payment by acreage and 'headcount' of stock, set at a national rate. The structure of these payments should be designed to *avoid* the 'skewing' of CAP payment towards larger and wealthier landowners; in practice this may involve payments which are 'banded' by acreage, with the bulk of payments relating to smaller acreages.¹³
 - Additional payments which reflect farmers' engagement in land management and conservation practices which meet *both* national *and* local environmental needs, mitigate identified local risks, and promote decarbonisation of the local and national economies.
 - Additional cash payments which incentivise innovative practices in production *and/or* environmental management/decarbonisation.
 - Additional cash payments which incentivise engagement in farm support for agricultural and other skills development, and research activity, which supports rural growth, development and environmental conservation.
- Support for innovation, research and development, and skills provision, and/or for coordination of these activities by regional stakeholders (for example universities, the private sector). Rural devolution deals will involve a specification of how rural teams in local areas will support producers and other rural businesses to access research and development, skills training which boosts innovation and effective production/environmental management, and collaboration with other stakeholders. Providing this through rural devolution deals would effectively offer farmers a 'one stop shop' for these opportunities, and a clear and effective point of contact. It also offers a clear and effective route for collaboration between neighbouring regions. The integration of these elements into support for agriculture is an important practice in several countries, for example Australia, New Zealand and South Korea (Allen 2016, Cockfield 2015).
- Transparent and 'holistic' funding to support rural growth including:
 - Farm diversification, and establishment/expansion of other rural businesses including tourism and heritage; this will include collaboration between agriculture and other sectors where land management supports business formation, and also local provision of key infrastructure which can be used by groups of rural businesses, for example processing facilities, specialised business services and support.
 - Approaches to land and asset use which support rural growth, for example for business premises and housing.
- Plans for involvement in capital spending and infrastructure projects (including digital and broadband), tailored to rural needs and to specific local circumstances.

¹³ See Devlin and Wheatley 2017 for an example of how this could be achieved.

- Plans for engagement of rural areas in the wider industrial strategy, including:
 - Sector-specific plans for the contribution of rural areas through sectors where they have a distinctive presence, for example agriculture, agri-tech, energy generation.
 - 'Ruralised' plans for the contribution of rural areas to national sectors (for example advanced manufacturing, digital, tourism), proposing specific strategies to maximise the *distinctive* contributions of rural areas, to manage threats to their ability to make these contributions (for example in relation to skills supply).
- Funding for rural community building and 'placemaking', focussed on the contribution of local communities, services and quality of place to the rural economy.

5.3 SPECIFIC RECOMMENDATIONS

1. Central government should convene an advisory group on the rural economy, as proposed above, which will develop a framework for rural devolution deals. This will include guidance on 'minimum obligations' and 'maximum entitlements' for rural areas, relating to contribution to national food production and food sustainability, as desirable goals for these become established once post-EU trading relationships are known. Environmental protection will include flood prevention, meeting carbon reduction targets, and conserving the natural environment; the aim of decarbonising the rural economy (and indeed the economy more generally) should underpin this. Participation in the new place-based industrial strategy, reflecting the importance of manufacturing, agri-tech and other 'non-traditional' sectors in the rural economy and specifically rural patterns in the service sector. Capital spending to support rural infrastructure and economic development, with the extension of superfast broadband as a priority.

These should form the basis for negotiations with devolved local areas.

2. Local and combined authorities in devolved areas, working with their LEPs, should develop offers to government which set out how they will meet their minimum obligations and add value, using the funding and other support available to do so. Settlements granted would effectively replace current CAP payments *and* support rural development which works with and also complements development in agriculture in ways which support effective rural placemaking.

The support available in rural devolution deals will include:

- A reformed system of subsidies for agricultural producers, designed to avoid the inequitable aspects of CAP funding and incentivise good environmental management for sustainability, decarbonisation, innovation and skills development, and support for the wider rural economy.
- Support for innovation, research and development, and skills provision, coordinated locally and with improved accessibility for agricultural producers; support and effective routes for collaborations.

- Transparent and holistic funding to support rural growth, including farm diversification and effective asset management for rural business.
- Plans for involvement in capital spending and infrastructure projects, including digital and broadband infrastructure, tailored to rural needs and specific local circumstances.
- Plans for engaging rural areas in the wider industrial strategy, including sector-specific plans for 'distinctive' rural sectors (for example agriculture, agri-tech) and 'ruralised' plans for rural contributions to national sectors (for example advanced manufacturing, digital).
- Funding for rural community building and placemaking.
- 3. Central government should develop a progressive approach to food sustainability and security to underpin national and local obligations for food production. CAP has to a large extent operated as a *de facto* policy for food production. But food production is a key industry for rural GVA and employment, as well as for the future of rural areas and for the social life of the UK. A progressive approach would consider (among other issues) cost to consumers, prices for producers and processors, quality and health, environmental impact and the potential impact of future trading relationships.
- 4. Environmental protection should be considered at both national and local levels; the former should include directions for local areas to work together where this will add significant value, for example in flood protection.
- 5. The 2013 agri-tech strategy should be revisited and strengthened in the context of EU withdrawal and the new industrial strategy. Measures should include facilitation of relationships between primary producers and scientific experts in HEIs or industry.
- 6. Universities in rural areas and neighbouring cities should be incentivised to set up dedicated 'spin out' offices to identify and foster agri-tech collaborations with primary producers (following the model of successful institutions); a LEP network should be established to encourage links with 'out of area' HEIs which have research capacity and which could support agri-tech research and development.
- 7. The potential of rural areas as centres of excellence in advanced manufacturing and high-tech fields (for example energy) should be part of a place-based industrial strategy.
- 8. Rural connectivity should be improved in ways which affect its importance to rural trading and workforces. Broadband provision in particular should include options for 'non-standard' approaches which work better in rural areas than conventional urban solutions (for example satellite broadband, fibre to remote node, community schemes).
- 9. Workforce and skills issues should be addressed at the sector level to take account of issues such as: the potential impact of changes to free movement of labour; skills for development in agriculture and tourism; and how rural areas can attract and retain a pool of skilled labour for their key industries (including through the 'quality of life' which they can offer). The management of changes to free movement of labour in sectors which have historically relied on a large EU migrant workforce should also form a key part of this.

- 10. Business support in rural areas should reflect their distinctive business populations, for example high numbers of small- and micro-businesses, business start-ups which may rely heavily on digital connectivity, etc.
- 11. Devolution deals should include an element of rural 'placemaking' considering how rural communities and quality of life relate to economic growth and demand in local economies. This would include access to local services, the role of 'hub' towns within rural networks, and rural housing. This should include plans for the integration of migrant worker populations, taking into account changes to free movement of labour following EU withdrawal and any special provisions for rural workforces.

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