

Routledge Companion to Rural Planning

Section 3: Planning for the Rural Economy

Rural Innovation and Small Business Development

Abstract

Rural businesses from multiple sectors make an important contribution to growth and productivity and are affected by wider challenges that impact on local and national growth strategies. Rural firms experience practical challenges concerning the availability of business premises, planning regulations, access to support, recruitment of skilled staff, as well as lack of innovative technologies. In this chapter we consider innovation barriers and experiences in rural areas and introduce an exemplar case study of 'Rural Enterprise Hubs' in England. This chapter examines the process of innovation in a rural context and how rural enterprise hubs contribute to rural innovation.

Introduction

Rural economies are some of the most dynamic places in terms of growth rates and SME innovation (Deller & Conroy, 2017; Frontier Economics, 2014). However, how is rural innovation understood in policy terms, what hinders it, and how might barriers and obstacles be overcome? To explore these issues in more detail the chapter uses a case study of the rural enterprise hubs initiative in England, established to provide the vital networking and infrastructure needed to support rural innovation and small business development.

Innovation is the process of creating something novel, a product, ways of working or service (the invention), and introducing that novelty to the real world (OECD, 2005). This process is important as it is a mechanism by which value can be created and productivity increased. Schumpeter (1934) argues this occurs through 'creative destruction' - old, inefficient ways of producing products or providing services are superseded by new, more efficient methods. In this way productivity can be increased and value created for the economy. Closely linked to the concept of innovation is the concept of entrepreneurship. Entrepreneurs are often identified as the key actors in the process of innovation. For some, entrepreneurship is connected to new business formation (Stewart, Watson, Carland, & Carland, 1999). For others, just forming a business is insufficient; the process also involves a degree of novelty and improvement to qualify as being entrepreneurial (Schumpeter, 1934).

Typically, innovation and entrepreneurial processes are most often associated with urban rather than rural areas (Carlino, Chatterjee, & Hunt, 2007; Dvir & Pasher, 2004). This is in part due to the importance placed on flows of knowledge within innovation and entrepreneurial processes. With agglomeration of firms and higher density of knowledge networks in urban areas, new ideas can flow more readily between innovators and entrepreneurs (Cooke, 2002; Caniels & Romijn, 2005; OECD, 2014). There are also intangible benefits from this clustering of actors and high density of networks (Bathelt, et al., 2004)). Individuals circulate throughout this environment freely, both through formal processes (i.e. higher turnover of staff, business networking events or training and learning events) and more informal social networks, and it is through these interactions that both codified knowledge and tacit knowledge are transmitted. Studies demonstrate (Saxenian, 1994 & (Schoenherr, Griffith, & Chandra, 2014) that to create an innovative entrepreneurial environment, the ability to access both forms of knowledge are important.

In contrast to the dynamic image of urban economies, the narrative for rural areas tends to be that they are static and traditional, dominated by primary sectors, and comprised of low growth firms and 'lifestyle' entrepreneurs; who choose to start a business to achieve a work/life balance and are motivated by social and cultural aspirations rather than economic imperatives (Kalantaridis, 2004).

However, a review conducted by OECD (2014) details how these framings of rural innovation fail to capture the contemporary nature of rural areas, and that sustained, high levels of regional performance are no longer necessarily dependent on high population densities. Rural regions contain a diverse range of engines for economic growth, driven by enterprise, innovation and new technologies, across a host of new and old industries. However, rural areas tend to underperform in terms of the generation of patents (Carlino et al., 2007) the metric most often used to measure place-based innovation. The reach of formal, patent focused linear research-based innovation systems, reliant on scientific or technological discovery in universities, national governments and corporate R&D facilities, remains weak.

However, an overreliance on patent-based measures has led to the "mistaken assumption that rural areas are not innovative" (OECD, 2014, p. 10) and that to allow the potential for growth in all regions a place-based approach is required along with a "better understanding of how innovation can emerge in a rural setting and how governments can support and encourage it" (p.X). Contrary to this assumption, prior research identifies rural businesses to be more innovative than urban businesses in terms of new product development (Anderson et al., 2005; Phillipson et al., 2017). Moreover, the characteristics of rural economies, their limited local markets, lower business densities and distance to major markets can act as a spur to innovation as entrepreneurs innovate to overcome barriers to growth (Hubbard & Atterton, 2014). Alternative framings of innovation associated with open innovation models and networked and collaborative approaches may be more relevant in rural areas (Chesbrough, 2006). But what key barriers must be overcome to realise the full potential of rural innovation?

Barriers to rural innovation and small business development

Successful innovation requires a critical mass of human, financial and social capital (Drabenstott and Henderson, 2006). However, in rural areas several barriers may hinder the accumulation and successful application of such capital. For instance, rural businesses may suffer from small pools of local labour, limited business diversification, poor availability of external funding, and low-quality information communication technology (ICT) infrastructure (Huggins and Hindle, 2010; OECD, 2011; Kotey and Sorensen, 2014). Some of these problems may be more acute in rural areas where labour markets are typically shallower, with a smaller pool of skilled workers. Distance from major markets may also hinder innovation, particularly where ICT infrastructure is weak (Henderson, 2007).

Recent EU wide research (Tisawang, Gorton, & Phillipson, 2017) examines the adoption of innovative technologies by small and medium sized enterprises (SMEs). Data, from owners or directors of SMEs (in this case from farming and food related businesses), were collected from 8 countries, namely Bulgaria, Czech Republic, Greece, Hungary, Latvia, Italy, Slovenia and the UK. Survey respondents reported information on the type of technology adopted, their motives for doing so, barriers encountered on adoption of the new technology, as well as impacts on the business in terms of job generation, ability to access new markets, and firm profitability. SMEs encounter multiple barriers during the integration/adoption of new technologies, with the most common relating to a lack of funding/finance, integration costs, lack of expertise/skilled labour, inability to hire new employees with relevant skills/expertise, competition in the industry, and regulation / limited support by local agencies. Other barriers include a lack of appropriate external advice/technological skills, difficulties

in establishing effective collaboration with supply chain partners, and lack of consumer demand or stakeholder's interest.

The same research explores the link between the impacts of new technology adoption on the business and the barriers encountered in adopting the technology. For example whether SMEs benefit or not from job generation following adoption was not found to be associated with any particular barriers. However, rural SMEs that have not experienced improved access to new markets were more likely to have faced lack of funding/financial resources, lack of consumer demand or stakeholder's interest as their main barriers. SMEs with improved access to new markets were more likely to highlight competition in the industry as a barrier. Firms that did not witness improved profitability were more likely to report regulation/limited support by local agencies, lack of funding/financial resources, lack of consumer demand or stakeholder's interest, difficulties in establishing effective collaboration with supply chain partners as barriers to the adoption of innovative technologies. Overall, the study highlights that financing difficulties, unfavourable regulatory conditions and market risk are significant obstacles to the adoption of innovative technologies by rural SMEs.

Improving flows of knowledge is a vital component of the innovation process and in overcoming hurdles to rural innovation. For example the barriers to knowledge impact collaboration within supply chains and more generally the ability of businesses to obtain information about the innovation process, i.e. finding funding for innovation and advice from those with specialised knowledge. Two characteristics of rural businesses combine to create this knowledge barrier. Firstly, rural businesses tend to be smaller, often having no employees other than the business owner (Cosh & Hughes, 1998). There is often little spare capacity to engage in knowledge exchange and networking activity. Secondly, a higher proportion of rural businesses have no independent business premises, operating instead from the home (Taylor, 2008), which can act as a barrier to meeting other businesses and other commercial contacts.

The need to stimulate knowledge transfer (NESTA, 2007) both within rural areas and between rural and urban areas has long been recognised. Whilst developments in ICT provide a platform for many rural areas to participate in knowledge sharing activities irrespective of distance, physical agglomeration and location of the business (Cairncross, 1997), not all areas have benefitted and, given the quality of ICT connectivity, reach of ICT has been uneven. Moreover, the benefits of personal face-to-face connections remain a key component of innovation practice to facilitate the transmission of tacit as well as codified knowledge (Storper & Venables, 2004). This can be seen in an urban context with the proliferation of co-working spaces particularly in the digital and creative sectors (see for example Dunlop, 2017). Co-working and shared office spaces are one way of fostering inter-personal contact between entrepreneurs in a way that fosters collaboration and innovation. This is also being encouraged in several rural areas, with the next section presenting a case study of this in greater detail.

Case Study: Rural Enterprise Hubs in the North East of England

This section outlines a case study of a policy initiative to establish a series of 'enterprise hubs' in the rural north east of England to support small business development and innovation. In this project, an enterprise hub is the central point in a business network. This relates to both a physical network, a geographical place where individuals meet. It also relates to a node in the flow of knowledge, a place which transmits and circulates knowledge. In 2012 the north east of England was named as one of 5 Rural Growth Network pilot projects (RGN). Its aim was to improve rural growth and productivity. As part of the RGN program a work package was to focus on the provision and development of rural business premises. It has been known for some time that the provision of suitable rural business

premises is a significant barrier to growth for rural businesses. The NE RGN wanted to test a number of possible models for rural business premises: live/work units; 'smart working' and incubator space.

There was also a more fundamental issue of what a rural enterprise hub is and what it should do. To answer this question a review of rural business premises was conducted. The review found 18 enterprise hubs in the pilot area. The majority of these hubs were owned by the private sector (50%) with the not-for-profit sector owning a further 33% and the public sector owning the remainder. Interviews with hub managers revealed most offered very little additional services or support beyond renting the physical space. There was also little flexibility in either the tenure offered to occupiers or the space they could rent (Cowie et al., 2013).

Based on the initial review of rural enterprise hubs within the pilot area, a working definition of enterprise hubs was developed. From the initial interview data it appeared there are two factors which differentiate an enterprise hub from any other business premises. The first relates to the physical characteristics of the enterprise hub. Enterprise hubs tend to offer additional facilities and services which are not offered within a general business premises. For example Bergek & Norrman (2008, p.21) argue there are four features common to all business enterprise hubs:

- Shared office space, which is rented under more or less favourable conditions;
- A pool of shared support services to reduce overhead costs;
- Professional business support or advice;
- Network provision, internal and/or external.

In addition, there are also other benefits which relate to the flexibility in the terms of letting the premises. Flexibility in terms of length of tenure and the ability to move between larger and smaller spaces over time as the business grows or shrinks is extremely beneficial to growth businesses.

The second, less tangible factor which differentiates an enterprise hub from other business premises is the opportunity to share and exchange knowledge. Having space in an enterprise hub provides opportunities to the businesses to share of knowledge both with other business within the hub and externally with the wider economy. This knowledge brokering is a key source of additionality which enterprise hubs can provide. It adds value over and above the physical bricks and mortar of the building. Enterprise hubs become key nodes in the transmission and use of knowledge within the rural and regional economy.

An initial analysis of the rural hubs with the Rural Growth area also highlighted an interesting distinction between hub types. These were characterised as either 'Hive Hubs' or Honey Pot Hubs'. Hive Hubs contained mainly business to business enterprises without necessarily having customers attend the premises. In contrast, Honey Pot Hubs contained mainly business to customer enterprises often in the craft and arts sector. These hubs relied on getting customers to visit the hub and often contained ancillary attractions such as a café or were built around an existing tourist attraction (Cowie et al., 2013).

The first phase of the project highlighted the needs of the hubs themselves. Many of the hubs were quite vulnerable. They needed business and innovation support in the same way as their tenants. This was recognised in the second phase of the project which instigated a number of projects to support hubs and allow them to be more innovative. One example of such an innovation was the use of pre-fabricated office spaces, known in the project as 'office pods' [*would be good to have a picture here if possible.*] Two of the enterprise hubs experimented with these office pods as a cost-effective way of creating more flexible office space. The pods were fully serviced and self-contained office. The hubs were able to commission a variety of sizes which allowed them to provide flexibility of office space to their tenants. One of the hubs that commissioned the hubs via the RGN found them so successful they

bought a further 3 themselves. They were then able to accommodate businesses as they grew. The most successful example of this moved their home-based business to a 2-person pod. As they grew they moved to a 4-person pod and ultimately graduated from the hub to their own office space elsewhere. In terms of innovation, the hubs themselves have innovated to create new business space. The pilot project also found two innovations, the live/work units and 'smart workspace' did not succeed. These types of hubs were not seen as being attractive and needed in the pilot project. The live/work unit idea was abandoned before any hubs were created and the smart workspace hubs failed to attract sufficient interest and so were converted to more traditional works spaces.

Interestingly these experiments, the office pods, live/work units and 'smart workspace' were tested by the not-for-profit and public-sector hubs. This highlights the need to understand innovation can be instigated by the public as well as the private sector. Indeed Mazzucato (2015) argues it is the state that can play in integral part of the innovation process through fostering an entrepreneurial environment.

In phase two of the project the hub occupiers were investigated. A survey of rural enterprise hubs in the pilot area found that on the whole businesses occupying enterprise hubs were younger but employed more people than the general NE rural business population. In terms of their markets, hub businesses had fewer very local customers but more regional customers than the general NE rural business population. Hub based businesses were also more likely to serve other businesses this is particularly striking given the sample included businesses in the 'honey pot hubs' which target private customers.

In terms of the role enterprise hubs play in the rural economy, one of the most interesting findings of the project was the fact that 58% of hub occupiers had moved to the hub from home. In addition a further 10% had started their business in the hub. This indicated that enterprise hubs were playing an important role in developing new and early stage businesses. The exact nature of this role was explored further with businesses asked what their primary motivation was for moving to the hub. The majority of respondents cited that rent and flexibility of tenure has the biggest influence in their decision. More intangible benefits such as the opportunity network or collaborate with other businesses and gain access to business support was much less important.

This can be contrasted with what businesses feel are the barriers to growth. In both the INNOGROW and Enterprise Hubs research, collaboration and better business support were cited as a significant barrier to growth. The finding suggests that hub occupiers do not see the move to an enterprise hub as a way of achieving better access to knowledge. Or at least not initially.

The nature of hub occupiers may be key to understanding this issue. As mentioned above, 2/3rds of hub occupiers have either started their business in the hub or are moving on from a home-based business. In both instances taking on commercial business premises will be a significant commitment. Having flexible terms will therefore play a significant role in the decision-making process. Once a business has secured suitable space on favourable terms they can start to develop the networks needed to overcome the barriers to growth. The need to overcome isolation and gain access to better business support start off a latent needs but then crystallise once the functional problem of finding suitable face has been resolved. The business owner was aware of the potential to collaborate and gain access to business support but it played a secondary role in the decision making process. This has implication for the way rural enterprise hubs are promoted and how business support and networking activity is delivered through the hubs.

A post-hoc evaluation to the RGN program highlighted the rural enterprise hubs as one of the more successful elements in the overall project (SQW, 2016). The project originally planned to create 6 hubs

but this was expanded during the project to 11 as they proved to be very successful. One aspect of the rural enterprise hubs that was not as successful as expected was the provision of hot-desk co-working spaces. It was anticipated that the dispersed isolated nature of home-based rural businesses would mean there would be a demand for space to work outside the home. This was not the case and many of the hot-desking spaces have been removed. Notwithstanding the failure of hot-desking in a rural context, the remaining program highlighted how it is possible to create environments which mirror what could be considered a more urban way of working. The high occupancy rates found in the hubs and the anecdotal evidence¹ of businesses growing and collaborating with other hub occupiers highlights the opportunities for rural entrepreneurship once some of the barriers are removed. There has also been individual examples of innovation by the businesses in the hubs directly as a result of their presence in a hub. One business was able to adapt and transfer their service to a new market following discussion with other hub members and the hub manager. Another hub occupier is attempting to introduce a new product to the market in the UK and is using many support services from other members of their hub. Both these examples would not have happened were it not for the connections made through the hub and the ability to gain both tacit and codified knowledge through the hub network.

The hubs initiative is itself an example of rural innovation. An essentially urban concept has been translated into a rural context. As outlined above it has not been a complete success. Innovations such as smart working and live/work units have not succeeded in a rural context. The hubs have also created a network to support their activity, foster collaboration between hubs and to share knowledge between them. These activities start to overcome some of the barriers to innovation often found in rural economies. What is not as clear is the degree to which the hubs have stimulated innovation within the rural economies in which they are located. Further research on this issue is needed.

Conclusions

Innovation is a complex process which requires a consideration of the spatial dimension. There are substantive differences between the way innovation occurs in rural and urban areas. The density of knowledge networks, limited local labour force and poor access to markets and finance in rural areas do act as barriers to innovation. Having said this, innovation can and does occur in rural areas. The opportunities afforded by developments in ICT, whilst acknowledging that this is not fully deployed in many rural areas, offers opportunities for rural businesses to engage in the more open forms of innovation.

To foster greater innovation requires proactive initiatives to overcome some of the barriers to rural innovation. The INNOGROW project quantifies many of these barriers and highlighted their interdependence. Enterprise offer a potential, place based, solution to overcoming these barriers. The flow of knowledge is at the heart of the innovation process and often the poor flow of knowledge within rural economies is a major barrier to innovation. This can be as a result of the physical properties of rural economies. It can also be through more intangible barriers which occur as a result of certain narratives attaching to rural economies, that they are not innovative and not the location of innovation.

The rural enterprise hubs program has shown a form of innovation, the translation of an idea in one context into another. An urban innovation often associated with high tech industry has been translated to a rural context. The case study highlights the process of innovation is not a smooth linear one. Certain avenues of innovation can be dead-ends. In the case of rural enterprise hubs it was the smart workspace and live/work innovations that failed to succeed. The case study also highlights the

¹ Personal communication with hub managers in the summer of 2017.

role the state can play in innovation. In the case of the rural enterprise hubs it was able to convene the key actors in this field: the public, private and third sector hub owners. The state, acting in collaboration, was able to mobilise resources, not just financial but also academic resources, to tackle the issues at hand.

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