

# **The Role of Business Support Programmes in Micro Enterprise Innovation: The Context of Artisan Food Production**

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I confirm that the word count of this thesis is less than 100,000 words excluding the title page, contents acknowledgements, summary or abstract, abbreviations, footnotes, diagrams, maps, illustrations, tables, appendices, and references or bibliography.

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## **DEDICATION**

This thesis is dedicated to my mother and children.

My mother has been a constant source of support and encouragement to me throughout my life. She has taught me to work hard for the things that I aspire to achieve. Quite simply, she is the most humble, generous and resilient person I know.

To Arthur and Arabella. I will continue to be your “24/7” source of encouragement, challenging you to frequently come out of your comfort zone. Embedding in you to give your best and go for the best always. You are very capable of, and deserve, great things. Carpe Diem!

## **ABSTRACT**

The process of innovation in organisations is often complex and this complexity is compounded in peripherally located or rural smaller and micro size firms. Governments are aware of the importance of creating a progressive business support infrastructure to assist rural development and regional competitiveness. In terms of agricultural and rural advisory services, business advice of various forms is now offered via a range of bodies and agencies, following the network model of development and business, designed to encourage collective action.

This thesis addresses gaps in knowledge around how micro size enterprises engage with business support networks for knowledge exchange and innovation. The aim of this research is to explore the role of business support programmes in the development of innovation in micro size enterprises, within an artisan food context. The thesis takes a multiple theoretical perspective, utilising concepts from the knowledge exchange (open innovation) and the rural, social networks literatures to explore micro firm engagement with business networks for innovation, the nature of network development, the business actor-producer relationship and the impact on knowledge exchange and innovation.

The geographical context for the study is Northern Ireland. A qualitative methodology was adopted, utilising semi-structured interviews, focus groups and observations, and incorporating the views of micro enterprises and business support actors. The findings highlight that these enterprises are typically innovative, particularly in terms of product development, and are creative in how they source knowledge for innovation purposes. They generally do not engage heavily with business support actors for innovation, but they appreciate the benefits of knowledge exchange and peer learning. The barriers to engagement in business support programmes are quite complex and are largely related to the enterprises' constructions of the value of such engagement, which is linked to their previous experiences and their attitudes towards growth. Trust is a major theme in business support engagement and the success of business support programmes.

This thesis makes an original contribution to knowledge by building on gaps in the literature on how artisanal food enterprises innovate and how micro enterprises interact with business support actors for innovation and knowledge exchange purposes, and the impacts of that interaction. The study develops a conceptual framework using theory building that can serve as the basis for future research into this largely exploratory area. Specific suggestions for future research are made. There are several key policy implications emerging from the findings.

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# **CHAPTER 1**

## **Introduction**

## 1.0 Introduction

It is generally accepted that in today's competitive environment organisations must innovate in order to survive and grow. However, the process of innovation in organisations is often complex (Rammer and Schubert, 2018; Rodriguez Ferradas et al., 2017; Woschke et al., 2017). This complexity is compounded in peripherally located or rural smaller and micro size firms, with limited "industrial agglomeration" (Oostrom and Fernandez-Esquinas, 2017, p. 1932), which have innate limiting factors, namely scarce resources, lack of skills and limited access to external knowledge (Marshall et al., 2017; Townsend et al., 2017; Baumann and Kritikos, 2016). Nevertheless, micro firms are a critical part of the regional innovation system (Oostrom and Fernandez-Esquinas, 2017).

Very little is known about innovation within micro sized firms (Granata et al., 2018; Hewitt-Dundas and Roper, 2018; Roper and Hewitt-Dundas, 2017). Indeed, there has been limited data collected on micro firms and of those few studies that have been carried out recently, findings have indicated that micro firms are not marginal businesses and that they do innovate and have growth potential (Baumann and Kritikos, 2016). Micro enterprises are often not included in large scale innovation studies (Baumann and Kritikos, 2016), such as the Community Innovation Survey (CIS) collected every two years across the EU, due in great part to an assumption that they engage in low levels of Research and Development (R&D). Therefore, knowledge is limited on the drivers of innovation within this size of business (Chapman and Hewitt-Dundas, 2018; Rasmussen and Nybakk, 2016; Tu et al., 2014). Nevertheless, small firms have qualities which can enhance innovation such as agility and customer-orientation (Pekovic et al., 2016; Harbi et al., 2014).

The importance of business support in the development and progression of small agri-food collaboration for innovation has been highlighted by several authors (McAdam et al., 2016; Maietta et al., 2015; Jack et al., 2014; Bertolini and Giovannetti, 2006; O'Reilly and Haines, 2004). However, it has been shown that rural development initiatives risk being seen as too centralised by those in rural communities (Wellbrock et al., 2013) and for the benefit of larger farms, where smaller farms are less visible to agencies (Labarthe and Laurent, 2013), and that institutions only partially recognise the diversity of needs and competencies of producer actors (Bouette and Magee, 2015; Cumming et al., 2015; Faure et al., 2013; Wellbrock et

al., 2013; Chiffolleau, 2009). More generally, the role of business organisations' involvement in small firm collaboration has been questioned due to problems of compatibility and cultural barriers between institutions and small firms, and business actor bias towards working with technology intensive SMEs (Vissers and Dankbaar, 2016; Maietta et al., 2015; Todtling and Kaufmann, 2001).

Recent studies indicate a degree of competition rather than collaboration and coordination between business support agencies in agricultural systems (Cerf et al., 2017; Faure et al., 2017; Rijswijk and Brazendale, 2017). Therefore, in order to develop trust at the level of the business support network, agency advisers are required to assume the role of facilitators rather than technical experts, with the need to deal with complex social and group processes which require strong interpersonal skills (Landini et al., 2017; Nettle et al., 2013). Advisers have been traditionally strong on technical knowledge but not in the management of social processes and group relations (Landini et al., 2017).

This thesis explores the nature of innovation in micro size enterprises within the context of rural based artisan food production. In particular, the role of business support programmes in the development of innovation within this contextual setting will be examined. The study will encompass the knowledge sources for innovation, the factors impacting upon micro enterprise engagement in business support programmes, the nature of relational aspects, such as trust and reciprocity, and the innovation (and other) outputs from such engagement, within the artisan food sector context.

## **1.1 Background to Research**

This section presents the background to the research and outlines the importance of the study. It first discusses the theoretical background that informs the research and then goes on to discuss the policy and practice context.

### **1.1.1 Theoretical Background**

This study takes a multiple theoretical perspective, utilising concepts from the open innovation and the rural, social networks literatures to explore micro firm engagement with business support networks for innovation, within the contextual setting of rural,

artisan food. This theoretical underpinning allows for a consideration of the broad range of knowledge sources that may lead to innovation outcomes. The open innovation and social networks theoretical lenses allow for consideration of both the macro level of network structure and the micro level of dyadic interactions, as called for in previous studies (see for instance Iturrioz et al., 2015; Slotte-Kock and Coviello, 2010).

The innovation discourse has widened beyond narrow technical definitions to that of more inclusive and organisational approaches to innovation (Appleyard and Chesbrough, 2017; Hossain and Kauranen, 2016). A key development in this area is the development of the related concepts of open innovation and network-based innovation where both individual firms and networks of firms can draw upon internal and external sources of knowledge to develop a wider organisational classification of innovation beyond solely that of R&D (Hewitt-Dudas and Roper, 2017; Ali and Shah, 2016; Karantininis et al., 2010). The networked-based approach to open innovation suggests that external knowledge may be obtained through both horizontal and vertical networks that may be used to overcome skills and knowledge deficiencies of an individual firm (Boari and Riboldazzi, 2014; Kozan and Levent, 2014). This broader classification of innovation is especially important for micro, artisan food firms that typically are not research intensive in comparison to science and technology-based firms yet have to innovate to survive and grow (Ramos-Rodriguez et al., 2010).

Artisan food enterprises are a central component of the discussion around alternative food networks (AFNs) (Marshall et al., 2017) “short supply chains” and the “turn to quality” (Coq-Huelva et al., 2017; Goodman et al., 2013) which has received much attention in the rural sociology and rural geography literatures in the past 10-15 years (see for instance Mincyte and Dobernig et al., 2016; Tregear, 2011; Marsden and Smith, 2005; Renting et al., 2003; Winter, 2003; Murdoch, 2000; Murdoch et al., 2000). Such studies have conceptualised AFNs as social constructions, through narratives of the lived experiences of AFN participants, offering valuable insights into actor behaviour in AFNs, which can appear very different to mainstream systems (Tregear, 2011). The growing agri-food systems literature around AFNs has signalled the importance of network building within this context, as highlighted by authors such as Ilbery and Kneafsey (2000), and the network concept has assisted understanding of the diverse forms of rural development (Murdoch, 2000). Within this body of

literature the network perspective recognises the myriad of connections between actors and institutions occurring in different spaces and places (Midgley, 2010).

Actor Network Theory (ANT), Commodity Chains and AFNs have been considered in some depth by authors such as Murdoch (2000) and Tregear (2011). ANT combines insights from economics and sociology to consider the things that draw actors into relationships and how actors come to define themselves, and others, through interaction. Food artisans not operating in traditional supply chains, but rather short supply chains, are more linked to “network of innovation variety” than the “commodity chain type” as highlighted by Murdoch (2000) with less focus on power issues and more on relationships. These small- and medium-sized enterprises are typically bound together by reciprocal, trust-based linkages which facilitates joint learning and knowledge transfer while also permitting easy adaptation to changing conditions. This is in contrast to the commodity chain model which implies more traditional, vertical rather than horizontal chain relations, which are characterised by power and coercion. This infers a strong reliance on social networks for knowledge exchange within the short supply chain, AFNs and rural context. The importance of social networks within the broad rural setting has been highlighted, in that social networks allow rural places to overcome disadvantages of location and size (Moyes et al., 2015; Ring et al., 2010; Anderson and Jack, 2002), and informal networks have been deemed to be of critical importance in rural areas (Atterton, 2007). The social network dimension refers to the ways in which people are connected through various social familiarities. Thus, the social networks literature, the social capital concept, and the themes of trust and reciprocity, where attention is given to the structure of the network and the relational dimension, or interactions between actors, has value here in explaining the relational dynamics, the nature of network ties, how and why the networks form and how they may be managed over time (Elvekrok et al., 2017). They enable understanding around various themes such as the potential for innovation or the identification of power bases for information control and brokerage (Slotte Kock and Coviello, 2010).

### 1.1.2 Policy and Practice Context

Governments are aware of the importance of creating a progressive business support infrastructure to assist rural development and regional competitiveness (Mole et al., 2017; Siemens, 2015; Henry and Treanor, 2013; Smallbone et al., 2008; Beaver and Prince, 2004; Curran, 2000). The development of the small business sector has been

high on the agenda for policy-makers across the United Kingdom since the 1960s (Cadil et al., 2017; Blackburn and Smallbone, 2011) and particularly from the 1980s onwards (Bennett and Robson, 2003). Since the publication of the Bolton Report in 1971 significant progress has been made in the development of small business policy (Cadil et al., 2017; Beaver and Prince, 2004), with regional Governments across the United Kingdom being given more responsibility for the development of policy intervention for small businesses (Wapshott and Mallet, 2017; Bennett, 2008).

In a wider context there has been a liberalisation of policies in the European Union (integration though liberalisation, restrictions on state aids and public procurement and so on) as a path to economic growth, while maintaining a commitment to active state intervention through schemes such as support for small firm networks (Amin and Thrift, 1995). The liberalisation of agricultural and rural advisory services during the 1990s altered networks of support (Sutherland et al., 2013; Klerkx and Proctor, 2012; Proctor et al., 2012). Business advice of various forms is now offered via a range of bodies and agencies. In addition, policymaking for rural areas has followed the network model of development and business support (Curry, 2009; Ingram, 2008), with programmes such as LEADER, European Innovation Programme Operational Groups and specific measures of the Rural Development Programme designed to encourage collective action and stakeholder engagement to solve joint problems (Bonfiglio et al., 2017) and grow the social capital of rural communities (McElwee et al., 2018).

The food industry is a mature industry (Bayona-Saez et al., 2017; Baregheh et al., 2016) with limited technological resources (Gulyayeva et al., 2016). The industry has been traditionally associated with very little investment in terms of research and development with moderate levels of innovation (Presenza et al., 2017; Baregheh et al., 2016; Carraresi et al., 2016). In recent times the sector has faced a number of challenges (O'Connor and Kelly, 2017; Baregheh et al., 2016; 2014; 2012; Aatonen et al., 2015; Tonner and Wilson, 2015; Clark et al., 2015), including increased international competition (Psomas et al., 2018; Carraresi et al., 2016; Manning and Smith, 2015) and regulatory requirements (Mattevi and Jones, 2016; Clark et al., 2015), technological developments (Gulyayeva et al., 2016), changing customer needs (O'Connor and Kelly, 2017; Alonso et al., 2016), food scandals (Smith et al., 2017; Magnan, 2015; Manning and Smith, 2015), and a number of socio-economic issues including increasing populations and food shortages (Manning and Smith,

2015), healthy eating and diet related conditions (Clark et al., 2015; McCarty et al., 2013). Myriad food scares in recent years (Smith et al., 2017; Le Velly and Dufeu, 2016) and growing concerns over food contamination and a lack of nutrition in highly processed foods (Mucioki et al., 2018), has seen increased consumer interest and awareness of authenticity (Carrigan, et al., 2018; Manning and Smith, 2015), localness (Marshall et al., 2017) traceability, health and provenance of food products and environmental and ethical concerns (Clark et al., 2015; Manning and Smith, 2015), which are often the key basis for micro food firm formation (Seo et al., 2013). This has promoted the phenomenon of the turn towards the re-localisation of food (Moragues-Faus and Sonnino, 2012), and the territorial embeddedness of food systems, with a focus on AFNs which are associated with concepts of quality and trust. Within this context, the valuable contribution that artisan enterprises make within rural and peripheral regions to local food production has been recognised, including the enhanced reputation of local regions for their food expertise and culture (Scott, 2010; Tregear et al., 2007) and the support for sustainable farming (Magnan, 2015; Inwood et al., 2009).

The geographical context for the study is the United Kingdom (UK) region of Northern Ireland. This region has been chosen as it represents a peripheral UK economy which consists heavily of small and micro sized enterprises, particularly within the food sector and within largely rural areas. Studies carried out by Invest Northern Ireland (2017), the Department of Enterprise, Trade and Investment (2011) and the Department of Business, Innovation and Skills (2010) have indicated that the economy needs to become more innovative, highlighting the need for a “culture of innovation” to be developed (Abreu et al., 2011). Northern Ireland has traditionally lagged behind the other UK regions for innovation activity. In the most recent Innovation Survey results for the UK in 2015 Northern Ireland was reported as the least innovative active country in the UK, despite a recorded increase over the period (Department for Business Innovation and Skills, 2016). Furthermore, a comparison with Great Britain (GB) regions showed Northern Ireland had moved from the least innovation active region in 2010 - 2012 to the second least innovative in 2012 - 2014. Kitson’s (2011) review of innovation policy in Northern Ireland recommended that a systems approach be adapted to innovation, removing the focus from single policy mechanisms. An earlier MATRIX (2008) report found that there is a tendency for innovation in Northern Ireland to be focused around the areas of R&D and science, with a lack of focus on collaboration. Under the auspices of the Department for the

Economy (formerly the Department of Economy, Trade and Investment), an innovation strategy was introduced in 2014 outlining a number of challenging and ambitious long-term goals and medium-term targets in order to drive innovation and the growth of the economy. The importance of fostering innovation within the agri-food sector in Northern Ireland has been highlighted by a number of agencies and in several reports over recent years (Agri-Food Strategy Board, 2013; InterTradeIreland, 2012; NIFDA, 2012). These reports have concluded that the industry needs to increase innovation activity as the limited scale of innovation is a severe deterrent to growth.

The agri-food industry is the largest manufacturing sector in Northern Ireland. Given its contribution to the local economy, the agri-food sector has attracted significant interest during the past five years at Northern Ireland regional Government level as evidenced by its strategic priority status in the Programme for Government 2011-2015, and the establishment of an industry led and Government backed Agri-Food Strategy Board. Against this policy backdrop, there has been an increased consumer demand for local food and artisan food produce (Mintel, 2017; 2016). The reputation of locally produced artisan food has been strengthened with international awards (Mintel, 2017; Agri-Food Strategy Board, 2013) and the designation of products of geographic indication. Thus the region continues to develop an increasing gastronomic reputation, which has seen an upsurge in food tourism (Mintel, 2017).

## **1.2 The Aim and Objectives**

The aim of this research is to explore the role of business support programmes in the development of innovation in micro size enterprises, within an artisan food context. Specifically, the study addresses the following research objectives (ROs):

RO1: To explore the knowledge sources for innovation in micro enterprises, within the artisan food sector context;

RO2: To explore the factors impacting upon micro enterprise engagement in business support programmes, within the artisan food context;

RO3: To explore the nature of relational aspects, such as trust and reciprocity, in micro enterprise engagement with business support actors, within the artisan food



sector context;

RO4: To explore the innovation (and other) outputs from such engagement, within the micro firm, artisan food sector context; and

RO5: To develop a conceptual framework to illustrate the role of business support programmes for innovation within the micro firm, artisan food context.

Research objectives one and two are concerned with the contextual factors that influence (in a positive or negative way) how micro enterprises utilise knowledge sources for innovation and how they engage with business support actors for innovation. A number of contextual factors will be identified and discussed in relation to the sources of innovation and engagement in the business support environment. As indicated by Curado et al. (2018) and Galende (2006), such contextual innovation antecedents will be unique for any given situation, such as food-based, artisan micro firms and networks in the current study. These antecedents will relate to unique firm and network level influences on the development of the innovation process in this context. Innovation antecedents lead to and influence the manner in which micro firms and their innovation networks develop knowledge exchange to drive innovation outcomes, as proposed by Chiaroni et al. (2011) and Chesbrough and Swartz (2007).

Research objective three considers the relational aspects around the nature and dynamics of trust, cooperation and reciprocity in these network forms and the impact on actor behaviour and innovation network outcomes. There is a need for business support actors to consider how relational assets such as social capital, trust relations, reciprocity, and learning capacities may be best leveraged to improve network outcomes (Landabaso et al., 1999) and, in turn, local economic development (Tregear and Cooper, 2016; Esparcia, 2014; Besser and Miller, 2011; Eklinder-Frick et al., 2011; Trigilia, 2001).

Research objective four addresses the innovation and other non-innovation outputs from engagement in business support programmes. Business support programmes invariably set targets for innovation, however there are less tangible outcomes related to opportunities for network building, knowledge exchange and learning that would not necessarily lead to innovation. Thus research objective four also seeks to explore

the wider network building and knowledge exchange impacts that follow on from network relations (RO3) between micro enterprises and business support actors.

In addressing research objectives one to four, the conceptual framework will present a theoretical model to aid understanding of the role of business support programmes in the development of innovation within the micro enterprise, food artisan context.

### **1.3 Justification for the Research**

There has been limited empirical research exploring innovation practices of small and micro food enterprises and the types of innovation and innovativeness within small food enterprises (Alonso et al., 2016; Danson et al., 2015; Lefebvre et al., 2015). Indeed there is a more general lack of understanding and empirical knowledge on micro, artisanal enterprises and their goals and motivations and contribution to economic development (Alonso and Bressan, 2015), of innovation practices in micro firms (Alonso et al., 2016; Zobel et al., 2016; Tu et al., 2014), and the sources of innovative behavior in SMEs (Curado et al., 2018; Presenza et al., 2017; Lefebvre et al., 2015; Della Corte et al., 2013; Trippi, 2011).

The small business sector is not a homogenous group (Giacosa et al., 2017) and thus there is the potential for valuable insights into small firm innovation, more generally, to be obtained from a focus on micro level enterprises (Hewitt-Dundas and Roper, 2018; Baumann and Kritikos, 2016; Della Corte et al., 2013; Verbano et al., 2013) and in particular industry contexts (North and Smallbone, 2000) such as food, which is known to be a low-tech sector displaying low levels of R&D investment and innovation (Baregheh et al., 2016; Manning and Smith, 2015, Aaltonen and Hytti, 2014; Baragheh et al., 2014; Lambrecht et al., 2014).

Several authors suggest that there is a need for more contextually grounded studies of innovation in smaller firms where key antecedents or influencing factors are analysed (Curado et al., 2018; Reinl et al., 2015; Lamprinopoulou and Tregear, 2011; Lee et al., 2011; Spithoven et al., 2011; Kelliher and Reinl, 2009). Within the food systems literature, while producer-consumer ties have received significant attention, relations and power dynamics between producers (and other supply chain actors) remain underexplored (Bowen, 2011; Chiffolleau, 2009), there have been calls for a greater examination of the context and environment (cultural, ecological, political and

economic) within which AFNs operate (Bowen, 2011; Sonnino, 2007; Tregear, 2005). Therefore, knowledge of the sectoral context shaping artisan food network development and innovation is limited and warrants research that would contribute to understanding more generally around the nature of innovation in micro enterprises.

This study thus responds to calls for research to undertake sector specific studies to provide greater understanding of innovation (Baregheh et al., 2016; Bakkour et al., 2015; Wischnevsky et al., 2011; Damanpour 2010; De Jong and Vermeulen 2006) and for research that considers the particular context of micro enterprise innovation (Hewitt-Dundas and Roper, 2018; Baumann and Kritikos et al., 2017; Alonso and Bressan 2014; Tu et al., 2014; Della Corte et al., 2013; Verbano et al., 2013).

Despite the particular operating characteristics of small firms and the different ways in which small firms and large firms innovate, there has been limited empirical evidence on the effectiveness of R&D instruments for SMEs (Radas et al., 2015). Knowledge gaps have been identified in relation to the impact of public support on innovation and innovation-oriented attitudes (Chapman and Hewit-Dundas, 2018) and on the joint effects of networks and institutions upon innovation (Schott and Jensen, 2016). Moreover, there has been a call for more longitudinal evaluation designs when examining the impacts of public support (Chapman and Hewit-Dundas, 2018). In the rural, agri-food context, it has been argued that networks, involving business actors, such as government support agencies and third level institutions, are critical to successful and sustainable rural development (Nettle et al., 2018; Bourne et al., 2017; Landini et al., 2017; Phillipson et al., 2016; Faure et al., 2012; Oreszczyn et al., 2010).

While previous research has examined the effectiveness of business support schemes in a farming context (De Rosa and Bartoli, 2017; De Rosa and McElwee, 2015; McElwee and Annibal, 2010), the institutional arrangements supporting innovation in agriculture has been highlighted as an area worthy of further research (Klerkx et al., 2013; Nettle et al., 2013). Furthermore, the coordination of business support advisory services requires an understanding of the different ways advisers perform their role and operate in networks (Nettle et al., 2018; Phillipson, et al., 2016). In the case of the business support actor network bridging role, the issue is not whether the actor directly assists the producer to innovate but rather whether the actor can strengthen the innovation process by facilitating the interaction between actors,

including the producers themselves (Faure et al., 2012). However, few studies have discussed interactions between different actors within agricultural advisory systems (Bourne et al., 2017; Faure et al., 2012) or the evolving role of private sector organisations in providing advisory services (Nettle et al., 2018). To date studies have tended to focus on one-to-one advice between advisers and their clients, and thus the role of business support institutions in aiding network development in rural agri-food networks is not clear. More specifically, apart from some valuable insights provided by a very small number of studies (Alonso and Bressan, 2014; Tregear, 2005), little is known about how locally embedded artisan food enterprises engage with business support institutions for innovation, and how their operating environment shapes network development.

The role of business support agencies in developing trust in rural communities, through network development, is worthy of research investigation. Trust is widely viewed as a fundamental characteristic of business networks more generally, facilitating interaction between actors, knowledge exchange and innovation (Jarratt and Ceric, 2015; Newbery et al., 2013; Besser and Miller, 2011; Sökjer-Petersen, 2010; Murphy, 2006). A review of the literature denotes a number of areas which require further exploration and understanding, in order to further develop knowledge on the nature of trust, and how it is manifest, in rural communities (Richter, 2017). Moreover, further exploration of the forms of trust that emerge from business support programmes, their delineation and the connections between the forms of trust, is needed.

Thus, this study seeks to address significant gaps in knowledge by exploring how micro size enterprises, within the artisan food context, engage with business support networks for knowledge exchange and innovation (see also Table 4.1, Chapter Four for a more detailed coverage of the research gaps). The geographical context for the study is the peripheral UK region of Northern Ireland and the study will explore a number of research objectives in relation to artisan food production based in rural locations across the region, operating predominantly through AFNs. The lack of research into the nature of innovation with the micro size, artisan food context, and the role of business support in innovation development, led to the formation of broad, exploratory research objectives.

## 1.4 Methodology

An overview of this study's methodology is now presented (a detailed account of the methods is presented in Chapter Five). An interpretative stance was adopted as this research investigates a social phenomenon and seeks a deep understanding of specific relationships, interactions and change within producer-business actor networks. Qualitative research has been deemed appropriate to study networks and the associated themes of trust and social capital (Fiedler et al., 2017; Jarratt and Ceric, 2015; Malecki, 2012; Jack, 2010; Hoang and Antonic, 2003) and entrepreneurship processes (Smith et al., 2013), and has been the recommended approach to the study of agri-food key collaborative activities (Aggarwal and Srivastava, 2016) and relationships between institutions and producers in the local or alternative food networks context (Tregear, 2011; Klerkx and Leeuwis, 2008; Ilbery and Kneafsey, 2000).

Given the dynamic nature of network development, an in-depth and open-ended research design was required to allow time for the development of understanding of the complex and rich nature of innovation in micro size, artisan food businesses. Therefore, a qualitative method of data collection, interpretation and analysis in relation to micro size innovation and the role of business support was preferred. The data collection was undertaken in a number of stages. Stage one involved documentary analysis of existing policies and programmes for business support for micros and SMEs in Northern Ireland. At stage two, the empirical study commenced with group discussions with micro food producers and business support actors. This was conducted in tandem with participant observation. A third and final stage of research involved semi-structured interviews with food producers and business support actors. The methods used in the fulfilment of each of the study's research objectives are outlined in Table 1.1.

**Table 1.1: Research Objectives and Methods**

Research Objectives	Research Methods
RO1: To explore the knowledge sources for innovation in micro enterprises, within the artisan food sector context	<ul style="list-style-type: none"> <li>• Documentary (stakeholder) analysis</li> <li>• Semi-structured interviews with artisan food enterprises and business support actors</li> <li>• Group discussions with artisan food enterprises and business support actors</li> </ul>
RO2: To explore the factors impacting upon micro enterprise engagement in business support programmes, within the artisan food sector context	<ul style="list-style-type: none"> <li>• Semi-structured interviews with artisan food enterprises and business support actors</li> <li>• Group discussions with artisan food enterprises and business support actors</li> <li>• Observations at business support events</li> </ul>
RO3: To explore the nature of relational aspects, such as trust and reciprocity, in micro enterprise engagement with business support actors, within the artisan food sector context	<ul style="list-style-type: none"> <li>• Semi-structured interviews with artisan food enterprises and business support actors</li> <li>• Group discussions with artisan food enterprises and business support actors</li> <li>• Observations at business support events</li> </ul>
RO4: To explore the innovation (and other) outputs from such engagement, within the artisan food sector context	<ul style="list-style-type: none"> <li>• Semi-structured interviews with artisan food enterprises and business support actors</li> <li>• Group discussions with artisan food enterprises and business support actors</li> <li>• Observations at business support events</li> </ul>
RO5: To develop a conceptual framework to illustrate the role of Government policies and business support programmes in innovation in artisan food enterprises	<ul style="list-style-type: none"> <li>• Developed from RO1-RO4</li> </ul>

### 1.5 Contribution to Knowledge

This thesis makes several key contributions to knowledge on innovation within the micro enterprise, artisan food context. Firstly, it provides an exploration of how artisanal food enterprises innovate of which little is presently known (McAdam et al., 2016; Baregheh et al., 2016; 2014). Secondly, it provides a holistic view of innovation in food enterprises that explores the interplay of innovation types. Thirdly, it reveals how micro enterprises interact with business support actors for innovation and knowledge exchange purposes, and the impacts of that interaction. Finally, in

methodological terms, it incorporates regional business support actor and participant (food producer) perspectives to provide the scope for a relatively richer and deeper understanding of the nature of innovation in regional artisan food enterprises, which will in turn contribute to knowledge on small firm innovation more generally. A more detailed consideration of the contributions of this study will be provided in the Conclusions chapter (Chapter Ten).

## **1.6 Definition of Terms**

A number of key terms used throughout this thesis are now explained and defined. It should be noted that a definition of innovation and business support terminology will be provided in Chapters Two and Three and further discussion and definition of terms relating to the theories used in this study will be provided in Chapter Four.

### **1.6.1 Artisan Food**

Food artisan products are distinguishable from those produced by mainstream producers, through their scale, the association of the materials and methods with their locality of origin and their core attributes of taste and appearance (Autio et al., 2013; Sage, 2003). Artisan food has been referred to as...“*a synthesis of the personality of the producer, the place it comes from, the product provided and the passion, without which no food is ever great*” (Taste Council, 2004, p.7). Micro food artisans are viewed as regionally grounded trade practitioners, possessing specific technical skills derived from experience, and utilising handmade, manual techniques (Bouette and Magee, 2015; Hellin and Kanampiu, 2008; Roberts et al., 2007; Tregear 2005; Sage 2003). They are characterised as drawing heavily on a core tacit knowledge that is used to reproduce traditional and often geographically-specific practices (Blundel 2003; 2002). Their products are distinguishable from those produced by mainstream producers, through their scale, the association of the materials and methods with their locality of origin and their core attributes of taste and appearance (Bouette and Magee, 2015; Autio et al., 2013; Sage 2003). The artisanal nature of food products produced in this authentic manner involving a high degree of manual work is often attractive to consumers (Waldman and Kerr, 2015; Sidali and Hemmerling, 2014).

### 1.6.2 Alternative Food Networks (AFNS)

The term “alternative food networks” (AFNs) is used here to describe emerging networks of producers, consumers and other actors that embody alternatives to the conventional (Bui et al., 2016; Renting et al., 2003) more standardised industrial (Krzywoszynska, 2015), or global modes of food supply (Renting et al., 2003), where the production and consumption of food are more closely connected in spatial, economic and social terms and may include reconnecting farmers to consumers (Fonte and Cucco, 2017). Examples that have been studied include localised and short food supply chains (Tregear, 2011), farmers’ markets (Dodds et al., 2014), community supported agriculture (CSA) (Phillipov, 2016) and community gardens and organic related schemes (Kamau et al., 2018; Milestad et al., 2017; Bui et al., 2016; Tregear, 2011).

### 1.6.3 Region, Local, and Rural

The term “region” is used here in relation to Northern Ireland as a sub region of the United Kingdom. The term “local” denotes the sourcing and supply of food produce predominantly through AFNs within the Northern Ireland region as a whole. However, recognition is given to the difficulty in viewing “localness” in simple spatial relations terms, where the appeal of local and regional products can extend beyond the local market (Hinrichs, 2003; Marsden et al., 2000). Localised food systems is associated with a set of attributes that reflect a high degree of social embeddedness and positive, respectful and non-instrumental social relations (Baritoux et al., 2016; Hinrichs, 2000). Although distance and population size have long been used to define rural (see for instance North and Smallbone, 1996), the term rural is considered elusive and fuzzy, given the associated geographical, demographic, economic and social identities (Dellemain et al., 2017). The themes of network interactions and relationships (Tregear and Cooper, 2016; Kelliher et al., 2014; Tregear, 2011; Murdoch, 2000), and the interaction between the local environment and firm dynamics (Massard and Autant-Bernard, 2015) have been discussed within the rural studies domain. Within rural economies, firms are more likely to be limited in terms of market reach with a much greater reliance on local markets (Elvekrok et al., 2017; Galloway and Mochrie, 2006; Mitchell and Clark, 1999). The rural location in itself may not be a significant barrier to growth for small firms, and geography matters less than size, sector or other firm characteristics, however skills shortages may be more acute for



rural firms (Steiner and Teasdale, 2018; Lee et al., 2014, Anderson et al., 2005) and rural businesses have been found to incur relatively higher transaction costs, around transportation and communication due to remoteness (Anderson et al., 2005), combined with the withdrawal of physical public services (Hodge et al., 2017).

#### 1.6.4 SME and Micro

This study adopts the commonly accepted European Commission (2018) definition of micro and small medium sized enterprises (SMEs), which are categorised in terms of employee numbers, turnover and financial characteristics, as follows:

**Table 1.2: Definition of SMEs and Micros**

<b>Company category</b>	<b>Staff headcount</b>	<b>Turnover</b>	<b>Balance sheet total</b>
Medium-sized	<250	€250	€ 43 m
Small	<50	€50	€10 m
Micro	<10	€10	€ 2 m

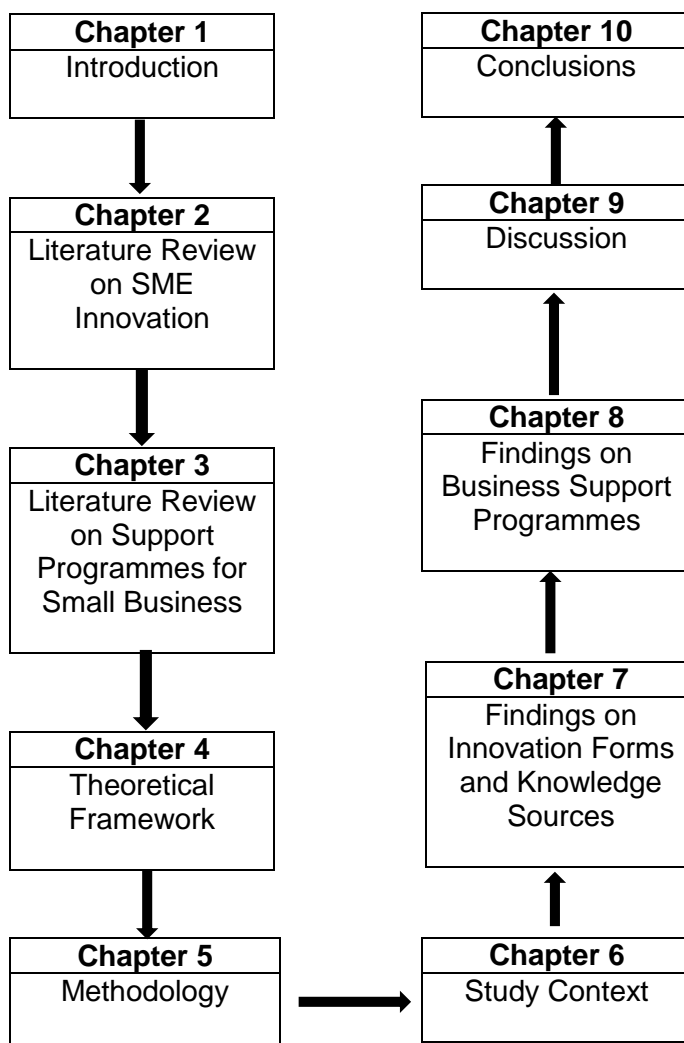
Source: European Commission (2018)

Micro enterprises are predominant in rural areas and are an important part of the economic and social fabric of local communities. They are distinctive from SMEs and large firms in terms of their operational and structural characteristics, which include: sole/family based ownership; diverse goals and motivations; the centrality of the owner-manager; and restricted resources (Radicic et al., 2017; Hansson et al., 2013; Phillipson et al., 2002).

### 1.7 Thesis Structure

Chapters Two to Four contain a review of the pertinent literatures and theoretical underpinnings of the study. Chapter Two reviews the literature on SME innovation and previous studies on types of innovation and barriers to innovation in small firms. Chapter Three reviews the literature on business support programmes for small firms, including the historical development of small business support in the UK, the impact of business support, and the characteristics of support for agriculture and rural enterprises more widely. Chapter Four presents the theoretical framework for the study, based on the preceding literature review and the adoption of two theoretical

perspectives (open innovation and social networks), and an initial conceptual framework. Chapter Five provides an overview of the research philosophy guiding the methodological approach, and a detailed account of the qualitative methods employed. Chapter Six provides a discussion of the study context, namely the Northern Ireland agri-food sector, and a summary stakeholder analysis of the business support actors and programmes for agri-food. Chapters Seven and Eight present the findings from the study, around the nature of innovation in micro size artisan enterprises (Chapter Seven) and the nature of their involvement in business support programmes (Chapter Eight). A discussion of the findings is provided in Chapter Nine, and a revised conceptual framework proposed. The main conclusions, limitations and implications of the research are provided in the final chapter (Chapter Ten). Figure 1.1 presents a detailed overview of the structure of the thesis.



**Figure 1.1: Thesis Flow Diagram**

## **1.8 Chapter Summary**

This chapter has presented the background and rationale for the study and has stated the research aim and objectives. The study seeks to address a major gap in the literature – the role of business support agencies in the development of innovation and knowledge exchange within micro enterprises, in the artisan food context. The following chapters (Two and Three) will next provide a review of the main literature bases relevant to this study – the innovation and business support literatures.

# **CHAPTER 2**

## **SME Innovation**

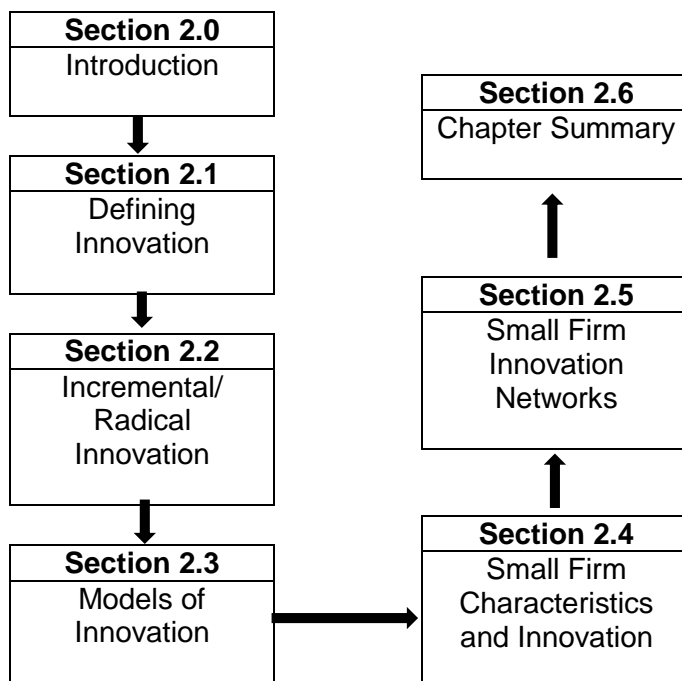
## 2.0 Introduction

As discussed in Chapter One (Section 1.2), the overall aim of this study is to explore the role of business support programmes in the development of innovation in micro size enterprises, within an artisan food context. Thus, a review of the SME innovation and business support literatures will be undertaken in this chapter and in Chapter Three. This chapter seeks to examine the nature of innovation in SME and micro firms.

It is increasingly recognised that sustainable economic development is dependent on the stimulation of innovation within regions (Carson and Carson, 2018). In peripheral regions innovation is a key focus of economic policy (Ní Fhlatharta and Farrell, 2017). Moreover, innovation is recognised as an immediate source of competitive advantage within the SME and broader innovation literature (Knickel et al., 2017). There is much evidence to suggest that innovation has positive impacts for SMEs (López-Bazo and Motellón, 2017; Alonso and Bressan, 2016; Freel and Robson, 2017; Aalonen et al., 2015; Purcarea et al., 2013), allowing them to utilise their unique attributes (Kumar et al., 2012). There are many benefits to be gained for small businesses in relation to fostering innovation, including increased market share and profit margin (Taneja et al., 2016; Laforet, 2012), strategic orientation (O'Connor and Kelly, 2017) and the transfer of knowledge (Presenza et al., 2017; McAdam et al., 2014).

Much of the literature on innovation in SMEs has focused on the manufacturing, electronics, engineering and general high technology industries (López-Bazo and Motellón, 2017; Alonso and Bressan, 2016; Oke et al., 2007), where there has been a tendency to view innovation in purely technological terms. A relatively limited number of studies have been carried out on SMEs operating in low-tech sectors such as agri-food (Bayona-Saez et al., 2017; Geldes et al., 2016; Acosta et al., 2015; Manning and Smith, 2015; Baregheh et al., 2014; Karantininis et al., 2010; Spithoven et al., 2010). Whilst there is a consensus that collaboration is a vital source of innovation for SMEs, enabling them to overcome their resource constraints, knowledge about how SMEs actually innovate remains limited (Presenza et al., 2017; Roper and Hewitt-Dundas, 2018; van Hemert et al., 2013; Hotho and Champion, 2011) and the components of successful innovation are still not clear (Mennens et al., 2018; Love and Roper, 2015; van Hemert et al., 2013), particularly within the agri-food sector (O'Connor and Kelly, 2017; Karantininis et al., 2010).

This chapter will begin by defining innovation, followed by a summary of the four innovation types and how they relate to the agri-food sector. Following this, incremental and radical innovation and models of innovation are discussed. Small firm characteristics and innovation, including factors facilitating and restricting innovation will then be outlined. A discussion will then follow on the nature of small firm innovation networks, including reference to regional institutional sources, innovation intermediaries and the role of market actors. Figure 2.1 illustrates the main sections of the current chapter.



**Figure 2.1: Outline of Chapter Two**

## 2.1 Defining Innovation

The concept of innovation has been studied extensively across a number of various disciplines (Baregheh et al., 2016; 2014; Poirier et al., 2015) including psychology, organisational behaviour, science and engineering (Damanpour and Wishevsky, 2006). There are a vast range of definitions of innovation in existence across the disciplines. However, it is widely accepted that innovation is not straightforward to define, is complex, often misinterpreted and not understood properly (Lai et al., 2016; Teixeira et al., 2013; Roland-Ortt and van der Duin, 2008).

At the most basic level innovation involves “improving something” (Baregheh et al., 2012). Michael Porter claimed that innovation is “a new way of doing things” (cited in Westland, 2008, p 8). Innovation in low-tech manufacturing based SMEs relates to doing things better, cheaper and quicker with less emphasis on a continuous improvement approach (Alonso and Bressan, 2016; Teixeira et al., 2013). Innovation is further defined as “the process of bringing new ideas to the market, beginning with strategic goals, then developing through to product, process, marketing and organisational development, or a combination of all” (Earle, 1997). While there has been considerable discussion around the definition of innovation, there is a lack of a universally agreed definition (Baregheh et al., 2014; 2012). However, one coherent theme may be identified: innovation is about the successful introduction of something new including the introduction of new products or services, new methods, techniques, or practices. A number of definitions of innovation are presented in Table 2.1. As can be seen from Table 2.1, in seeking to understand what is meant by the term innovation, consideration is often given to the forms that innovation can take.

**Table 2.1: Definitions of Innovation**

<b>Definition</b>	<b>Author(s)</b>
True innovation is complex and tumultuous; full of spurts, frustrations and sudden insights.	Quinn (2000)
Innovation is a complex phenomenon involving the production, diffusion and translation of scientific or technical knowledge into new or modified products and services as well as new production or processing techniques.	Menrad (2004)
Seeking new or better products, processes and/or work methods.	Laforet and Tann (2006)
Innovation as the creation of new knowledge and ideas to facilitate new business outcomes, aimed at improving internal business processes and structures to create market driven products and services. Innovation encompasses both radical and incremental innovation.	Plessis (2007)
Innovation is the commercialisation of an innovative idea.	Karantininis et al. (2010)
Innovation is the successful introduction of something new, through the merger, combination or synthesis of creativity	Teixeira et al. (2013)

<b>Definition</b>	<b>Author(s)</b>
and knowledge into new products, processes or services.	
Innovation defines as a process to change an idea or technique into a new innovative product or service that creates value for the customers.	Yasini (2016)
Innovation refers to the implementation of creative ideas, involving different approaches within an organisation.	Brink and Madsen (2016)
Innovation is an interactive process of value creation and problem solving based on both tacit and explicit or codified knowledge.	Oostorm and Fernandez-Esquinas (2017)

There are four commonly accepted forms of innovation, that include product, process, organisational practices and market (Avermaete et. al., 2004). A summary of innovation types and how they can be applied in the food sector are provided in Table 2.2. According to Avermaete et al. (2003) product innovation is an idea, good or service that exists in a limited capacity, or in other words, is perceived to be new within a business including “tweaking” existing product lines or could be new to the market. Product innovation helps firms develop competitive advantage (Baumann and Kritikos, 2016; Camisón and Villar-López, 2014) by improving or developing new features to products. Within the food sector, product innovation can relate to developing the nutritional aspect of food, for instance reducing the salt content of products (Toldrá and Reig, 2011). However, product failure rates within small businesses are high (Kim and Lui, 2015). Nevertheless, when successful, the development of new products will influence market sales and therefore growth (Damanpour et al., 2009). Product innovation is based on technical and tangible knowledge (Birkinshaw and Mol, 2006) which helps to develop new product features. Changing consumer needs and requirements represents a key driver for product innovation within food SMEs (De Martino and Magnotti, 2017).



**Table 2.2: Innovation Types**

Type	Definition
Product	A change in a product or service offered by an organisation.
Process	A change in how something is made or delivered.
Organisational	Implementation of a new organisational practice. May include changes in marketing/sales, management administration and staff policies.
Market	The development of new segments within the existing market.

Source: Adapted from Avermaete et al. (2004)

In process innovation the emphasis is on the advancement of equipment (De Martino and Magnotti, 2017). Process innovation involves the use of new technologies and equipment in order to make the production of goods more efficient. This may occur as a result of the sharing and exchange of knowledge within a network (McAdam et al., 2014). Some have argued that process innovation is the core focus within food businesses (Archibugi et al., 1991). Process innovation involves ways of improving and/or creating methods of production (Cárcel et al., 2012; Khazanchi et al., 2007) in addition to developing the processes and systems and reengineering activities to develop new products (Oke et al., 2007). Previous studies on SME process innovation have found that medium sized businesses are more likely to invest in and update equipment and machinery. This supports the proposition that process innovation is influenced by R&D investments (Presenza et al., 2017) whereby medium sized firms have more resources to invest than their smaller counterparts. Other studies argue that a larger firm is more likely to implement process innovation than a micro firm (Baumann and Kritikos, 2016). However, in a very recent study carried out that explored the innovation capacity of micro, small and medium enterprises in the Italian food sector (De Martino and Magnotti, 2017), collaboration and market orientation were identified as drivers of process innovation. This therefore would suggest that micro and small food businesses have the capacity to overcome scarce resources via cost-effective innovation, having the flexibility to respond in a well-timed manner to meet specific customer requirements (Laforet, 2013). This approach enables small artisan businesses to differentiate themselves through the use of traditional

production methods (McAdam et al., 2014), whilst increasing productivity and efficiency (Gallego et al., 2012).

Until recently organisational innovation has largely been neglected in the literature (Minarell et al., 2015; Kim and Lui, 2015). This is a domain of innovation that is gaining more interest, particularly in the agri-food sector, as it is concerned with the improvement of current standards and practices (McAdam et al., 2014; Jack et al., 2012). Organisational innovation refers to the introduction of internal and external management practices, processes and structures. It also takes into account the development of external relationships that can have a significant impact for businesses (Ganter and Hecker, 2013). Previous studies have indicated that the wider the network, the more diverse are the resources accessed and therefore the knowledge accumulated. For instance, this may include the exchange of knowledge between collaborating firms and customers, suppliers and competitors (Kim and Lui, 2015). As the learning process continues, this is likely to enhance innovation levels (Laursen and Salter, 2006).

Organisational changes tend to follow the introduction of new technologies (Ferto et al., 2016). The knowledge accumulated tends to be tacit (Ferto et al., 2016; Ganter and Hecker, 2013) which may lead to non-technical changes of managerial practices and structures (Kim and Lui, 2015), thus for instance in assisting small or micro food producers to develop strong internal R&D activities (De Martino and Magnotti, 2017). Organisational innovation is much more difficult to imitate than product innovation (Kim and Lui, 2015). However, the relationship between organisational innovation and performance is less prominent than the link between product innovation and performance (Kim and Lui, 2015).

As illustrated in Table 2.2, market innovation refers to the development of new segments within the existing market and therefore is closely linked to product innovation (Gupta et al., 2016). Innovation is very context specific (Gupta et al., 2016) and may be influenced by learning and knowledge generation through market research (McAdam et al., 2014). This helps SMEs to develop a market-centric focus from various information sources and develop new products and services in meeting customer needs (Didonet et al., 2016). Small food businesses can use market innovation to enhance competitiveness, through the development of product design, promotion or packaging (De Martino and Magnotti, 2017), the development of a

website (Baregheh et al., 2012) and the use of social media (Simmons et al., 2011). Consequently this helps SMEs to gain exposure to a wider market base and develop contacts to help drive collaboration.

Previous studies acknowledge the benefits of adapting a mix of innovative strategies (Damanpour, 2010). The challenge therefore for small business owner-managers is to adapt and tailor innovation management processes to suit the needs of their businesses, supporting an interactive approach to innovation (Chesbrough, 2012), including by engaging with open innovation including via collaboration with external parties to gain external knowledge (Tsinopoulos et al., 2018; Oostorm and Fernandez-Esquinas, 2017), being particularly important in developing new-to-the-market innovation (Roper and Hewitt-Dundas, 2017). By so doing they should take into account their size, aspirations of growth, internal resources and the competitive context in which their business operates (Robbins and O’Gorman, 2015).

Research studies on SME innovation in the food industry have, in the main, focused on particular types of innovation largely in isolation (De Martino and Magnotti, 2017; Baregheh et al., 2014; Purcarea et al., 2013; Triguero et al., 2013; Avermaete et al., 2004) rather than taking a more holistic view of innovation and an exploration of how small firms innovate. These studies have predominately focused on product, process (Baregheh et al., 2016; 2014; Lefebvre et al., 2015) and service innovation (Lefebvre et al., 2015). Food SMEs are more likely to engage in product and process innovations than other types of innovation (Ferto et al., 2016; Baregheh et al., 2012). According to Trippl (2011) food firms engage in new product development as well as in process and marketing innovations.

As suggested in Table 2.1, the innovation discourse has widened beyond narrow technical definitions to that of more inclusive and organisational approaches to innovation (Karantininis et al., 2010; Tidd and Bessant, 2009; Chesbrough, 2003) with leading authors highlighting the multifaceted and holistic nature of innovation. Consequently, innovation can no longer be seen as solely belonging to science or technology-based firms who purely focus on product research and development (Rieple and Snijders et al., 2018), but rather encompasses an organisational wide approach of collaborative based innovation (Phelps, 2010). This is an important development for small businesses that have the potential to develop not only their

technological capacity but also re-organise their business processes to enhance their competitiveness (Gallego et al., 2012).

A further consideration is the degree to which innovation may be classified as incremental or radical in nature. Incremental and radical dimensions will now be discussed.

## **2.2 Incremental and Radical Innovation**

Innovation has been described in incremental and radical terms. Incremental innovation refers to continual improvements to a service, product or process, which for instance would incorporate a minor improvement to an existing product, which represents low novelty (Baregheh et al., 2014; Radas and Bozic, 2009). Emphasis is placed on the quality aspect and the improvement of traditional products (Todtling and Kaufmann, 2001). Incremental innovations are “add-ons” to an existing innovation.

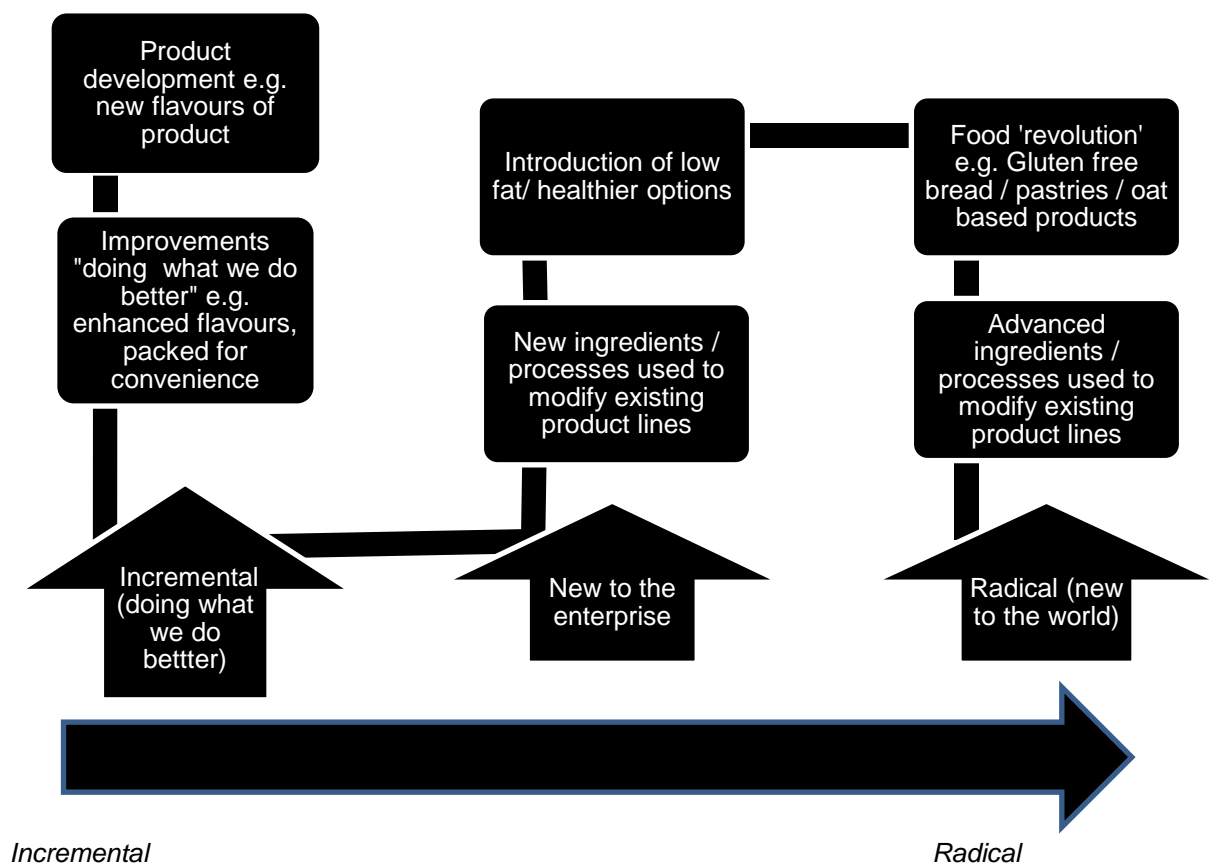
Even though there are many benefits associated with incremental innovation (Woschke et al., 2017; Baregheh et al., 2014), radical innovation involves higher levels of risk, takes longer to develop, and requires more resources (Fores and Camison, 2015) including various types of knowledge, intangible assets and tacit knowledge (Teece, 2007). Radical or “breakthrough” innovation refers to the development of new products/services which occur as a result of acquiring new knowledge, for example, leading to a key development in technology (Bessant and Tidd, 2011) and consequently a high degree of novelty (Presenza et al., 2017; Radas and Bozic, 2009). Radical innovation would indicate a higher level of manufacturing, resource and learning capability compared to incremental innovation, and is considered to require specialised knowledge from external partners such as universities (Uduma et al., 2015). It is recognised that both incremental and radical innovations are important for gaining a competitive edge. Employing both forms brings various benefits. Incremental innovation can help a business to become more efficient whilst radical innovation can help to avoid potential capability issues. Radical innovation has the ability to dramatically influence the market, including making current products obsolete (Beck et al., 2016).

There have been contradictory findings regarding the types of innovation developed by small businesses (Baregheh et al., 2016). It has been argued that small firms are more likely to implement radical innovation compared to larger businesses (Damanpour and Wischnevsky, 2006). One reason cited for this is due to the entrepreneurial capabilities of small firms (Salavou and Lioukas, 2003). However, studies carried out by authors including the likes of Woschke et al. (2017), Baregheh et al. (2012) and Oke et al. (2007) highlight the benefits to be gained for SMEs in adopting an incremental approach to innovation development. It has frequently been argued that SMEs do not have the resources required to develop radical innovation (Woschke et al., 2017; Baregheh et al., 2014; Laforet, 2012; Ettlé and Rosenthal, 2011) as they lack the required competences to effectively develop, produce, and commercialise their innovations. This suggests the need to access external collaborations to overcome innovation gaps (Colombo et al., 2014), and the implementation of marginal changes via collaboration and customer feedback to bring about minor innovations within the business. Open innovation is another means of assisting with this; involving the use of resources outside the boundaries of the businesses to help accelerate innovation (Presenza et al., 2017; Chesbrough, 2012; 2006).

Incremental innovations are less expensive to develop and have the capacity to be operationalised in a much shorter time frame than that of radical innovations (Teixeira et al., 2013; Bhaskaran, 2006). Limited financial and human resources (Doh and Kim, 2014; Laforet, 2012) can accommodate minor changes, helping to improve customer benefits, whilst enhancing the effectiveness of operations (Forsman and Rantanen, 2011) and acting as a strategic tool in business development (Teixeira et al., 2013; Bhaskaran, 2006). Whilst the investment is largely in the leadership and investment of time by the owner-manager (Beckeman et al., 2013), nevertheless it is also recognised that time constraints are a major issue for small businesses, impeding the ability of the owner-manager to multi task (Anderson and Jack, 2010) and therefore innovate.

Research studies within the food context have supported the notion of innovation within SMEs as largely incremental, through doing the same thing, but doing it better, therefore increasing functionality and performance (Lefebvre et al., 2015; Baregheh et al., 2014; Laforet, 2012; Laforet, 2011; Costa and Jongen, 2006; Avermaete et al., 2003; Menrad, 2004). Beckeman et al. (2013), in their research with small Swedish

food firms, found that very few innovations developed were radical in nature. Likewise in a study carried out by Trippl (2011) on Viennese food firms, innovation was more likely to be incremental in nature. This is consistent with findings from previous studies (Costa and Jongen, 2006; Lagnevik et al., 2003). Incremental innovation has been evident in recent years in response to the increasing demand for traditional artisan and home-made products produced by hand using products linked to a particular region (Aquilanti et al., 2013). This approach has benefits for micro artisan businesses as it enables them to develop niche products in response to changing market conditions and to meet local market demand (Tonner and Wilson, 2015; Uddin, 2006) and can, for instance, take the form of new flavours for existing product lines or a change of packaging, as highlighted in Figure 2.1. Figure 2.2 below summarises incremental and radical innovation types in relation to the food sector.



**Figure 2.2: Incremental and Radical Innovation in the Food Industry**

Source: Adapted from Bessant and Tidd (2011)

The tendency towards more incremental type innovation in small food enterprises may be attributed to the often informal and unstructured nature of innovation, characterised by the owner-manager's "gut" feeling (Beckeman et al., 2013) and linked to knowledge gained from collaborations with customers, with less reliance on science base actors (Lefebvre et al., 2015; Baregheh et al., 2014; Colurcio et al., 2012). It has been argued that food SMEs do not have the resources required to develop radical innovation (Baregheh et al., 2014).

### **2.3 Models of Innovation**

As referred to in Section 2.2, knowledge and understanding on innovation has emerged from a range of disciplines, resulting in the wide-ranging definitions as highlighted in Table 2.1. Consequently, social science has been viewed as an "evolving structure" where there is a need to constantly develop new knowledge (Fagerberg et al., 2011). The importance of innovation has been recognised going back to the nineteenth century (Baregheh et al., 2012). From this time innovation has been a topic of huge debate among economic historians (Taalbi, 2017; Trott, 2005). One economist who significantly contributed to the field was Joseph Schumpeter (Taalbi, 2017). Schumpeter argued that competition from new products had much more impact than making minor changes to the price of existing products (Trott, 2005). He was one of the first economists to highlight the importance of the introduction of new products to help accelerate economic growth, therefore specifying that innovation takes into account not just economic fundamentals but those related to technological, organisational and social factors.

Following the seminal work of Schumpeter, focus progressed to exploring the relationship between economic development and technical change, with more emphasis being placed on product and process innovation, albeit a limited and simplistic approach to measuring innovation (Gallego et al., 2012). Rothwell identified five generations of innovation management over a period of forty years, commencing in the 1950's. The first generation, originated during the 1950s during a time when technology and industrial development were beginning to drive economic development. Following this, during the second generation period of the 1960s, more investment in technology was taking place and this resulted in an increase in manufacturing productivity. At the beginning of the 1970s, during a time of economic downturn, levels of unemployment had increased and company restructuring was

leading to rationalisation, which led to a change of thinking. This initiated a move away from the assumption that innovation predominately took place within large enterprises (Doh and Kim, 2014). The third generation began to move away from the traditional closed model, towards a more open research and development model in order to develop collaboration, enabling co-operation and communication across organisations (Fagerberg et al., 2009).

As the 1990s approached and the fourth generation developed, the manifestation of the Internet was starting to be felt, allowing businesses to communicate globally. More and more emphasis was being placed on technological accumulation and scholarly interest in innovation was steadily increasing (Fagerberg et al., 2009). As a result the field of innovation evolved during this time and more integrated models of innovation were developed (Baregheh et al., 2012). The fifth generation emphasised the importance of building and developing collaborations and strategic networks. Studies have shown that those companies who innovate successfully need to constantly change to meet the requirements of the external market, which is particularly important in surmounting the resource limitations of SMEs (Argent, 2017; Lee et al., 2015). On this basis, new generations develop as a response to changing environments, and innovative capabilities have to develop accordingly.

Rothwell's model has been criticised on the grounds that innovative businesses do not necessarily follow best practices that may prevail at a particular time. Nevertheless, this was a significant turning point in the literature, moving away from Schumpeter's view of medium and large sized businesses who were fundamental in the development of innovation, challenged by a new conventional view of innovation whereby entrepreneurial SMEs and established smaller businesses had started to play an indispensable role in contributing to regional development through their innovative capabilities and activities (Doh and Kim, 2014), at the expense of loss of market share for their larger counterpart. The key attributes of this generation model are summarised in Table 2.3.



**Table 2.3: Rothwell's Five Generations of Innovation Models**

<b>Generation</b>	<b>Description</b>	<b>Date range</b>
First / second	Simple linear or closed model – including technological pull / push and often associated with radical innovation (Tura and Harmaakorpi, 2005)	1950 to early 1970s
Third	Coupling model, recognising the interaction between different elements and feedback loops between them	1970s to the mid-1980s
Fourth	Parallel model, integration within the business. Emphasis on developing strategic linkages and alliances	1980s to the mid-1990s
Fifth	Systems integration, extensive networking and flexibility to ensure ongoing innovation	1990s onwards

Source: Rothwell (1992)

Since the beginning of the 21<sup>st</sup> century, the literature has explored the concept of open innovation (Triguero and Fernandez, 2017). The literature on open innovation proposes that resources obtained from outside of the firm help to utilise internal strengths (Chesbrough, 2016; 2006; Nieto et al., 2015). As a result there has never been such a need for companies to become involved in open innovation (Bogers et al., 2018; Stanko et al., 2017; Foss et al., 2011; Chesbrough and Garman, 2009), evidenced by the fact that increasingly businesses are engaging in open innovation strategies more so than ever (Chesbrough and Brunswicker, 2015), including small businesses (Henttonen and Lehtimäki, 2017; Wynarczyk et al., 2013). Moreover, open innovation has also been extended into low-tech industries and is increasingly important in the development of public policy (Bogers et al., 2018). Nevertheless, despite the benefits of small businesses increasingly adopting open innovation, knowledge remains limited (Wynarczyk et al., 2013; Van de Vrande et al., 2009) particularly on micro level businesses and open innovation (Hewitt-Dundas and Roper, 2018). This is surprising as it is micro businesses who stand to gain the most from adopting open innovation in order to overcome resource constraints. Open innovation is discussed in further detail in Chapter Four.

The innovation literature (Gault, 2018; Taalbi, 2017) acknowledges that current thinking in the area is represented by conflicting theoretical considerations; however, as illustrated, considerable progress has been made over the last decade in our understanding of small business innovation. It is increasingly acknowledged that SMEs must embrace innovation, moving beyond a technical view of innovation (Santoro et al., 2017), to one of innovation as a wider organisational process, developing both internal and external knowledge to result in new products and new ways of doing things leading to new markets (Chesbrough, 2011), whereby SMEs must continually develop their knowledge-base and social networks (Chesbrough, 2003). Consequently, central to the current innovation approach is the idea that innovation is a shared process requiring intensive interaction with various stakeholders, namely suppliers, customers, competitors (Tödting and Trippl, 2005), in addition to other organisations such as research and educational institutions and industry associations (Bayona-Saez et al., 2017). Consequently, the nature and focus of innovation within small businesses has changed over time as the concept of innovation itself has evolved.

The nature of innovation in SMEs will be examined further in the remaining sections with a focus on the operating characteristics that determine how and where innovation is derived. The sources of knowledge that are typically used will be examined, including internal capabilities and external, open innovation-based networks, institutional and market-based sources. Throughout this section reference will be made to micro firm innovation and innovation in the agri-food context.

## **2.4 SME Characteristics and Innovation**

The relationship between size and innovativeness is well documented in the literature and it has been argued that larger firms have additional resources for investing in innovation development (Presenza et al., 2017; Baregheh et al., 2016; Baumann and Kritikos, 2016; Kumar, 2010). A consideration of the nature of innovation in SMEs needs firstly to take account of the particular operating characteristics of SMEs, in relation to large firms. The characteristics of SMEs in relation to innovation and the factors facilitating and restricting innovation in SMEs have been widely examined (Love and Roper, 2015). SME characteristics and the implications for innovation development are summarised in Tables 2.4 and 2.5.

**Table 2.4: SME Characteristics Facilitating Innovation**

<b>SME characteristics</b>	<b>Description</b>	<b>Author(s)</b>
Responding to market changes.	Flexibility, adaptability and creativity. Can respond timely to changing consumer trends and implement change.	De Massis et al. (2018); Adamowicz and Machla (2016); Hulbert et al. (2015); Price et al. (2013); Forsman and Rantanen (2011); Damanpour (2010)
Owner-Manager characteristics.	Characteristics and behaviours of the entrepreneur or owner/manager that help to foster innovation.	De Massis et al. (2018); Marzo and Scarpino (2016); Higgins et al. (2013); Romero and Martinez (2012); Cope et al. (2011)
Presence of family members.	The dominance of family members results in them outperforming non-family businesses in terms of innovation.	Duran et al. (2016); Bakkour et al. (2015); Chrisman et al. (2015); Kraiczy et al. (2015); Classen et al. (2012)
Organisational learning.	The ability to use core competencies, build on unique selling strengths and employee relations to develop knowledge and innovation.	Ng and Kee (2018); Presenza et al. (2017); Whittaker et al. (2016); Galabova and McKie (2013); Laforet (2011); Simpson et al. (2011)
External links/collaboration.	Attaining knowledge outside of the business by developing links and opportunities to partner and collaborate.	Fiedler et al. (2017); McAdam et al. (2016); Whittaker et al. (2016); Clifton et al. (2010)
Research and Development.	Research and development tends to be reactive as it is informal, ad hoc and opportunistic (dependent on knowledge obtained from external sources).	Presenza et al. (2017); Whittaker et al. (2016); Lefebvre et al. (2015); Ganotakis and Love (2011)

**Table 2.5: SME Characteristics Restricting Innovation**

<b>SME characteristics</b>	<b>Description</b>	<b>Author(s)</b>
Resource constraints, skills and knowledge.	Lack of independence. Limited knowledge and relying on skills of a small number of people including family members which may impede innovative capabilities.	Granata et al. (2018); O'Connor and Kelly (2017); Shamsuzzoha and Al Kindi (2016); Purcarea et al. (2013); Irwin and Scott (2010); Birdthistle (2006)
Marketing ability.	Due to limited resources, SME marketing is likely to be haphazard and informal, with limited knowledge of marketing practices and consumer markets.	Alonso et al. (2016); Makhitha (2016); Hulbert et al. (2015); Gellynck et al. (2012); Parry et al. (2012); Hatonen and Ruokonen (2010)
Lack of strategic focus.	Flat organisational structure with a high level of staff turnover / owner-managers who may not take on board the views of their staff / lack specialist knowledge to pursue growth and innovation, focusing on short-term tactics.	Hagen et al. (2017); Marzo and Scarpino (2016); Tell et al. (2016); Kumar et al. (2012); Simpson et al. (2012)
Lack of Cooperation.	Small business owner-managers unwillingness to collaborate/barriers to open-mindedness / lack of awareness of opportunities to partner.	Hewitt-Dundas and Roper (2018); Adamowicz and Machla (2016); Shamsuzzoha and Al Kindi (2016); Baumann and Kritikos (2016); Brink and Madsen (2015)
Negative view / lack of awareness of Government support.	Lack of awareness, focus and negative perception of Government support. Limited interaction with key stakeholder community.	Loader (2018); Ghouse et al. (2017); Presenza et al. (2017); Mole et al. (2017); Adamowicz and Machla (2016); Drakopoulou Dodd et al. (2016)
Belief system of Owner-Manager.	The vision and belief system of the owner-manager will dictate decisions they make /make their own choices based on "intuition".	Collins and Reutzel (2017); Whittaker et al. (2016); Anderson and Ullah (2014)
Absorptive capacity.	Lack of absorptive capacity to translate external knowledge into new products.	Presenza et al. (2017); De Zubielqui et al. (2016); Love and Roper (2015); Spithoven et al. (2010)
Regulation / legislation.	Having to increasingly adhere to a number of regulations and legislation can be very costly and time intensive / i.e. specialist expertise (solicitor / accountant etc.).	Adamowicz and Machla (2016); Cant and Wiid (2016); Anderson and Ullah (2014); Akinboade and Kinfaek (2012)
Changing market forces.	Issues relating to changing market forces including demand / supply issues.	Nandonde and Kuada (2018); De Martino and Magnotti (2017); Manning and Smith (2015)

<b>SME characteristics</b>	<b>Description</b>	<b>Author(s)</b>
Financial.	Financial constraints can act as a barrier to smaller firms engaging in development, growth and networking.	Rammer and Schubert (2018); Rostamkalae and Freel (2016); Love and Roper (2015); Fraser et al. (2015)

SME characteristics facilitating innovation relate to the firm's internal capabilities in responding to external market factors. External factors include globalisation (Manning and Smith, 2015), changing market forces around demand and supply, and changing regulations (De Martin and Magnotti, 2017; Adamowicz and Machla, 2016). Attaining knowledge outside of the business by developing links and opportunities to partner represents various challenges for small businesses when developing product innovation (Projogo and McDermont, 2014). Nevertheless, SMEs can engage in "contextual innovation", wherein operational and strategic decisions are based on current business context (Roland-Ortt and van der Duin, 2008; McAdam et al., 2007), allowing SMEs to respond positively to change as a result of their adaptability and flexibility (Bakkour et al., 2015; Forsman and Rantanen, 2011) and overcome the typical advantages of larger firms, through market-orientation activities (Love and Roper, 2015; Alpkan et al., 2007). Such a context-based approach may be more appropriate for SMEs as it enables the management of innovation processes in a more informal and flexible manner to meet the constantly changing needs of small businesses (Gallego et al., 2012).

Internal firm capabilities include the owner-manager characteristics (Marzo and Scarpino, 2016), employee skills, creativity and empowerment (Dobni et al., 2015), an informal culture, (Love and Roper, 2015; Herrera and Sánchez-González, 2012; Rothwell, 1992), resources and size of the business (O'Connor and Kelly, 2017; Bouette and Magee, 2015; Laforet, 2012; Gray, 2006) as indicated in Table 2.4. It has been asserted that owner-managers do not fully recognise the competences that exist within their businesses including the value of internal communication systems, and the expertise and dedication of particular staff members (Faherty and Stephens, 2016; Varis and Littunen, 2010). Internal capabilities can help to grow the absorptive capacity of a business, therefore enabling firms to increase their ability to obtain and maximise knowledge from external sources (Chesborough, 2011; 2006), whilst creating and improving existing and new products and processes. Innovation adoption in small firms is heavily linked to the degree of absorptive capacity for collecting and using external knowledge (Galbraith et al., 2017; Presenza et al., 2017;

De Jong and Freel, 2010), through the use of open innovation to address resource limitations (Shamsuzzoha and Al Kindi, 2016; Colombo et al., 2014).

Absorptive capacity relates to the ability of a firm to identify, assimilate, transform and exploit knowledge from its environment into an innovation that enhances the firm's competitive position in the marketplace (Zahra and George, 2002; Cohen and Levinthal, 1990). Some debate exists within the literature about the dimensions of the absorptive capacity construct. Cohen and Levinthal (1990) contend that the construct comprises of three dimensions, firstly the ability to recognise the value of external knowledge, secondly the ability to assimilate it and finally the ability to apply it to a commercial end. Zahra and George (2002) devised a model proposing absorptive capacity as a dynamic capability comprising of four components. Acquisition and assimilation were perceived to have the "potential" to create competitive advantage whilst transformation and exploitation were classified as "realized" components of absorptive capacity as they reflect a firm's ability to leverage the knowledge that has been acquired. A contribution of Zahra and George's (2002) model is its assertion that knowledge flows can be analysed through organisational capabilities embedded in the firm's operations. Although the authors clearly distinguish between each component the interdependence and complementary roles each component plays is noted. The model suggests that each capability builds upon each other, in a cumulative process to "produce a dynamic organisational capability" which in turn leads to sustained competitive advantage. The model contends that in order for knowledge to reach the potential absorptive capacity (PACAP) stage there must be an activation point that compels a firm to respond to changes either in its internal or external environment. This could take the form of a performance failure, a change in Government policy or a radical innovation by a competitor. Furthermore, Vega-Jurado et al. (2008) suggest that firms in low technology sectors, such as the agri-food sector, are likely to display higher levels of PACAP than RACAP (realised absorptive capacity), due to their inability to exploit scientific knowledge that has been acquired. According to Zahra and George (2002) this may be detrimental to achieving competitive advantage as RACAP is a primary source of competitive advantage.

According to Zahra and George (2002) this may be detrimental to achieving competitive advantage as RACAP is a primary source of competitive advantage. For SMEs and micro enterprises, participation in networks and business support initiatives can help overcome resource limitations through leveraging external

knowledge for commercial gain (Zobel et al., 2016; Kozan and Akdeniz, 2014). However, it may be difficult to leverage this to lead to innovation outcomes (Galbraith et al., 2017) through realized absorptive capacity. In the context of micro enterprises this may prove particularly problematic, as innate resource and skills limitations impact the ability to acquire, assimilate, transform and exploit external knowledge (Zobel et al., 2016).

The literature suggests that SMEs tend to face higher barriers to innovation around their internal capabilities than their larger counterparts (O'Connor and Kelly, 2017; Love and Roper, 2015; Griffith et al., 2010; Nieto and Santamaria, 2010) including resource constraints and a limited pool of knowledge and skills (O'Connor and Kelly, 2017; Love and Roper, 2015; Manning and Smith, 2015; Shiri et al., 2015; Xie et al., 2010; Laforet and Tann, 2006; Todtling and Kaufmann, 2001) as highlighted in Table 2.5 above. Lack of resources in turn limit the small firm knowledge, skills and competency base (O'Connor and Kelly, 2017; Bouette and Magee, 2015; Gray, 2006), including knowledge on how to organise the innovation process (Cagliano et al., 2016; Costa and Jongen 2006), the time commitment for innovation (Straten et al., 2014) and the ability to network (Love and Roper, 2015).

Other significant internal capability issues include the lack of strategic planning for innovation to overcome fundamental barriers to innovation – the need for strategic planning on the part of the owner-manager (Tell et al., 2016), and the need for a “consultative” leadership style and limited empowerment of staff within the businesses (Boutette and Magee, 2015). Some authors have highlighted the downside of an “informal” approach to innovation (Scuotto et al., 2017; Laforet, 2012) as being short-sighted (Nooteboom, 1994) and “ad-hoc” (Laforet, 2012). The failure of many small firms to adequately train their employees is a reflection of short-term thinking, indicating a lack of long term planning to improve performance (Yu-Lin et al., 2010; Gray, 2006). SMEs are likely to be more risk adverse with limited ability in terms of how they respond to changes in the external market (Manning and Smith, 2015; Bennett, 2008).

Micro size businesses (ten or less employees) have their own unique operating characteristics and approaches and need to be considered independently from larger small and medium sized businesses (Baumann and Kritikos, 2016; Kelliher and Reinl, 2009). Table 2.6 below highlights some key micro firm characteristics.

**Table 2.6: Micro Firm Characteristics**

<b>Characteristic</b>	<b>Author(s)</b>
The decision-making process is different from that of a larger company - adhoc and enabling the owner-manager to maintain control.	Alonso and Bressan (2016); Baumann and Kritikos (2016); Weber et al. (2015); Kellier and Reini (2009); Greenbank (2006; 2000)
Informal communication occurs as and when needed within the business, with no formal procedures or policies recorded.	Gherhes et al. (2016); Leissur and Sonfield (2015); Kelliher and Henderson (2006)
Owner – manager traits, including emotional intelligence and the ability to capitalise on previous experiences and past employment history to innovate.	Rieple and Snijders et al. (2018); Leissur and Sonfield (2016); Kearney et al. (2014); Tregear (2005)
Lifestyle motivation - balance competing goals pertaining to business objectives and lifestyle aspirations, with the owner-manager desire for independence.	Kirkwood (2016); Swan and Morgan (2016); McAdam et al. (2015); Weber et al. (2015); Weber and Carlsen (2012)
Creativity and passion particularly of the owner-manager and other more senior members including relations.	Faherty and Stephens (2016); Kilenthong et al. (2016); Bakkour et al. (2015)
Family member control over firm, including the influence of the founder.	Roper and Hewitt-Dundas (2017); Leissur and Sonfield (2015); Moyes et al. (2015); Ullah and Smith (2015)
Limited capacity and willingness to collaborate / co-operate.	Granata et al. (2018); Alonso and Bressan (2016;2015); Gherhes et al. (2015); Tu et al. (2014)
Limited resources to innovate where marketing research is infrequently employed with cost considerations usually not being accounted for.	Oostrom and Fernandez-Esquinas (2017); Anderson and Ullah (2014); Tu et al. (2014); McElwee et al. (2006)
Peripheral location limiting economic development that will deliver growth and jobs.	Carson and Carson (2018); Bennett et at. (2015); Reini et al. (2015); McAdam et al. (2015)
Significant emphasis is placed on interacting with customers.	Alonso and Bressan (2016); Faherty and Stephens (2016); Levebrve et al. (2015); Kellier and Reini (2009)

They face increasing levels of competition (Aaltonen et al., 2015), bureaucracy and trade barriers. Moreover, they are owner-manager dominated, growth-averse, with underdeveloped capabilities in fundamental business areas and lack sufficient business support provision (Gherhes et al., 2016). For micro sized businesses the importance of informal networks of friends and family members are highly rated sources of information (Mole et al., 2017). Informal or social networks allow micro firms in rural places to overcome disadvantages of location and size (Sanders et al., 2014; Ring et al., 2010; Anderson and Jack, 2002), and informal networks are deemed to be particularly strong in rural areas (Sorensen et al., 2016; Atterton, 2007). Trust relations with family members and friends and the wider community within which micro businesses are embedded help to foster social capital and strong ties, which are deemed to be highly important for knowledge exchange (Sorensen, 2016; Tregear and Cooper, 2016). Further consideration will be given to informal networks for micro



businessses in Chapter Four (Section 4.1.2.1) within the discussion of social capital. The types of business networks that micros and SMEs more widely use will be discussed in the next section.

## **2.5 SME Innovation Networks**

As highlighted in the previous section of this chapter, the innovation discussion on SMEs has widened beyond focusing on internal capabilities for innovation around financial (Lechner et al., 2016), physical and human resources (Varis and Littunen, 2010), to consider how SME owner-managers seek external support in order to overcome the numerous constraints they face (Presenza et al., 2017; Cadil et al., 2017; Purcarea et al., 2013), including through open innovation, using resources from outside their business in order to accelerate innovation (Shamsuzzoha and Al Kindi, 2016; Chesbrough, 2012). Small firms rarely innovate in isolation and depend significantly on external sources of information to innovate other than internal R&D as is the case within larger businesses (Levebrve et al., 2015; Kuhne et al., 2013; Freel, 2004; Ganotakis and Love, 2011). Increasingly more firms are now collaborating through networks consisting of a comprehensive range of companies and so accessing a range of resources and knowledge (Love and Roper, 2015), including via open innovation (Presenza et al., 2017; Ferto et al., 2016). Within the agri-food sector firms are particularly dependent on external sources of innovation (Ciliberti et al., 2016; Doloreux, 2015; Lefevre et al., 2015; Kuhne et al., 2013) due to their reliance on learning from and engaging with other firms.

Both innovation management and network literatures indicate that those businesses that belong to networks are more successful than those that do not (Shamsuzzoha and Ali Kindi, 2016; Miller et al., 2007; Brass et al., 2004). It is widely recognised that firms who participate in collaboration and who pursue external sources of knowledge are likely to be more innovative than firms who depend on their own resources to innovate (Lefebvre et al., 2015; McAdam et al., 2015; Purcarea et al., 2013; Laursen and Salter, 2006; Ritter and Gemubden, 2003). This has been found to be the case in younger small businesses (Whittaker et al., 2016; Marcati et al., 2008), and even those firms operating in low tech industries, including the agri-food sector (Bayona-Saez et al., 2017; Presenza et al., 2017; Trott and Simms, 2017). The literature on open innovation (see discussion in Chapter Four) proposes that resources obtained from outside of the firm help to utilise internal strengths (Chesbrough, 2012; 2006).

While authors such as North and Smallbone (2000) and Sternberg and Arndt (2001) argue that the development of internal competences is more important than external influences, as the majority of innovation occurs inside the firm (Fagerberg et al., 2009), recent studies have contradicted this, arguing that strong internal competences and the knowledge base are not required in order to successfully develop innovative processes and to successfully avail of external knowledge sources (Purcarea et al., 2013; Varis and Littunen, 2010; Avermaete et al., 2004). Firms with high level networks can gain knowledge externally which they can then implement internally, therefore developing their innovation capability (Steensma et al., 2012) and thus indicating the importance of SME owner-managers moving away from “the doing it alone” attitude to one where maximum benefits are achieved from utilising internal capabilities in conjunction with external sources of innovation (Presenza et al., 2017). Indeed, it is therefore recommended that a combination of internal and external sources should be used collectively to improve innovative capabilities (Gerke et al., 2016; Bellamy et al., 2014), involving relationship building (Phelps et al., 2012), as novel innovation is only truly achieved when a range of collaborators are consulted (Greve, 2007).

There are many specific benefits to be gleaned from SMEs participating in networks (Love and Roper, 2015; McAdam et al., 2014; Watson, 2011). The literature on innovation systems (Freel and Robson, 2017; Whittaker et al., 2016; Oakey, 2013) has highlighted the need for SMEs to develop relationships with heterogeneous actors including customers, other businesses, educational, public and private institutions including universities, research centres and consultancies in order to access resources and complementary assets (Colombo et al., 2014) and to help overcome insufficient resources and a lack of multidisciplinary skills and capabilities (Galbraith et al., 2017; Abouzeedan et al., 2013). By so doing this helps these small businesses to develop inter-firm linkages to address their “knowledge gaps”, fostering their innovative performance (Avermaete et al., 2004), in particular via open innovation (Presenza et al., 2017; Colombo et al., 2014). Networks can provide a mechanism for social support among businesses who are often isolated and a forum from which business owners can learn and discuss day to day experiences of their peers or seek information in relation to business issues (Phillipson et al., 2006). Networking through social, business and trade activities can form the key source of marketing intelligence on which SME planning is based. Firms increasingly recognise the need to collaborate formally and informally (Avermaete et al., 2004) as

benefits for innovation can be significant, including bringing together complementary skills (Elvekrok et al., 2017; Westerlund, Risto Rajala; 2010) and thus gaining and sharing knowledge and developing new relationships whilst gaining access to new technologies and markets (Lefebvre et al., 2015). By making use of external knowledge through networks and by responding quickly to opportunities via open innovation (Ferto et al., 2016), and developing collaboration (Love and Roper, 2015; Massa and Testa, 2008), small businesses may overcome any skills shortages and capabilities that would otherwise inhibit innovation (Wright et al., 2015; Abouzeedan et al., 2013). The sharing and exchange of knowledge with external stakeholders to exploit external knowledge can help to enhance competitive advantage (Elvekrok et al., 2017; McAdam et al., 2015; Clifton et al., 2010), leading to a higher degree of flexibility and the development of a number of various relationships amongst members. Furthermore, opportunities are available to “partner”, which is important for survival (Fisher et al., 2009).

Nonetheless, the benefits of collaboration have been questioned (Fitjar and Rodríguez-Pose, 2013). Collaboration presents a range of various challenges. Lack of knowledge (De Noni et al., 2018), institutional differences and contradictory cultures can lead to a whole array of issues and thus potential network problems (van de Vrande et al., 2009). Innovation is more likely to occur when businesses select partners with the relevant knowledge that can be easily transferred (Varis and Littunen, 2010). Moreover, innovation is likely to be further enhanced when stakeholders are based outside of the local vicinity (Fitjar and Rodríguez-Pose, 2013) as partners can benefit from a wider sphere of knowledge creation and diffusion. Nevertheless, it has been contended that co-located based partners are more effective in developing external research collaborations (Belussi et al., 2010). However, little is known about what makes up a successful network apart from partners being able to “fit” together with a local business person taking the lead in the development of the network (Herr and Mann, 2010).

To summarise, there are a number of external actors or networks that SMEs and micros can interact with to avail of external sources of innovation. These can be broadly categorised as institutional or scientific and technical actors/sources, to more ‘softer’ elements or market based actors/sources, involving informal relationships that facilitate the generation and exchange of knowledge via the development of

interactions and networks (Lundvall, 1992). The institutional and market based actors and sources of innovation will be discussed in the following sections.

### 2.5.1 Regional Innovation and Institutional Sources

As referred to in the section above, there are a number of external actors or networks that small firms can interact with to avail of external sources of innovation, including institutional sources. Institutional sources of innovation include developing relationships with universities and research bodies, clusters and other networks (Nettle et al., 2018; Kim and Lui, 2015), consultants (Nettle et al., 2018; Mole et al., 2017; Esparcia, 2014), the public sector (Galbraith et al., 2017), business associations and online sources (Presenza et al., 2017; Newbery et al., 2015). These may be discussed within the broader concept of regional innovation systems (RIS). The regional innovation system may be defined as “the institutional infrastructure supporting innovation within the production structure of a region” (Asheim and Coenen, 2005, p.1177). In this, regional competitiveness is predicated on the degree of collaboration and the existence of social networks and institutional structures (Kitson, 2011), where increasing innovation capacity across all sectors of activity is essential in developing economic advantage to drive regional competitiveness. An important aspect of RIS is the “clusters” approach which highlights the importance of regional resources, collaboration and networks (Skålholt and Thune, 2014). As often associated with Porter’s work (2008; 1990), the cluster concept suggests that regional competitive advantage is primarily based on the dynamics of geographically localised activities and institutions. The concept of regional innovation systems has addressed the role of intermediary organisations in the innovation process, and intervention policies in facilitating innovation capacity or the RIS (Lui and Chen, 2012; Landabaso et al., 1999; Cooke et al., 1998), distinguishing between hard and soft innovation structure. Hard support refers to organisations with personnel designated to carry out R&D activities such as universities and research centres, while soft support refers to a range of organisations with fewer resources that act as liaisons between firms and the other agents in the innovation system. More recently, there has been a reinterpretation of regional innovation systems and clusters by work linking the micro-economic behavior of firms and individuals (agents) with the growth of networks at the level of the economy (Coenen et al., 2017).

The regional innovation system is a very important support system for SME owner-managers as it helps to overcome their inherent knowledge limitations through fostering their involvement in networks. Public bodies play a significant role in helping low tech SMEs to develop their innovative activities moving away from traditional models of innovation in favor of open innovation approaches (Presenza et al., 2017). Furthermore, it has been argued that small firm agri-food firms who collaborate with public bodies are more likely to have increased levels of product innovation (Fearne et al., 2013). As network models of business support facilitate a breadth of ideas and inputs from a range of local public and private stakeholders, opportunities for knowledge exchange and learning, and innovation are enhanced (Radicic et al., 2017; Newberry et al., 2013; Ng and Hamilton, 2013; Smallbone et al., 2010; Morgan, 1997). This is arguably critical in rural and peripheral regions (Galbraith et al., 2017) that tend to have lower levels of innovation compared to central regions (Fearne et al., 2013). This is the case with Northern Ireland, traditionally a region renowned for under-achieving in terms of innovation activity (Galbraith et al., 2017; Cooke et al., 2003). Given the importance of developing learning to progress innovation, particularly through tacit knowledge (Pina and Tether, 2016), and face-to-face contact, SMEs are thus enabled to develop strong internal R&D activities (De Martino and Magnotti, 2017). Therefore it is argued that small businesses rely more on regional innovation and development (Argent, 2017; Lazzarotti et al., 2010), than their larger counterparts who place more emphasis on national and international networks to develop their innovation activities.

Similar to the regional innovation systems literature, the importance of regional “institutional thickness”, in the form of an interlocking and integrated network of supportive organisations at the firm and regional institutional levels was highlighted, in a body of work during the 1990s, as helping to shape the development of a collective learning capacity (Amin and Thrift, 1995). Different types of intermediaries can be used to build networks where network power comes from the associations between actors (Amin and Thrift, 1995). Amin and Thrift (1995) list the organisational components and processes that make up the institutional thickness of a locality including:

- A strong institutional presence;
- High levels of interaction among the institutional network in the locality, which may in time bring about shared rules and conventions;

- Structures of domination which result in the gain collective representation; and
- A mutual awareness of a common enterprise or goal among participants and institutions.

The presence of these determinants of institutional thickness will produce various outcomes including a high innovative capacity, at region and firm levels, and trust and reciprocity as a behavioural norm. However, there are examples of where institutional thickness has not been found to be linked to economic success in particular regions and this is attributed to a lack of conceptual clarity associated with economic geography concepts such as social embeddedness or the learning region (Henry and Pinch, 2001).

Studies highlight the importance of SMEs developing relationships to facilitate scientific collaboration with a collection of agencies that include research bodies and universities, consultants, trade associations, and Government support agencies, to help them develop their innovative capabilities (see for instance Barzi et al., 2015; van Hemert et al., 2013; Lasagni, 2012; Parida et al., 2012). Collaboration between academia and industry is viewed as critical in developing a knowledge based economy (Abbasnejad et al., 2011) through organisational innovation. University innovation partners are more likely to be used in some industries than others (Ritter and Gemunden, 2003), for example, the pharmaceutical sector, where studies have indicated that university collaboration is more beneficial for firms who have high scientific absorptive capacity (Belderbos and Gilsing, 2016). Moreover, collaboration with universities is more likely to result in radical product innovation rather than process forms of innovation (Fitjar and Rodríguez-Pose, 2013). Research institutes are regarded as an important source of innovation for small low-tech firms as they provide knowledge and expertise to undertake in-house research (Baardseth et al., 1999). In addition, collaboration with universities can help small food businesses to innovate through new technological developments around food processing and packaging techniques (Menrad, 2004). This enables the amalgamation of new ideas and products (Laursen and Salter, 2006). Moreover, it has been suggested that SMEs are more likely to benefit from external linkages with universities at particular stages of innovation development than others (Tödtling et al., 2009).

Various studies have found SMEs to be generally less likely to avail of support provided by universities and educational institutions. Indeed, the value of research

carried out by universities on behalf of SMEs who are developing and introducing new products or services has been questioned (Soh and Subramanian, 2014). In a recent study carried out on SME wine companies based in Italy a range of external knowledge sources were investigated, and it was concluded that academic related networks did not play any role in impacting on a firms' innovation ability (Presenza et al., 2017). This may be explained in that SMEs operating in a low-tech sector are much less likely to engage with higher education institutions due to a range of cultural differences, including different perceptions regarding timeframes and expectations (Goduscheit and Knudsen, 2015), as well as a lack of awareness of the services on offer. In this, the commercial value to SMEs from university / business engagement is in question (Dada and Fogg, 2014). Colurcio et al. (2012) found that for SMEs consumers and competitors were the main sources of innovation for SMEs, rather than research institutions. It has been argued that universities are more likely to be interested in the scientific rather than the market value of any activities they become involved in (Hyll and Pippel, 2016), therefore the knowledge provided by universities may be harder for SMEs to access. Therefore, there are mixed results regarding the contribution of universities and research institutes to innovation in small business.

Trade associations provide another source of information and knowledge exchange between consumers and producers (Kahl and Grodal, 2016) including the identification of new trends and knowledge, hosting events and distributing information in a range of forms (Kahl, 2018). This is beneficial to small business owner-managers as they have limited time and means to obtain and process this new information. Furthermore, trade associations can act as a "collective voice" and provide social opportunities for the exchange of knowledge and ideas, whilst reducing feelings of loneliness and isolation for owner-managers (Newbery et al., 2016). By so doing trade associations can act as innovation intermediaries on behalf of small businesses. The following section will discuss the role of innovation intermediaries in more detail.

#### *2.5.1.1 Innovation Intermediaries*

The systems of innovation literature has recognised the existence and role of intermediary organisations. Howells (2006) defined the innovation intermediary broadly in terms of an organisation that acts as an agent/broker in any aspect of the innovation process between two or more parties. The different roles that these actors

play within the innovation process have been variously described as third parties, intermediary firms, bridgers, brokers, and information intermediaries. Innovation intermediaries undertake a variety of tasks, 'that go well beyond the early phases of information scanning and exchange' (Howells. 2006, p.720). These include: scanning and information processing; knowledge processing; gatekeeping and brokering; testing and validation; and commercialisation, as highlighted in Table 2.7 below, involving more than information gathering, exchange and linking functions, to incorporate a much wider and holistic role for clients (Kirkels and Duysters, 2010).

**Table 2.7: Innovation Intermediary Functions**

<ol style="list-style-type: none"><li>1. Foresight and diagnostics</li><li>2. Scanning and information processing</li><li>3. Knowledge processing and combination/recombination</li><li>4. Gatekeeping and brokering</li><li>5. Testing and validation</li><li>6. Accreditation</li><li>7. Validation and regulation</li><li>8. Protecting the results</li><li>9. Commercialisation</li><li>10. Evaluation of outcomes</li></ol>
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Source: Howells (2006)

Howells (2006) noted the systemic value that innovation intermediaries may play in policy terms in an innovation system - not only in terms of improving connectedness within a system, particularly through bridging ties, but also in its "animateur" role of creating new possibilities within a system. Furthermore, Howells (2006) noted the broad scope of activities associated with innovation intermediaries that go beyond just the brokering of innovation services, linking clients with other organisations, but also the supply of services direct to their clients on a one-to-one basis, which does not involve interaction with other organisations.

Batterink et al. (2010) identified several core characteristics of intermediaries dedicated to network development as a core activity, focused on facilitating innovation by brokering between cooperating SMEs. Batterink et al. (2010) outlined the various functions of brokers including that: innovation brokers help to initiate innovation networks by helping SMEs to articulate their knowledge demand, by searching for and delineating cooperation partners and by guiding the cooperation during the innovation process. In this, the innovation broker should be embedded in the social



and business network of local SMEs, enhancing transparency in the innovation network, facilitating interaction between the network members, and maintaining a large and heterogeneous network.

In the small firm development literature it is argued that intermediaries require a very special set of skills and aptitudes, excellent communication, ability to maintain equal distribution of power and dependency, reducing friction and animosity, by using their own local knowledge resources within an environment conducive to mutual learning (Huggins, 2000). As Huggins' (2000) work demonstrated, the energy, enthusiasm and experience of intermediaries or brokers is key in generating effective interaction and exchange between participants, particularly in the early stages of group formation. The most effective network brokers are able to successfully mix the economic goals with softer social interests of participants. Sökjer-Petersen (2010) also points out that to be most effective, advisers should adjust their facilitation approaches according to the evolution stage of the network, starting, in the early phases of development, with sensitivity to group "pre-history". Advice from intermediaries therefore requires a close working relationship between the adviser and client that allows the transfer of know-how and expertise (Clark, 1993). This is viewed as an inherently intangible service and thus judging the quality of advice is difficult (Bennett and Robson, 2003).

### 2.5.2 Market-based Actors

Market-based actor knowledge for innovation includes knowledge accumulated mainly through informal, ongoing interaction including via social capital ranging from customer to producer feedback (Lefebvre et al., 2015; von Hippel, 1988), personal relationships and links to other firms (inter-firm co-operation) (Barzi et al., 2015), alliances and partnerships and relationships with suppliers (Lefebvre et al., 2015).

For SMEs operating in a mature sector such as agri-food, interacting with customers is key for innovation (Gerke et al., 2016; Laforet, 2012), reflecting the paradigm shift of firms learning from their customers, moving towards more open forms of innovation (Presenza et al., 2017; Chesbrough, 2003). Engagement with customers allows businesses to develop, tweak and produce products and services to meet the needs of their target audiences (Bianchi et al., 2010). In a study carried out exploring external sources of innovation in the Canadian wine industry (Doloreux, 2015), the

primary source of feedback for product development was market information from customers. It has been identified that small artisan businesses base the development of their innovations on customer feedback, providing firms with a better understanding of customers' needs and developments in the market (Freng Svendsen et al., 2011), therefore reducing the associated risks involved (Pittaway et al., 2004). Nevertheless, a shortcoming of customer intelligence is that the knowledge they provide may be difficult to access and implement due to its complexity.

Recent studies have indicated that various sources of external knowledge produce different types of innovation (Presenza et al., 2017; Lefebvre et al., 2015; Capitano et al., 2010; Todtling; et al., 2009; Freel and de Jong, 2009). For instance, more complex, radical innovations require engagement from a diverse range of partners thus developing knowledge and expertise (Lefebvre et al., 2015; Pittaway et al., 2004). In the food industry firms develop inter-organisational relationships for innovation purposes and most notably with suppliers (Beckeman et al., 2013). It has been argued that firms who engage with suppliers are more likely to develop products that are radical or new to the market (Tranekjer, 2017; Baiman et al., 2002) due to the importance of gaining their feedback on various aspects of product development (Chen et al., 2016; Doloreux and Lord-Tarte, 2013). Benefits of the involvement of suppliers are numerous including providing a more superior service than their competitors (Ferto et al., 2016), improvement of product quality, reduced costs and time savings (Feng et al., 2010). The importance of suppliers has been questioned however, with some authors arguing that their impact on product innovation in small firms is much less positive (Fabio and George, 2017; Presenza et al., 2017).

Informal networks may evolve into more formal collaborative efforts (Vrande et al., 2009). However, this may cause issues for small firms in maintaining a balance between sharing information and capabilities with other businesses whilst not declaring "inside knowledge" relating to product uniqueness (Presenza et al., 2017), due to the fear of partner firms stealing ideas and "trade secrets" (Dahlander and Gann, 2010). Collaboration with competitors can have a negative effect on the ability of firms to innovate, however, partnerships within the same sector are more likely to result in incremental product innovation as competitors may deliberately suppress their knowledge, which therefore cannot be accessed or shared (Bouncken et al., 2015). Traditionally, micro owner-managers (Danson et al., 2015; Reini et al., 2015), and food artisans have demonstrated a lack of within-sector networking and

collaboration (Alonso and Bressan 2015; Tregear 2005), restricting their ability to avail of knowledge sources for increasing innovativeness. Trust plays an important role in developing innovation capacity with collaborators within the food industry (Dubois, 2018; Kuhne et al., 2013).

The results of these studies suggest that market based sources of innovation are more important to the introduction of innovation within SMEs than science based actors. Ultimately, whilst suppliers and competitors play a very important role in the innovation process, it is customers and other businesses who firms predominately engage with when innovating (Presenza et al., 2016; Todtling and Kaufman, 2001). Furthermore, such collaborations can lead to the development of innovative behaviour where stakeholders are from the same industry due to their shared interests and knowledge of the sector (Lefebvre et al., 2015).

## **2.6 Chapter Summary**

This chapter has reviewed the literature on SME innovation including studies on the types of innovation and barriers to innovation in small firms. It has highlighted the positive impacts of innovation on small business. Small or micro size enterprises can avail of knowledge sources from outside the business through learning networks with customers, suppliers and business collaborations, and through business support from a number of institutional actors. Moreover, innovation management and network literatures indicate that those businesses who belong to networks are more successful than those who do not. Whilst there is a consensus that collaboration is a vital source of innovation for small and micro firms, enabling them to overcome their resource constraints, knowledge about how small firms actually innovate remains limited, particularly in relation to low tech and traditional sectors such as agri-food. Research studies on small firm innovation in the food industry have, in the main, focused on particular types of innovation largely in isolation rather than taking a more holistic view of innovation.

The review of the literature in this chapter has identified a number of themes that will be incorporated into the literature based conceptual framework presented in Chapter Four. With the broader context of innovation networks and external sources of innovation introduced in this chapter, Chapter Three will now proceed to review the literature on small business support.

# **CHAPTER 3**

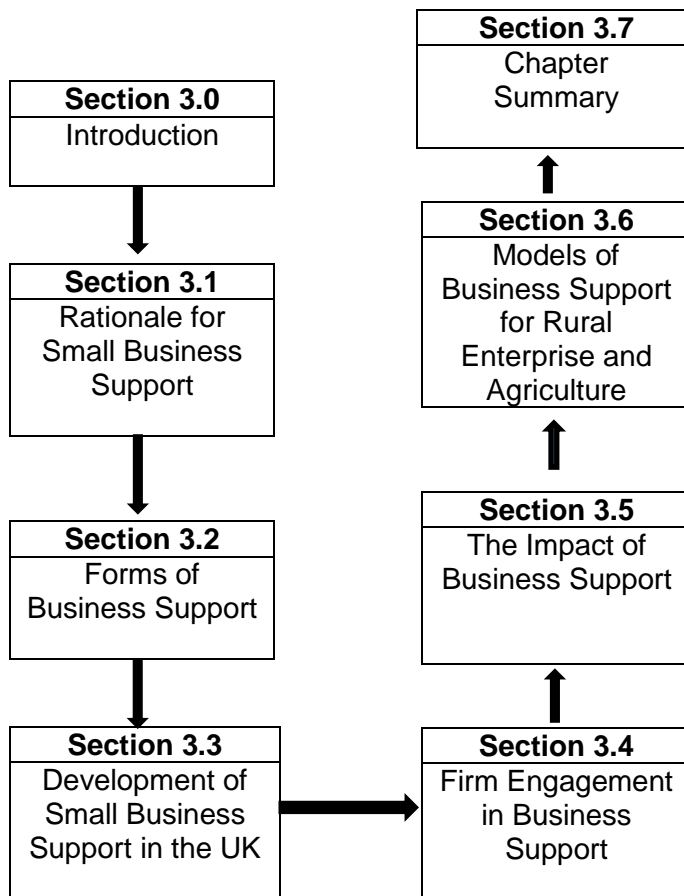
## **Support Programmes for Small Business**

### **3.0 Introduction**

Chapter Two presented a comprehensive literature review on SME innovation and considered previous research on types of innovation and barriers to innovation in small firms. In so doing, knowledge gaps were identified around how small firms actually innovate, particularly in relation to low tech and traditional sectors such as agri-food and by extension the role of business support agencies in fostering innovation within micro enterprises. In relation to this research gap, and the aim of the present study as highlighted in Section 1.2, this chapter reviews the literature on business support programmes for small firms, including the historical development of small business support in the UK, the impact of business support, and the particular characteristics of support for agriculture and rural enterprises. The chapter will thus cover the areas highlighted in research objectives two, three and four.

The chapter will begin by considering the rationale for small business support before moving on to delineate the main forms of business support. Studies that have measured the impact of small business support will then be reported, with particular reference to the development of small business support in Northern Ireland. The changing nature of support for agriculture and rural enterprise more widely will be outlined, and the chapter will end with a discussion of the literature on adviser roles and the adviser-client relationship in agriculture, and studies that have examined the adviser-adviser relationship.

Figure 3.1 outlines the main sections of Chapter Three, presented overleaf.



**Figure 3.1: Outline of Chapter Three**

### **3.1 Rationale for Small Business Support**

The need to develop sustainable business environments and entrepreneurial conditions to support growth and innovation is more paramount today than ever before (De Noni et al., 2018; Arshed et al., 2016, Thompson et al., 2012). Governments are increasingly aware of the importance of creating a business support infrastructure which is innovative and progressive (Dumont, 2017; Lee and Shaw, 2016; Henry and Treanor, 2013; Martin et al, 2013; McElwee and Annibal, 2010; Smallbone et al., 2008; Beaver and Prince, 2004; Curran, 2000). Thus, support for the creation and development of small business is widely viewed as a key component of the industrial policies of most nations (Cadil et al., 2017; Dumont, 2017; Robson and Bennett, 2010). While an issue of contention is the expenditure invested in SME support policies, and its impact, publically funded advice to SMEs is generally deemed to be important for economic development (Dumont, 2017; Mole et al., 2011).

Despite this being the case, there is an ongoing need for policy makers to better understand the needs of SMEs (Loader, 2018; Lee and Shaw, 2016), and especially the needs of micro businesses (Roper and Hewitt-Dundas, 2017).

Reports such as “Growing Your Business” (Young, 2013) indicate that the British Government is continuing to invest in SME support policies. There is extensive evidence that business support can have a major influence on the type and quality of businesses created in a country or region (Cadil et al., 2017; Ng and Hamilton, 2013; Smallbone et al., 2010). The use of external advice through Government policies and Government support programmes (Loader, 2018; Huergo and Moreno, 2017) is one way in which businesses can develop their strategies for growth (Cadil et al., 2017; Bennett and Robson, 2003). Owner-managers’ attitudes to availing of support varies considerably (Mole and Capelleras, 2018; Mole et al., 2017; Chapman and Hewitt-Dundas, 2017). Accordingly, it has been argued that those companies that do not avail of support are at a competitive disadvantage with limited opportunities to develop knowledge (Mole et al., 2013).

It has been proposed that small business policy should be designed to help assist SMEs improve their performance (Dumont, 2017), overcome barriers to growth (Cadil et al., 2017; Crichton, 2007; Kaikkanen, 2006), ability to innovate and, in short, to help increase regional competitiveness (Bennett, 2008). The arguments for small business support policies has been categorised in three major strands (Mawson, 2000). Firstly, where the case for Government support is based either in market failure (imperfect information on the part of customers or producers) (Mole et al., 2017; Gorton and Tregear, 2008) or in Government failure, whereby market failure occurs in that SME managers can find it difficult to assess the value of such advice (Mole et al., 2017; 2011). Secondly social economy arguments, whereby social networks that promote mutual trust and facilitate cooperation among business managers are important to the efficient functioning of markets (small firms tend to be much more socially embedded than large firms). Thirdly, governance arguments wherein the Government relies extensively on the private sector to achieve many aspects of public policy.

### **3.2 Forms of Business Support**

Support for small businesses is wide-ranging (Cadil et al., 2017; Bouette and Magee, 2015). Business support services include knowledge transfer through a wide range of sources, including business incubation or training provision from: venture capitalists, universities, Government business support programmes, and industry clusters (Macpherson and Holt, 2007). In the UK, public policymakers support entrepreneurship and enterprising behavior both in terms of bespoke programmes (e.g. for female-owned businesses; disabled people; ethnic minorities; students and graduates and rural enterprises) and also interventions that stimulate opportunities for the unemployed and generic start-ups (Lee and Shaw, 2016). Various authors (for example Mole et al., 2017; Green and Patel, 2013; Cumming and Fischer, 2012; Edwards et al., 2010) have attempted to categorise business support programmes. These categorisations include intensive or non-intensive, hard or soft, formal or informal, public or private supports. These will now be discussed in turn.

Intensive assistance involves continuous support and regular contact between the business service provider and the client. Non-intensive forms of assistance are deemed to be one-off interventions usually involving basic advice and assistance provided through a signposting service (Mole et al., 2009). “Soft” business support includes a range of assistance in areas such as accounting and finance, marketing, business plan development, product development, business improvement and technical support to help with skills development, ability to cope with problems, ability to manage, partnership development, and dissemination of best practice (Ramaciotti et al., 2017; Edwards et al., 2010; Ramsden and Bennett, 2005; Wren and Storey, 2002). “Hard” supports include a focus on reduction in business costs, increase in turnover and profitability, with the aid of public subsidies, small firm capital grants and loan guarantee schemes (Ramaciotti et al., 2017; Wren and Storey, 2002). There has been significant investment in soft business support in recent years (Greene and Patel, 2013; Edwards et al., 2010), moving away from traditional hard business support measures. However, it has been argued that “soft” business support measures have had limited impact for small businesses (Belso-Martinez, 2009) though have helped the survival rates of medium sized businesses (Wren and Storey, 2002).

The relationship between informal and formal sources is complementary as informal



advice acts as a vehicle towards businesses gradually availing of more formal support (Mole et al., 2017). However, policy interventions that are intended to promote and support networking are deemed to be among the most difficult to deliver effectively (North and Smallbone, 2006), for instance, it has been found that mentoring can have a negative effect on firm survival. Nevertheless, it has also been found that coaching and training contribute to higher sales growth (Ramaciotti, 2017).

In a further attempt to delineate business support, Bratton et al. (2003) divided business support organisations into three categories:

- Private sector suppliers whose primary objective is profit maximisation;
- Collective association service providers, such as business associations, whose objectives include collective services and advisory support to individual businesses that are their members; and
- Public service providers that seek to fill market gaps as well as pursuing social objectives.

Each supply a different but overlapping bundle of supports. Private sector suppliers represent the majority both in number and volume of services supplied and have been found to be the most frequently used sources of advice (Mole and Capelleras, 2018; Mole et al., 2017; Ramsden and Bennett, 2005; Jay and Schaper, 2003). Moreover, there is more demand for private sector advice in geographical areas where start-up rates are higher (Mole and Capelleras, 2018). Government support has therefore become regarded as supplementary in nature and not the main source of business support (Bennett, 2008). Bennett (2008) indicated that the most popular forms of private support come from advisory services, with typical service providers including the accountant, the bank, and suppliers. The accountant plays a very important role in the small business as they tend to develop a close, trustworthy relationship with the client (Mole et al., 2017; Edwards et al., 2010). There are a wide range of additional delivery agents involved in the supply of business support services, including business associations, for instance Chambers of Commerce (Kessler et al., 2009; Bennett, 2008). Chambers of Commerce are a common provider of business services to SMEs across the world (Kessler et al., 2009; Bratton et al., 2003). A Chamber of Commerce can provide a number of services including general business information, signposting, training and advice on exporting. The advantage of obtaining information from a Chamber of Commerce is that they offer a number of

business support services under one roof which are representative of the needs of the local business infrastructure (Bratton et al. 2003).

To summarise at this point, while categorising support allows for some clarity around the multitude of forms of support, the constraints of such classifications of business support have been highlighted. For instance, Massey (2006, p. 44) believes that they can “at best, offer a starting point for more complex thinking, but at worst, perpetuate outdated approaches to policy design”. Massey (2006) called for frameworks for SME development to focus on the key developmental issues both at individual and firm level, rather than membership of a particular target group.

In consideration of the study’s geographical context, the development of business support within the UK and Northern Ireland will be discussed in the next section.

### **3.3 Development of Business Support in the UK**

Contemporary discussions on publicly funded business support have taken into account a range of high level policies as has been the case in Northern Ireland, where support for the small business sector is an important policy issue, particularly within the agri-food sector (see Chapter Six). Consequently the development of the small business sector has been high on the agenda for policy-makers across the United Kingdom since the 1960s (Martin et al., 2016; Blackburn and Smallbone, 2011) and particularly from the 1980s onwards (Ram et al., 2012; Bennett and Robson, 2003). Following the publication of the Bolton Report, research rapidly developed into issues facing the small business sector during the 1970s (Blackburn and Schaper, 2012; Blackburn and Kovalainen, 2009). Consequently, significant progress has been made in terms of the development of small business policy (Cadil et al., 2017; Ram et al., 2012; Beaver and Prince, 2004), with regional Governments across the United Kingdom being given more responsibility for the development of policy intervention for small businesses when developing their economic agendas (Blackburn and Smallbone, 2011; Bennett, 2008).

In Northern Ireland, industrial development policy has been delivered through the Department for the Economy (formerly the Departments of Enterprise, Trade and Investment (DETI), and Economic Development) since the mid-1980s. Industrial policy has changed in focus since 1990 from support for direct job creation to indirect

support for employment through developing the competitiveness of firms receiving assistance (McGuinness and Hart, 2004). However, assistance has remained targeted at larger, export-oriented firms. Grant assistance to small firms was delivered by the Local Enterprise Development Unit (LEDU) during 1994-1997 through its Growth Business Support Programme. LEDU was focused on firms with fewer than 50 employees in manufacturing sectors and tradeable services sectors with potential for export growth. LEDU's strategic remit also included the development and promotion of enterprise in Northern Ireland, namely business start-ups. To this effect LEDU activities included the part funding of a regional network of Local Enterprise Agencies, providing services, including financial assistance and advice to firms at a local level. LEDU was merged with other industrial development agencies in Northern Ireland in 2002 to form InvestNI (further discussion on InvestNI will be provided in Chapter Six).

Across Great Britain business support has taken a number of forms. The nature of support changed significantly during the 1990s from a multi-agent, centralised and fragmented structure to a more coordinated, localised structure through Business Links and the Small Business Service in the latter part of the decade. There has been much discussion in the literature about Business Link (BL) (Mole et al., 2017; Henry and Treanor, 2013; Ram et al., 2012; Robson and Bennett, 2010; McElwee and Annibal, 2010; Mole et al., 2009; Bennett, 2008). BL was a "one stop shop" referral service using personal business advisers, run as a system of local franchises under a central brand, introduced by Government in Britain in 1993. One of the main reasons why BL was launched was to enable the decentralisation of business advice and support through local agents. Business advisers provided a central service comprising of specialist and generalist support to a range of SMEs in which they were in frequent contact with. Business Link concentrated more on mid-range SME firms (Mole et al., 2017; 2009; Wren and Storey, 2002), targeting SMEs employing over 10 employees, with a particular emphasis on those companies who had the potential to grow.

Under the revised Small Business Service model at the end of the last century, business support moved away from the provision of centrally provided services to a "brokerage" model where customers were linked up with other business support providers, through a model of local implementation and the supply of general support (Freitas and Tunzelmann, 2008). This move from Business Link towards a

decentralised brokerage model of service required the adviser to act as a sounding board, thus changing the nature of the adviser relationship with the SME client (Hjalmarsson and Johansson, 2003). This coordinated structure and single brand strategy sought to provide a simpler marketing strategy, thus making it easier for SMEs to find and access advice. This represented a move towards a value for money and hands off policy of support and the outsourcing of policy delivery to a local private infrastructure of providers, leading to changes in the type of support provided and in the number of private organisations delivering support to firms. However, the Small Business Service was short lived and ended in 2007 amid critical reports and criticisms of performance against targets and limited power across central Government (Green and Patel, 2013).

Since 2010, there has been a shift away from a public services direct support model, towards a “framework based paradigm” where Government sets a framework for private sector support (Richard, 2008). Following the Richard Report (2008), Business Link’s advice service (delivered face to face by advisers) was replaced by a signposting service (telephone and online based) to private providers for more intensive advice. In addition, the Regional Development Agencies (RDAs) were replaced by Local Enterprise Partnerships (LEPs) in England, in the hope that these new business-led organisations would provide better and more focused regional support (Green and Patel, 2013). While this transformation of business support aimed to increase the number of SME businesses taking up external advice from private sector sources, it has meant that public business support is now more associated with generic, codified knowledge rather than tacit knowledge (Mole et al., 2017).

### **3.4 Firm Engagement in Business Support**

The use of external advice through Government policies and Government support programmes (Mole and Capelleras, 2018; Curran, 2000) is one way in which businesses can develop their strategies for growth (Cadil et al., 2017; Solomon and Linton, 2016; Bennett and Robson, 2003). The motivation for participating in local business networks can vary greatly (Cadil et al., 2017; Curran, 2000) and in order to maximise involvement, it has been argued that focus should be placed on common interests (Elvekrok et al., 2017). Furthermore, the process of seeking out and participating in external support is deemed to be complex, involving a number of inter-

related factors (Johnson et al., 2007). The antecedents for business support services have broadly been identified in terms of firm level (access/location, size of the business, business life cycle, type of business, sector) (Mole and Capellers, 2018), owner manager characteristics (gender, ethnicity, age) and perceptual factors (perceived value of the services, quality of the services) (Chrisman and McMullan, 2004). The role of the owner-manager can not be underestimated. Their choices shape key decision and strategy making, driving the business forward through open innovation (Bogers et al., 2018; Ahn et al., 2017; Burcharth et al., 2017) and collaboration in order to develop close linkages, which are very important within the food sector (Trott and Simms, 2017). Furthermore, the importance of engaging with owner-managers and the needs of their business is crucial in securing effective outcomes from these initiatives (Arshed et al., 2016).

Moreover, the use of Government sources of advice varies greatly with owner-manager characteristics (Chapman and Hewitt-Dundas, 2017; Mole et al., 2017; Scott and Irwin, 2009). Owner-managers that have well developed networks are more likely to participate due to the referrals and word-of-mouth recommendations they receive as a result of a personal network (Hjalmarsson and Johansson, 2003). One reason for this is trust (Mole et al., 2017; Edwards et al., 2010) as the trust built with suppliers and customers is likely to influence the use of a service (Bennett, 1998).

Governments may intervene to facilitate SME growth (Heinonen and Hytti, 2016) and development where the use of external business advice allows for strategic and information skills to be developed (Johnson et al., 2007; Chrisman et al., 2005; Bennett and Robson, 2003). Over time as firms increase in size, they have greater need for external sources of expert knowledge and advice (Mole et al., 2017). It has been found that the use of external advice sources is stimulated mainly by gaps between the firm's internal resources and the resources required to meet business objectives (Mole et al., 2017; Johnson et al., 2007). Advice may help those with fewer resources to overcome barriers in the start-up phase. A lack of personal resources (social and human capital and entrepreneurial abilities) leads to greater take-up (Kosters and Obschonka, 2011) and can help in the early phase of firm development (Mole and Capelleras, 2018; Chrisman and McMullan, 2000). While business size has been found to be associated with more frequent support contacts, micro firms are not particularly intensive users (Mole et al., 2017; Cadil et al., 2017; Boter and Lundstrom, 2005) and advice has implications in that businesses are unlikely to be

prepared to pay for services that they can obtain at no cost from informal networks (Johnson et al., 2007). Moreover, they may place more trust in advice from individuals who they know, with business experience and no vested interest in the outcome of the advice. In addition, owner-managers will be concerned as to whether advisers will have a good understanding of their business needs (Mole et al., 2017). Moreover, micro companies have been less successful in gaining advice and small companies with over ten staff are much more likely to avail of formal sources of information and advice than micro businesses (Mole et al., 2017). Whilst firm size is linked to the take up of advice, so is location. Location is a further factor as knowledge is more likely to be shared among individuals through face-to-face encounters within their local regions (Mole and Capelleras, 2018). Therefore, there has been mixed results from studies carried out on the impact of business support, and this is further discussed in the section that follows.

### **3.5 The Impact of Business Support**

Small business support has been described as a “bewildering range of ever-changing policy schemes” (Kosters and Obschonka (2011, p. 601). A key question is whether firms actually benefit from interacting with business support and the evidence remains largely inconclusive (Loader, 2018; Cadil et al., 2017; Arshed et al., 2016; Pickernell et al., 2015; Nightingale and Coad; 2014). At Government level, little evaluation has been carried out to ascertain the success or otherwise of Government support initiatives (Huergo and Moreno, 2017; Radicic et al., 2017; Arshed et al., 2016; Richard, 2008). Given the level of Government investment in these initiatives (Arshed et al., 2016; Nightingale and Coad; 2014) running into the billions (Richard Report, 2008), this is somewhat surprising.

Of the limited reviews that have taken place these have been described as “imperfect” (Grimshaw et al., 2003). According to a recent report published by the Cabinet Office (2015) a number of reasons have been cited for this. Key reasons included not enough effective consultation with key stakeholders (for instance too much input from policy makers and not enough from small business owner-managers); not enough accountability undertaken; and too many priorities set, indicating a lack of planning for sufficient and focused implementation. Moreover, more generally, many evaluations do not take into account the longer-term impact of the initiatives and hence key learnings for future initiatives are at best limited (Jones et al., 2013). Thus

this indicates a waste of critical resources in relation to the public purse and a cynical community of owner-managers (Arshed et al., 2016).

The shortcomings on evaluation have also been stated by Kusters and Obschonka (2011) to include a focus on policy delivery, assessments of one particular type of scheme, which limits the generalisability of results given the diverse range of business support schemes, and a failure to account for selection bias. In addition, Government has been accused of adopting a top-down, mechanistic approach to policy development (North and Smallbone, 2006) and not fully understanding what support is actually needed, especially for small and micro sized enterprises (Thompson et al., 2012). Furthermore, there is no clear picture of the number of micro firms who avail of external advice (Bennett and Robson, 2003). Nevertheless, as a result of the global economic crisis and Government spending cuts and the amount of public funds earmarked for supporting SMEs, there has been an increased emphasis over the last few years on measuring the effectiveness of small business support (Cadil et al., 2017; Arshed et al., 2015; Henry, 2010). This would suggest that new innovative evaluation processes may be introduced (Henry and Treanor, 2013; Loader, 2013).

Storey (1999) highlighted varying approaches to policy evaluation (a six-step strategy) ranging from basic quantitative estimates of programme take-up to more sophisticated forms of evaluation comparing matched group comparisons of performance of assisted and non- assisted firms, taking account of self-selection bias. Evaluations of the impact of business support programmes have mostly been at the macro quantitative level, assessing outcomes such as job creation, and financial performance, rather than softer aspects around processes and learning (Patton et al., 2009). Quantitative analyses of programmes would appear to fit with Government preference for assessment against outcomes, over qualitative methods, where quantitative methods would be viewed as more rigorous (Curran and Blackburn, 2000).

Authors such as Cadil et al. (2017); Elder et al. (2016) and Lambrecht and Pirnay (2005) have called for more evaluation of public support initiatives at the micro, qualitative level where the objectives of the SME are taken into account, where there is more emphasis upon the process by which policy is developed and implemented, and the inherent learning, rather than a focus purely on outcomes (Patton et al., 2009). From the SME perspective, interactions with support providers are often of an

operational rather than strategic nature. SME firm level evaluations of success of interaction with support providers is dependent on the context within which the support is sought and whether or not the need that drove the interaction was met (the time taken, cost and outcome of the interaction) (Lewis et al., 2007).

### 3.5.1 The Value of Government Assistance

There is conflicting evidence on the value of Government assistance provided to small businesses (Cadaf et al., 2017; Nightingdale and Coad, 2014; Loader, 2013). In terms of take-up rates, research has suggested that business advice is commonly used in the small business sector (Mole and Capelleras, 2017; Henry and Treanor, 2013; Bennett and Ramsden, 2007; Boter and Lundstrom, 2005). A huge proportion (90%) of SMEs in Britain availed of support between the period 2004-2007 (Bennett, 2008; Ramsden and Bennett, 2005) which hints at the changing nature of SME involvement in external advice from that reported in earlier studies in the 1980s and early 1990s (see for instance Storey, 1994; Gibb and Dyson, 1984). On the other hand, more recent figures available highlight in the region of 3,000 schemes available for small businesses, with only 15% or less of small businesses availing of business support (Richard, 2008). Regular restructuring by Government has been attributed to low take up rates (Bennett, 2008).

Some evidence has been provided for the positive effects of publicly funded innovation programmes on SMEs in traditional manufacturing industries. In a study of organisational innovation in SMEs, Laforet (2012) found that the amount of public funding invested in the SME sector is warranted due to the associated benefits of SME innovation, in particular the productivity impacts for medium sized businesses. Programmes that have been developed at a regional level are likely to be more cost effective on the basis that they help to drive local economies (Curran, 2000). It has been found that SMEs receiving UK state support for innovation were more likely to innovate than those unsupported enterprises (Foreman-Peck, 2012). The findings on the effectiveness of the Business Link programme vary considerably, with satisfaction levels varying from highly satisfied to not satisfied (Mole et al., 2017; Mole et al., 2009; Bennett and Robson, 2003). This variation has been explained by the different intensities of the service delivered and by a wide range of adviser quality. Differences in types or size of firms, sector profitability and so on, were found to only have a minor role in explaining client satisfaction levels. Mole et al. (2009) found



positive impacts from the programme including an increase in business growth performance and employment growth. This would indicate that the programme, when compared with previous studies, for instance Roper and Hart (2005), had improved and was more likely to be meeting programme objectives. However, Mole et al.'s (2017) study suggested that the Business Link brokering approach failed to capture all the SMEs that could have benefitted from external assistance. This was attributed to owner managers with no prior experience of external support being more inclined to undervalue its benefits and reluctant to pay market rates. In addition, the identification of "growth firms" has been viewed as problematic, particularly in relation to differentiating by factors such as size age sector, innovation activity, export orientation and so on (Smallbone and Massey, 2012).

A series of studies around 2000-2004 undertook extensive evaluations of the effectiveness of small business support in Northern Ireland. This has been based largely on evaluations of the performance of groups of grant assisted and non-assisted companies using large datasets from support agencies (McGuinness and Hart, 2004; Roper and Hewitt-Dundas, 2001; Hart et al., 2000). These studies have shown a substantial differential in employment growth between assisted and non-assisted firms, although the growth figures do not take account of other important business performance indicators such as turnover growth and profitability nor the influence of firm level factors (i.e. whether the impact is linked to the selection process and attracts firms with high growth and a propensity to apply for assistance) (Roper and Hewitt-Dundas, 2001). Hart et al. (2000) analysed the performance of two groups of supported businesses who received different levels of assistance in the 1990s – "growth" and "established" clients. They drew their information from a database of 1600 small firms who had received financial assistance from the Local Enterprise Development Unit (LEDU). Their results showed that growth clients grew faster than established clients, indicating that a more intense support package is associated with business growth. Roper and Hewitt-Dundas (2001) sought to also find evidence of firms in the assisted cluster tending to grow faster, returning higher sales and profits. Their study however did not find any significant effect on turnover growth or profitability from assistance – grant support had more impact on job creation – suggesting a focus on job creation in economic policy but with implications for longer term development through productivity. The danger is that financial assistance encourages firms to over recruit to core activities (Roper and Hewitt-Dundas, 2001). McGuinness and Hart (2004) built on previous work by Hart et al. (2000) to examine

the relationship between the type of assistance received from LEDU and firm performance and whether differential impacts arise from the nature and timing of grant assistance. They added further explanatory variables to their model (size, sector, legal status, location) relating to variations in small firm growth rates. Their study found that productivity growth in larger small firms assisted by LEDU was associated with marketing and management assistance whereas for smaller firms the actual amount of finance received was of greater importance. The key implication being that business support packages must be sensitive to firm size in understanding how the assistance can impact upon economic outcomes and the effects of particular forms of support provided under broad small business support programmes.

At a wider European level, Radicic et al. (2017) found a typical increase in the probability of innovation and of its commercial success by around 15% but questioned the selection procedures which diminish the impact (in that the wrong firms are being selected for support). European-wide public initiatives have been found to have a positive influence on firm performance, although the effect may not be apparent until a year after project completion (Bayona-Saez et al., 2017). From a dynamics capability perspective, Cumming and Fischer (2012) found that young, small firms with growth potential can dynamically integrate new knowledge provided through publicly funded advisory services. These firms tend to do better in terms of sales growth and access to finance.

In relation to food, the important role of public support for firms engaging in innovative activities, in investment in R&D in the Spanish food industry has been noted (Acosta et al., 2015). Furthermore, Elliott et al. (2005) evaluated the impact of support measures and from a sample of 300 regional food producers identified that just over half (53%) had accessed public sector support. Of those who had accessed support the majority (77%) of beneficiaries recorded an increase in turnover with associated benefits in terms of entry to markets and compliance with trading standards and regulations. There have been calls for an acknowledgement of the differences between types of food producers when considering support needs for the sector, around the conventional business model providers and those that are more aligned with alternative or artisan production systems (Phillipov, 2016; Gorton and Tregear, 2008). According to Gorton and Tregear (2008), the needs of the former may best be met by generic support agencies. They identified a conflict between meeting competitiveness/growth objectives and environmental objectives/stimulation of

alternative supply chains in Government intervention.

There have been some insights provided into the factors behind successful support intervention. Using a panel dataset on Flemish SMEs between 1996-2008, Van Cauwenberge et al. (2013) found a positive effect of a Government supported network (PLATO) on productivity. They identified various underlying success factors of the programme including participant trust, outsourcing, and Government monitoring. This demonstrates an example of a successful public-private partnership for delivery of support programmes where the Government role is one of financing, outsourcing delivery and monitoring, rather than direct intervention, where firms value contacts with peers and where decentralisation increases accessibility and allows for better tailoring to local needs (Bennett and Robson, 2003). There is evidence to suggest that national policies across Europe work best where they allow for a high level of local involvement and a bottom up approach (North and Smallbone, 2006), for example through LEADER programmes encouraging rural development in local communities through local action groups. More intensive or “deeper” intervention strategies have been found to have more positive outcomes than “broader” approaches (Mole et al., 2011).

Others have argued that businesses who take part in the programmes do not improve their performance (Cadil et al., 2017; Yusoff and Zainol, 2012; Edwards et al., 2010; Audet et al., 2007). There have been some criticisms of business support within the UK for some time. From the emergence of SME promotion policies in the UK in the 1970s, it has been stated that there was little evidence of their success in achieving their objectives (Arshed, 2016; Curran and Storey, 2002), with little demonstrated effects and with programmes being delivered in a piecemeal fashion (Arshed et al., 2016; Edwards et al., 2010). Bennett (2008) found little evidence over the period of 1991-2004 to suggest that Government support justified the high level of cost involved and found that the way in which support is delivered (centralised versus localised structures) has had little influence on take-up and impact. Storey (1994) indicated that Government should provide less support and at a higher level - in other words focusing on quality rather than quantity. Limitations with measuring impact have been cited, and include issues around additionality (Norrman and Bager-Sjögren, 2010), deadweight and displacement (Curran and Storey, 2002). Additionality is difficult to measure due to the difficulty of assessing exactly what would have happened in the absence of assistance. Deadweight refers to instances where growth among the

recipients of Government financial assistance would have occurred anyway. Displacement of jobs may occur within the local economy as a result of job creation from Government assistance. Curran (2000) questioned the impact of business support for small businesses and outlined the difficulties in evaluating small business policies and support linked to assessing the net positive outcomes or additionality and whether the desired outcomes would have occurred in any case if the policy or programme had not been developed. The issue of small firms as a means of job creation and promotion is a contentious one (Storey, 2004). Storey (2004) found that job creation in small businesses only occurs in a very small proportion of these firms as a result of receiving assistance.

Beyond the UK, studies have called into question the value of public support in fostering firm innovation. For instance, Zeng et al. (2010), in a study of Chinese manufacturing SMEs, did not find any support for the argument that cooperation with Government agencies positively impacts innovation performance. Norrman and Bager-Sjögren (2010) evaluated an SME support programme in Sweden and found there to be no effects on additionality. Another study carried out by Lambrecht and Pirnay (2005) exploring public support for private consultancy firms whose clients consisted of SMEs, in Belgium, found no positive outcomes relating to financial performance by the SMEs involved in the study.

The conflicting findings in relation to the uptake of external assistance reflect differences in research design and methodology (Cadil et al., 2017) and the scope of what constitutes external assistance, with those studies with fewer users tending to exclude informal and routine forms of assistance such as banks (Mole et al., 2013) and accounting services (Mole et al., 2017). It has been suggested that, when surveyed, firms tend to be positive about the support and advice received (Roper and Hart, 2005; Smallbone et al., 2003) and may talk up the benefits of support in order to maintain funding. Therefore, the degree to which perceptions of impact can provide an accurate assessment of impact of support services has been questioned and approaches to quantify the impact of business advisory services (growth or business improvement) have been undertaken (see for instance Cumming and Fischer, 2012; Chrisman et al., 2005).

### 3.5.2 Issues with Support Provision

Various issues have been identified with support provision. Many of these issues are related to the “smallness” of the business and the lack of awareness of available support (Kamau et al., 2018), and issues around accessing the support. It has been postulated that the nature of available support measures suit large companies better than small businesses and that there is a high level of bureaucracy with support measures (Curran and Blackburn, 2000). The types of firms that can benefit from external support are viewed as larger and have more managerial capacity (Mole et al., 2008). Radas and Bozic (2009) highlight the costs involved for owner-managers when participating in the programmes. Moreover, there is a need to introduce more user-friendly procedures to EU funding (Purcarea et al., 2013).

There have been reported difficulties in accessing the relevant support provision, overlapping business support provision and conflicting advice and guidance (Jones and Parry, 2011). Low levels of awareness of support initiatives have been noted (Loader, 2018; Mole et al., 2017; Roper and Hewitt-Dundas, 2017). Loader (2018) and Smallbone et al. (2008) highlight issues such as the lack of understanding of the part of the owner-manager in terms of where to access services. For instance, Smallbone et al. (2008) argue that this is due to the complexity of the types of programmes available and an unwillingness and/or ability to pay the market rate for services, and concerns over the quality of services.

The standardised content of programmes which makes them less relevant to individual firm needs has been deemed to impact on take up rates (Curran, 2000). Curran (2000) suggested greater impact would occur through local initiatives at regional level through the UK rather than at national level. In addition, Mawson (2000) concluded from an analysis of central Government SME support schemes in England, Scotland and Wales that programmes with specialised objectives and tight frameworks filling clear market gaps function better as Government support schemes to SMEs. Other studies indicate that advice should respond to specialised needs that must be tailored to each firm’s individual circumstances (Van Cauwenberge et al., 2013; Edwards et al., 2010; Bennett and Robson, 2003), including specific micro firm requirements (Granata et al., 2018). This suggests the tailoring of programmes to fit local structures and processes, and adjustments occurring between agency and client in order to strengthen the programme (Miller and Masten, 1993).

The form of interaction between advisers and clients may vary between different types of supplier, depending on the formality of the relationship and the governance regime (Ramsden and Bennett, 2005) and the client's negative perception of the provider's level of expertise (Curran and Blackburn, 2000; Hjalmarsson and Johansson, 2003). Research has indicated that UK SME owner-managers have not always perceived themselves to be part of a business support or training network, compared with other regions, wherein engagement with support providers is perceived to carry risk, reflected in a "fortress enterprise" mentality (Kitchen and Blackburn, 1999, p. 631). As such, the issue therefore may not be that more support resources are needed but rather than SMEs need to make better use of existing resources. Here, owner-manager perceptions are key (Audet and Etienne, 2007).

More generally, SMEs interact with a broad range of actors, and the role of actors other than institutional support providers in promoting innovation has been highlighted. According to Reidolf (2016), higher level innovations in rural SMEs tend to be associated with proactive and strong relationships with customers, and "non human" actors such as trade fairs. Others have found that cooperation with customers, suppliers and other vertical relationships play a more significant role in SME innovation (Xie et al., 2010).

To summarise, whilst support for policy to encourage small enterprises has developed and is more wide ranging than ever before, there are still many barriers to small firm engagement in business support, and some that were first identified over twenty years ago and which are still prevalent today. There is the need to better understand the needs of all stakeholders including top-down and bottom-up actors, and most certainly owner-managers. By so doing, this will significantly influence more effective delivery of support programmes and return on investment of public monies. Nevertheless, micro businesses are less likely to avail of support than their smaller counterparts.

### **3.6 Models of Business Support for Rural Enterprise and Agriculture**

The nature of business support for rural firms has been discussed in the literature and it has been argued that business support for rural firms must take account of the distinctiveness of rural business, including the implications of their small size (compared to urban firms), lower business densities and their ability to access

business support due to their remoteness (Smallbone et al., 2003). Business support agencies also face the challenge of engaging rural firms in formal support mechanisms in that they tend to use informal ties and personal relationships rather than depend on formal networks (Moyes et al., 2015; Huggins and Johnston, 2010). The diverse range and complex structure of UK Government-funded small business support mechanisms for rural areas, providing advice, training and development, has been noted (North and Smallbone, 2006). Moreover, various models of business support for rural enterprises and farming have been identified. Smallbone et al. (2003) defined various types of rural enterprise support initiatives incorporating farming and food but also other non-farming forms of rural enterprise (see Table 3.1):

**Table 3.1: Types of Rural Enterprise Support Initiatives**

- Farm and land-based initiatives integrating business support (e.g. farm diversification schemes, sustainable development plans);
- Non-farm sector initiatives (village shops, tourism);
- Initiatives to modify the content/delivery methods for business support to meet the specific needs of rural enterprises; and
- Programmes targeting minority needs and/or disadvantaged groups;
- Business support in the context of a wider strategic approach to rural development and regeneration.

Source: Smallbone et al. (2003)

This includes various models including considering farming as a specialist and separate business support provision from other sectors of the rural economy, a full integration model, where farming is fully integrated into generic business support services, and an intermediary model which involves an intermediary agency acting as a bridge between farmers and generic support providers (Phillipson et al., 2004).

There has been some debate around whether farms should be integrated within generic support services and be treated in the same way as other rural business sectors (Smallbone et al., 2003). There have been calls for differentiated support for rural enterprises where needs are not being met by existing programmes at national or regional levels (Martin et al., 2013; Smallbone et al., 2003) and particularly in relation to the need for local and specific support for farm businesses (McElwee, 2006b). Alternatively, the case for integration of farming within the generic model, and the need for raising awareness of generic support services, using intermediaries to gain legitimacy, has been made by Phillipson et al. (2004). According to Phillipson

et al. (2004), under the “intermediary model”, trust and legitimacy is achieved through being known locally or having a good working knowledge of, or relationship with, the local farming community. In a further study, Phillipson et al. (2006), in their case study of rural market towns in the north of England, highlight the danger of external state intervention in the facilitation of small business networks, in that by disturbing established local norms and networks, such interventions may jeopardise the structures of social capital which they seek to exploit. In other words support agencies are influential, but not neutral, actors (Laschewski et al., 2002).

### 3.6.1 Small Business Support Mechanisms for Rural Areas

It has been argued that little consideration was given by Government to the relationship between farmers and the generic structures for support that were introduced during the 1990s (Mawson, 2000) and such measures have not been found to engage farmers, who have not appreciated the need to develop marketing and business management skills (Phillipson et al., 2004). In recent decades there has been a shift away from direct state provision of free technical and scientific advice to farmers and resulting privatisation of public agricultural research and extension systems in a number of European countries, including the UK, partly due to the move to privatisation of business advisory services (Nettle et al., 2018; Knierim et al., 2017; Landini et al., 2017; Labarthe and Laurent, 2013). For example, as part of the UK Government’s Business Simplification in 2009, over 3000 separate business support schemes were scaled down to 29 products through the Solutions for Business product offering, including a dedicated online service for farmers.

An increasingly complex regulatory framework, the diversification of the economic base of rural areas away from primary commodity production and a growing emphasis upon environmental protection and ecosystem services have seen farming become more demanding of specialised technical knowledge and thus willing to utilise a growing number of rural professional advisers (Phillipson et al., 2016). Recent decades have seen two key transitions which have led to increased complexity and diversity in the management of rural land and its products and services (Hodge, 2007), within the context of a move towards privatisation of rural advisory services. These include a shift in focus from production to consumption – from the quantity of production to the quality, and a shift in objectives from agriculture away from production towards sustainable development where the farmer is expected not only



to be a producer but also an environmental manager. This has led to a land economy which is more complex and diverse and where farmers have to solve increasingly complex problems (Phillipson et al., 2016).

At a pan European level, business support initiatives such as the EU's rural development policy, funded through the European Agricultural Fund for Rural Development (EAFRD), and the Horizon 2020 research and innovation funding programmes related to agriculture and rural development, have aimed to increase innovation and thus facilitate innovation capacity in rural areas. These programme priorities are strongly aligned with current and future common agricultural policy objectives. This includes helping the agricultural sector to become smarter, more resilient and environmentally sustainable, encouraging more young people to get involved in agriculture and rural life and strengthening socio-economic life in rural areas (Europa, 2017).

### 3.6.2 The Adviser Role

Various authors have categorized the types of rural business support advisory services. While a simple dichotomy is that of public and private based advice, this has been broadened to include the range of organisations and bodies that provide advisory services: public; private; farmer-based; public/private; public/private/farmer-based; and public/farmer-based (Knierim et al., 2017). Thus, the diversity and pluralism of advisory services across the EU has been documented (Knierim et al., 2017). Private sector advisers offer technical support to farmers and producers. The various types of private sector adviser have been categorized by Faure et al. (2017) to include: commercial firms (selling medicines, feed concentrates, and pasture seeds); advisory services provided by dairy companies to assist their producers and to ensure milk supply (for instance, the engagement of veterinarians to provide training); and specialised advisers (veterinarians, livestock or agricultural engineers, agricultural technicians and others) - these advisers sell products to cover their advisory costs, which can lead to competition between advisory firms. Producers avail of the services as they appreciate the one-to-one interaction and proximity to the adviser, and trust and believe in the information that is provided.

A stream of literature has focused on the role of the adviser, the farmer and land manager relationship with professional advisers, and relationships between the

advisers themselves. Advisers have been described variously in the literature as officers, animators, champions and grassroots leaders. Farmers use advisers for varying reasons including to take over some of the knowledge-related activities that would be difficult or time consuming, to reduce risk, to assist learning through access to networks, and to provide reassurance and added confidence allowing them to innovate more quickly (Kuehne et al., 2015). Advisers work directly with business networks and have a hugely important role (Hewes and Lyons, 2012; Sökjer-Petersen, 2010). This involves implementing policies and programmes where they play a critical enabling role (Juntti and Potter, 2002) and represent the public face of sponsoring institutions (Sutherland et al., 2013). In broad terms, advisers create and implement the structural features of networks which facilitate interaction (Besser and Miller, 2011; Sherer, 2003).

The nature of advisory services have changed over time and moved away from direct interaction with farmers and technology transfer, to the promotion of information flow and building capacity for local information exchange and collective action (Bourne et al., 2017; Knierim et al., 2017; Kuehne et al., 2015). Advisers have been traditionally strong on technical knowledge but not in the management of social processes and group relations (Landini et al., 2017). Advisers are now required to assume the role of facilitators rather than technical experts, with the need to deal with complex social and group processes which require strong interpersonal skills (Landini et al., 2017; Landini, 2016; Nettle et al., 2013). Here, the farmer is at the centre of the decision-making process, handling and organising inputs from the various advisers. This has brought about a less ordered and less structured approach to extension as a mode of delivery of expertise with a greater focus on the quality of interaction between farmer and adviser. Procter et al. (2012) found the knowledge exchange to be characterised by negotiation where advice is viewed as an ongoing process rather than an end product at a particular point in time, and where advice is assembled from multiple perspectives and actors, who ‘all come away changed in their relationships’ (p.1709). Here advisers are viewed as an organising force, which involves more than the straightforward provision of advice. Ingram (2008) referred to advisers as “animateurs” who encourage recipients to develop their own learning, and to learn from their peers, rather than learning through the traditional linear expert-beneficiary model. She found that outcomes are strongest when both recipients and advisers are engaged, as this allows for deeper discussion and learning.

### 3.6.3 Challenges Faced by Advisers

Advisers face a number of challenges in their role as network brokers. First, there are a range of client types and ways in which clients seek information from advisory services. Within farming, four main client types have been identified that range from those proactively seeking advice to traditionalists who seldom avail of advice (Klerkx et al., 2017). The challenges presented here for advisers include providing appropriate expertise to meet the specific knowledge demands, developing trust relations, motivating disinterested parties who are not interested in change, and simply making contact with small rural enterprises and farmers that are less visible to agencies and who are hard to reach (Labarthe and Laurent, 2013; Smallbone et al., 2003). Second, there is the complex task of negotiating between the needs of the firms in the network and goals of the policy or programme which finances the action (Sutherland et al., 2013; Klerkx and Leuwis, 2009; Phillipson et al., 2006; Juntti and Potter, 2002; Mole, 2002). Advisers have to deal with bureaucratic practices (Juntti and Potter, 2002) and the pressure on agriculture departments to improve scheme performance. Third, the success of networks requires impartiality and a neutral broker (Rijswijk and Brazendale, 2017; Laschewski et al., 2002), where the adviser should seek to be neutral in their interactions with clients, whilst also performing a guiding or steering function for the network (Klerkx and Leeuwis, 2009). Research has found that there can be some difficulty in convincing farmers and land managers of the value of external expert knowledge where there is the tendency of farmers not to trust “scientific” expertise or Government, generally (Fisher, 2013; Oreszczyn et al., 2010). Farmers see the need to differentiate information from different sources in that more credence is given to peers or high achievers, where longevity of contact is closely associated with trust (Sligo and Massey, 2007). Trust relations play an important role between advisers and farmers (Landini, 2016; Fisher, 2013). Interpersonal trust is employed in local social networks in response to perceptions of increased risk in farmers’ socio-political environment (Sligo and Massey, 2007). Farmers tend to trust advisers more when they can identify with them; this gives advisers legitimacy (Laschewski et al., 2002). The issue of the neutrality of the advice arises (Laschewski et al., 2002). The quality and impact of guidance from private sector providers may get distorted by commercial pressures in that consultants provide recommendations based on pre-packaged solutions rather than tailor made assistance (Turok and Raco, 2000). Private sector providers may have an incentive to lock clients into their network of services whereas public support is arguably in a

position to provide impartial advice (Mole et al., 2017). In rural business networks the detrimental impact on trust of heterogeneity between firms' goals in a network, and the lack of transparency by agencies or decision-makers has been noted (Curry, 2010; Phillipson et al., 2006).

Fourth, rural development initiatives risk being seen as too centralised by those in rural communities and for the benefit of larger farms (Wellbrock et al., 2013). Various studies have noted the importance of business support taking into account the socio-cultural context of communities to be effective (Ring et al., 2010; North and Smallbone, 2006). The example of the Emilia-Romagna region in north-east Italy is often cited, with its deep culture of reciprocity and trust. Here, mechanisms and institutions have been set up to capitalise on this culture. This may be contrasted with the Danish support model, based on communities with little or no pre-existing culture of cooperation, which fosters this kind of activity through deployment of scouts and brokers (Rosenfeld, 1996).

Thus, as discussed in Chapter Two on intermediaries more broadly, advisers require a very special set of skills and attributes to bring groups of actors together and facilitate networks, in the role of “champions” (Hewes and Lyons, 2012) or “grassroot leaders” (Sokjer-Petersen, 2010).

#### 3.6.4 The Client/Farmer-Adviser Relationship

The farmer-adviser relationship is dynamic and evolves over time so that as farmers gain experience and their initial reasons for using an adviser changes, they are also likely to demand higher levels of advice (Kuehne et al., 2015). The relationship between farmer and adviser is a socially embedded one with social commitments following from an initial economic arrangement. As the relationship is built on the personal bonds of friendship, it should be more resilient, and thus it is increasingly unlikely that it ends simply from a breach of commitment (Kuehne et al., 2015). Kuehne et al. (2015) found that farmers' commitment to the adviser is influenced by frequent meaningful interaction over a long period of time, high perceptions of equity and value, trust and confidence and an emotional connection.

The nature of the adviser-client relationship has been viewed through the identities and roles adopted by the parties. The consideration of client identity is worthwhile in

that it allows individuals to move beyond preformed judgements and measures of social positioning, altering their conceptions of how to relate to others (Wynne-Jones, 2017). Seuneke et al. (2013) emphasise that advisers need to display sensitivity to shifts in farmer identity. Johannson (1999) discussed a number of client identities. The “anti-client” refers to the manager as a non-receiver of consulting services. In such cases the manager seriously doubts that a consultant can give better advice than himself/herself about how to run a business. This client can look for other role models other than the consultant. The “consultant modifier” is someone who defines and re-defines the meaning of the consulting functions (the most common trait found). This represents a form of collaboration between client and consultant. The “ideal client” accepts that he or she has a need and use for advice (this identity was found to be the least common cited in the study).

Hjalmarsson and Johansson (2003) built on Johannson’s (1999) work and considered the power aspects of the adviser-client relationship and focused on two concepts – client identity and clientifying processes – to help understand the service encounter. They used narrative analysis of the stories of small business managers and identified the characteristics of advisory services to include services at the operational and strategic levels. Hjalmarsson and Johansson (2003) discuss the entrepreneur’s client identity and indicate how some are “ideal needy” clients (similar to Johannson’s ideal clients) whereas others are “anti-clients”. In the case of ideal needy clients, consultants deliver operational services that are solution oriented.

Niska and Vesala (2013) discussed the policy actor-entrepreneur relationship from the perspective of discourse analysis, where both parties present themselves as the principal and the other party the agent. Here, the idea of a “creative arena” is proposed, where SME owner managers learn from each other and where the public intervention role is to provide the arena or space to facilitate learning. This corresponds with Chrisman and McMullan’s (2000) suggestion that the use of a counselling approach rather than consulting is the key to success of assistance from external sources or “outsiders”. They explain that the key function of consultants is to perform a task or sets of tasks for their clients whereas counsellors also provide advice – their key contributions are the guidance and mentoring provided to clients. This is a facilitating role to enhance experiential, tacit knowledge gained by small businesses from their own efforts, rather than through knowledge transfer.

### 3.6.5 The Adviser-Adviser Relationship

The nature of the adviser-adviser relationship has received some attention in the literature in recent years. Studies have examined the types of networks advisers use to obtain knowledge (Klerkx and Proctor, 2013) and the skills and strategies employed (Phillipson et al., 2016). It has been argued that expert to expert interaction is crucial to the development of field expertise (Phillipson et al., 2016; Proctor et al., 2012). This interaction allows for knowledge exchange from wider networks (both within their own advisory professions and from different advisory professions) that helps to solve complex queries of clients. Notwithstanding the challenges of professional competition, studies have identified that advisers appreciate the benefits of inter-professional working, in broadening their knowledge base and in helping to provide a more comprehensive and integrated service for clients (Compagnone and Simon, 2018; Bourne et al., 2017; Phillipson et al., 2016; Klerkx and Proctor, 2013; Proctor et al., 2012). Phillipson et al. (2016, p. 329) found that advisers involved in inter-professional networks required skills in networking and an ability to 'recognise the limitations of their own expertise and the value of others'. An inter-professional working relationship thus allows advisers to increase their business competitiveness by making themselves more attractive to clients.

### 3.7 Chapter Summary

This chapter has highlighted that support for small business has received significant attention by Governments. While the value and impact of support has been widely scrutinised, it is clear that there are a plethora of supports and this has led to some rationalisation within recent years. There has been a liberalisation of support for agri-food and a move towards more privatised forms of support and advice. Therefore, there is a need for greater understanding of the implications of these developments in business support for small agri-food enterprise engagement with advisers and agencies, the impact from that engagement, and the nature of the adviser-client relationship. These issues will be explored further during the empirical phase of the study (see Chapter Eight).

Chapter Four will next discuss the theoretical perspectives (open innovation and social networks), adopted in the present study and an initial conceptual framework will be presented. This will incorporate the main components of the adopted theories

and also pertinent themes from the main literatures discussed in Chapters Two and Three.

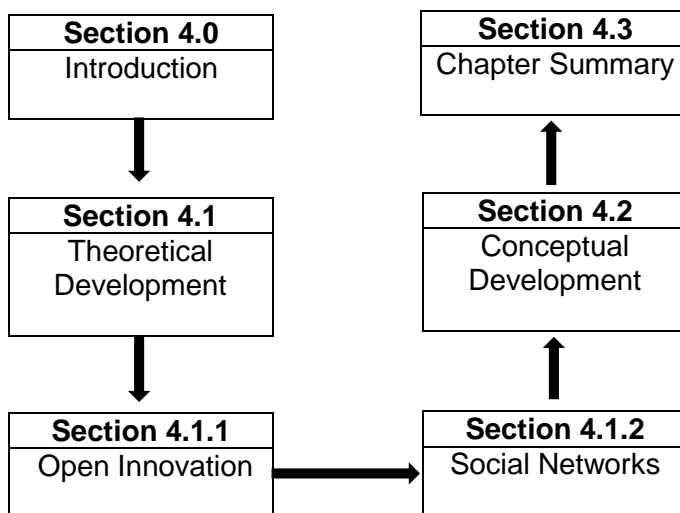
# **CHAPTER 4**

## **Theoretical Development**



## 4.0: Introduction

This chapter will explain the theoretical framework for the study which draws upon the literature discussed in Chapters Two and Three. The study adopts a multi-theory approach, utilising the components of open innovation and social networks to provide the basis for a conceptual framework. The rationale for the theory selection will be given. Following this, the literature on open innovation in small firms will be discussed, as a current development in the innovation literature, followed by a discussion of social networks and social capital in a rural context. The chapter will conclude with the presentation of a conceptual framework and a set of research questions that will be used to guide the data collection phase of the study. Figure 4.1 outlines the main sections of Chapter Four.



**Figure 4.1: Outline of Chapter Four**

### 4.1 Theoretical Development

Various theoretical perspectives have been used in explaining innovation processes and firm level engagement with a range of actors. A number of the more widely adopted theories will now be discussed in brief and evaluated in relation to their direct applicability in this study. The theories under consideration include the Resource Based View (RBV), Dynamic Capabilities, Stakeholder Theory, Open Innovation and Social Networks.

RBV has been used to explain why Governments may intervene to facilitate SME growth and development (Johnson et al., 2007; Chrisman et al., 2005; Bennett and Robson, 2003). RBV suggests that over time as firms increase in size, they have greater need for external sources of expert knowledge and advice. Penrose (1959) first expounded the RBV of the firm suggesting that firms are simply more than an administrative unit, they are a collection of tangible and intangible resources that work together to produce output. Wernerfelt (1984) who originally coined the term 'resource based view' further developed this concept proposing that for firms to achieve competitive advantage and optimal growth it is a balancing act between exploitation of existing resources and development of new ones. Resources are not homogenous (Galbreath, 2005). There are different types including physical, human, technological, financial and organisational and each resource can be classified as tangible or intangible (Wernerfelt, 1984). Tangible resources can include production techniques, technological ability or product specific resources. Intangible resources can include intellectual property, marketing skills, managerial skills, trust, information and knowledge (Barney, 2002; 2001; Hall, 1993) and are often thought to impact upon firm success more than tangible resources (Galbreath, 2005). Barney (1991) suggested that not all resources are capable of producing sustained competitive advantage. Barney (1991) contended that if certain conditions (valuable, rare, imperfectly imitable, non-substitutable) are present within the resource base then the firm will achieve sustained competitive advantage.

Since Barney's (1991) seminal work, many authors have revised, criticised and applied the theory to other areas within business research. Despite its significance, RBV has been referred to as conceptually vague, with insufficient attention to the mechanisms by which resources contribute to competitive advantage and that it has not fully explained how and why certain firms gain competitive advantage in rapidly changing markets (Eisenhardt and Martin, 2000). Moreover, it would not appear to provide a full explanation for micro firm engagement (or lack of) in external business advice. Micro firms are not particularly intensive users of business advice (Cadil et al., 2017; Mole et al., 2017; Boter and Lundstrom, 2005). As discussed in Chapter Two, for micro sized businesses the importance of informal networks of friends, family members and other businesses as important sources of information and therefore advice has implications in that businesses are unlikely to be prepared to pay for services that they can obtain at no cost from informal networks (Johnson et al., 2007). The RBV has been criticised for being too outdated and not taking into account the

complexity of changes in the current knowledge-based, network economy in order to understand the challenges businesses face in remaining competitive (Kraaijenbrink et al., 2010). As a response to this problem, the dynamic capabilities theory has developed, linking the internal and external aspects of the firm.

Dynamic capabilities suggests that when firms encounter change in their operating environments they must revise and develop new routines to remain competitive (Zahara et al., 2006). The main underlying premise is that in turbulent and dynamic environments firms must continually renew their resource base by obtaining, forming and coordinating new resources with their existing resource base in order to attain and sustain competitive advantage (Teece et al., 1997). Teece et al. (1997) defined dynamic capabilities as the firm's ability to integrate, build and reconfigure internal and external competences to address rapidly changing environments. Teece (2014) distinguishes between dynamic and ordinary capabilities. Dynamic capabilities may be described as a firm's ability "to renew itself in the face of a changing environment by changing its set of resources" (Danneels, 2010, p. 1). Ordinary capabilities enable a firm to conduct tasks to a certain standard and that in the short term they can form the foundations of competitive advantage. However, in the long term this is not sustainable due to their erosion through imitation by competitors. The processes that enable dynamic capabilities to be formed must be identifiable (Ambrosini and Bowman, 2009). Dynamic capabilities is a complex phenomenon with numerous definitions and conceptualisations. Similarly to RBV, it has been described as mysterious and confusing (Winter, 2003), abstract and intractable (Daaneels, 2010) and has been referred to as "an elusive black-box" (Pavlou and Sway, 2011). There is some agreement that the greater the turbulence within the marketplace the greater role dynamic capabilities will play (Winter, 2003) therefore helping to sustain a competitive advantage (Haleblian et al., 2012).

Stakeholder theory builds on these theories. Stakeholder theory is not a single theory but a combination of wide-ranging accounts (Gilbert and Rasche, 2008), emerging from a number of areas including corporate social responsibility to business ethics to corporate governance. Therefore, stakeholder theory is open to various interpretations (Miles, 2017). Stakeholder theory was proposed by Freeman (1984) and his seminal work has been followed by many studies that have used the theory to examine the responses of organisations to internal and external influences. According to Freeman (1984) stakeholders are viewed as any individual or group who

can affect or is affected by the achievement of the firm's objectives. The basic premises of stakeholder theory include that: the focal organisation enters into relationships with many groups that influence or are influenced by the company; the theory focuses on the nature of these relationships in terms of processes and results for the organisation and its stakeholders; explains how stakeholders try and influence organisational decision making processes so as to be consistent with their needs and priorities (Mainardes et al., 2011). Donaldson and Preston (1995) proposed a threefold classification of stakeholder theory to include: descriptive, instrumental and normative. The descriptive aspect addresses corporate characteristics and behaviours and defines innovation communities (for instance identifying the nature of organisations' stake in an innovation, as either creator or those with a legitimate interest in its application). Analysis and evaluation of stakeholder motivations is provided through the instrumental and normative aspects. Based on external values resulting from ethical theory, normative stakeholder theory examines why the interests of stakeholders should be taken into account in order to influence the actions of management. The instrumental approach considers any ethical related concerns which may result in stakeholder benefit (Miles, 2017).

For some time academics have criticised the explanatory power of stakeholder theory. Indeed, it has been well over thirty years since Freeman published his seminal work (Miles, 2017). The simplicity of the theory has attracted criticisms of its vagueness and ambiguity. Although there have been attempts to group stakeholders (e.g. Gibson, 2000), the term "stakeholder" has not been fully defined (Miles, 2017; Wagner-Mainardes et al., 2011). Furthermore, the simple examination of individual stakeholders is not sufficient in that organisations respond to the interaction of multiple influences from the full stakeholder set, rather than each stakeholder individually (Rowley, 1997). Table 4.1 presents a summary of the theory choices and their main attributes.

**Table 4.1: Theory Attributes**

Theory	Attributes	Applicability to this study
Resource Based View	<p>As firms increase in size, they have greater need for external sources of expert knowledge and advice.</p> <p>Firms are a collection of tangible and intangible resources that work together to produce output.</p> <p>Exploitation of existing resources and development of new ones required for firms to achieve competitive advantage and optimal growth.</p>	<p>RBV would not appear to provide a full explanation for micro firm engagement in external business advice. The effect of size has been contested and micro firms are not particularly intensive users of business advice.</p> <p>The study's objectives address the micro enterprise's external linkages more than internal resources and capabilities.</p>
Dynamic Capabilities	<p>Firms' ability to integrate, build and reconfigure internal and external competences to address rapidly changing environments.</p> <p>In turbulent and dynamic environments firms must continually renew their resource base by obtaining, forming and coordinating new resources with their existing resource base in order to attain and sustain competitive advantage.</p>	<p>Dynamic capabilities is most applicable in a volatile external environment.</p> <p>The study's objectives address the micro enterprise's external linkages more than internal resources and capabilities.</p>
Stakeholder Theory	<p>The responses of organisations to internal and external influences.</p> <p>Stakeholders viewed as any individual or group who can affect or is affected by the achievement of the firm's objectives.</p> <p>The focal organisation enters into relationships with many groups that influence or are influenced by the company.</p>	<p>Focuses only on the dyadic relationship.</p> <p>Represents phenomena which does not fit easily with the micro firm's producer-business support actor relationship.</p>
Open Innovation	<p>Innovation depends on the firm's ability to conduct organisation-wide processes of searching, exploring and assimilating external and internal knowledge sources, networks and linkages.</p> <p>The use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively.</p>	<p>Allows consideration of the wide variety of networks which small firms may utilise for innovation purposes.</p>
Social Networks	<p>Relational dynamics, the nature of network ties, how and why the networks form and how they may be managed over time.</p> <p>The social capital concept and the themes of trust and reciprocity.</p>	<p>Captures the influence of multiple, interdependent relationships on organisational behaviour.</p> <p>Enables understanding of the potential for innovation or the identification of power bases for information control and brokerage.</p>

The open innovation and social networks perspectives are preferred to the RBV and dynamic capabilities as they allow consideration of the wide variety of networks which small firms may utilise for innovation purposes. Furthermore, the research objectives, as highlighted in Section 1.2 of the study, are more centred on the external relationships that micro firm enterprises engage in, more so than the nature of firm resources and internal capabilities, and the configuration of the resource base, for innovation. According to Iturrioz et al. (2015, p. 105), “new innovation paradigms have placed innovation in a social context”, whereby the firm is situated in relation to a set of agents. One of the most extensively used theoretical perspectives on innovation in a social context is the open innovation paradigm. The social networks literature, the social capital concept, and the themes of trust and reciprocity, where attention is given to the structure of the network and the relational dimension, or interactions between actors, has also value here in explaining the relational dynamics, the nature of network ties, how and why the networks form and how they may be managed over time. Social network models counter the limitations of stakeholder research – a focus on the dyadic relationship – and examine systems of dyadic interactions, capturing the influence of multiple, interdependent relationships on organisational behaviour (Rowley, 1997). They enable understanding around various themes such as the potential for innovation or the identification of power bases for information control and brokerage (Slotte Kock and Coviello, 2010). Thus, the theoretical framework in this thesis is based in part on social network theory and associated concepts.

The principles of stakeholder theory are used in this study in a limited capacity (descriptive aspects around stakeholder identification), to identify the key institutional stakeholders and providers of support, and their programmes that could potentially lead to innovation in micro food producers (see Chapter Six). However, a sole reliance on stakeholder theory would not address the study’s objectives, for a number of reasons. Stakeholder theory represents phenomena which does not fit easily with the micro firm’s producer-business support actor relationship (for instance the micro firm is not dependent upon business support actors, nor is the business support actor dependent on the micro firm producer, nor do either party wield power over the other, nor are they engaged in contractual relations).

Open innovation has been briefly discussed in the previous Chapters Two and Three and will now be further explored here, as it has the potential to lead to increased innovation and overcoming smaller firm resource limitations in relation to innovation,

as suggested in the literature (Hewitt-Dundas and Roper, 2018; Iakovleva, 2013; Vahter et al., 2012; Spithoven et al., 2011).

#### 4.1.1 Open Innovation

Small food companies often lack the expertise and focus that science and technology based companies have in relation to R&D types of innovation and as discussed in Chapter Two the nature of innovation in small food enterprises is generally associated with the informal and unstructured, with less reliance on science base actors (Lefebvre et al., 2015; Baregheh et al., 2014; Colurcio et al., 2012) for the purposes of R&D. However, the innovation discourse has widened beyond narrow technical definitions around R&D to that of more inclusive and organisational approaches to innovation (Stanko et al., 2017; Kim and Lui, 2015; Laforet, 2012; Karantininis, et al., 2010; Enkel et al., 2009; Chesbrough 2003). A key development in this area is that of open innovation. The open innovation concept suggests that innovation depends on the firm's ability to conduct organisation-wide processes of searching, exploring and assimilating external and internal knowledge sources, networks and linkages (Love and Roper, 2013; Batterink et al., 2010; Chesbrough, 2003; Chesbrough and Swartz, 2007).

Chesbrough (2006, 1) states that "open innovation is the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively". Similarly, Chiaroni et al. (2011) suggest that open innovation is the planned use of knowledge inflows and outflows to both internalise and externalise innovation. However, more recently, Chesbrough's own definition of open innovation has advanced to: "a distributed innovation process based on purposively managed knowledge flows across organisational boundaries, using pecuniary and non-pecuniary mechanisms in line with the organisation's business model" (Chesbrough and Bogers, 2014, p. 17).

Chesbrough (2006, 2003) suggests two forms of knowledge flow for innovation. First, "inside-out" is where the firm uses its internal resources to commercialise innovation. Second, "outside-in" where external knowledge is accessed, evaluated and assimilated using environmental scanning. This external knowledge may be obtained through horizontal and vertical networks that may be used to overcome skills and knowledge deficiencies and provide external knowledge that acts as a source of

innovation. Vertical networks are linked to knowledge gained from collaborations with customers through user innovation (Doran et al., 2012; Vega et al., 2012; Van de Vrande et al. 2009; Von Hippel, 2005), and relationships with suppliers that create an environment for innovation (Henchion and McIntyre, 2005). Horizontal network development relates to a strengthening of local productive capabilities through innovation networks involving joint working between the firm, other producers and other network actors (McAdam et al., 2014; Murdoch, 2000).

These open innovation constructs correspond to Hellstrom et al.'s (2001) "explorative" and "exploitative" approach to innovation and is consistent with Avermaete et al.'s (2003) definition of organisational wide innovation as including 1) new products 2) new processes 3) new organisational forms and 4) new markets. This approach to innovation reflects the complexity and path dependency of innovation where a wide range of innovation antecedents or contextual factors may be identified for each of the four types of organisational-wide innovation. Hence the path or idiosyncratic nature of innovation development may offer unique opportunities for innovation and competitive advantage (Galende, 2006).

In summary the innovation discourse has widened to one that encompasses a more inclusive and organisational approach to innovation, including open innovation. For food businesses open innovation has the potential to impact radically on their businesses. Therefore, open innovation allows consideration of the dynamic nature of innovation, including theory building from the previous theories discussed including RBV and dynamic capabilities. Open innovation in the small firm context is now discussed.

#### *4.1.1.1 Open Innovation in Small firms*

The open innovation concept suggests the need for a more pluralist approach to studying innovation in small non-technical firms, and as discussed in Chapter Two evidence has suggested that there is a combined use of product and process innovation types in small food enterprises (Baregheh et al., 2014; Menrad, 2004). The adoption of open innovation practices in small firms offers potential opportunities to address resource capacity limitations that restrict new product development and access to new markets (Hewitt-Dundas and Roper, 2018; Van de Vrande et al., 2012; Lee et al., 2010).



Although studies show that open innovation is being increasingly practised by smaller firms (Henttonen and Lehtimäki, 2017; Wynarczyk, 2013; Doran et al., 2012) the existing research on open innovation is limited (Hewitt-Dundas and Roper, 2018) and typically involves cross sectional comparative surveys (Vahter et al., 2012) and analyses of large firms (Hewitt-Dundas and Roper, 2018; Wynarczyk et al., 2013; Huizingh 2011) with a focus on high-tech multinational enterprises (Presenza et al., 2016; Oakey, 2013; Van de Vrande et al., 2009). Although there is substantially more literature on open innovation in large organisational contexts, there is increasing interest in smaller company applications and there have been calls for further research into the nature of open innovation in small firms (Hewitt-Dundas and Roper, 2018; Wynarczyk et al., 2013; Doran et al., 2012; Vahter et al., 2012; Lee et al. 2010; Huizingh, 2011; Van de Vrande et al., 2009). Such studies need to show how smaller firms interpret open innovation constructs (Love and Roper, 2013; Vahter et al., 2012) and how they incorporate them within their overall approach to innovation (Lee et al., 2010). Several authors suggest that there is a need for more contextually grounded studies of open innovation in smaller firms where key influencing factors are analysed (Carado et. al., 2018; Lamprinopoulou and Tregear 2011; Spithoven et al., 2011; Lee et al., 2010). Furthermore, there has been limited research into the diverse sources of knowledge used by smaller firms in traditional and low-tech sectors such as food (Lefebvre et al., 2015; Della Corte et al., 2013; Trippi, 2011; Capitano et al., 2010; Muscio et al., 2010). There have been calls for a better understanding of open innovation strategies in the food industry in particular (Presenza et al., 2017; Sarkar and Costa, 2008).

Smaller companies in specific contexts can effectively use their unique contextual factors to avail of open innovation, subsequently leading to a range of innovation outcomes (Presenza et al., 2017; Iakovleva 2013; Teirlinck and Spithoven, 2013; Vahter et al., 2012; Spithoven et al., 2011; Van de Vrande et al., 2009). A number of studies suggest that smaller companies focus more on outside-in aspects of knowledge acquisition in the development of new products and processes as they seek to meet rising customer expectations and competitor threats in a customer-pull or user led innovation manner (Doran et al., 2012; Vega et al., 2012; Van de Vrande et al., 2009). Inside-out knowledge flows are more likely to be limited by smaller firms' innate resource limitations (Kirkels and Duysters, 2010). Doran et al. (2012), Raymond and St Pierre (2010), and Vahter et al. (2012) suggest that many small firms can be more innovative than their larger counterparts even though they have

less R&D because they avail more effectively of a large and broad range of external knowledge sources. Pullen et al. (2012) and Vega et al. (2012) suggest that these external knowledge sources often involve various types of cooperation through formal and informal networks. Moreover, cooperation with partners helps to develop opportunities for innovation in regions where innovation levels are low (López-Bazo and Motellón, 2017), which is one way small enterprises can help overcome these constraints in Northern Ireland (Hewitt-Dundas and Roper, 2018).

This knowledge must be absorbed into routines for new product development (Pullen et al., 2012). While smaller firms can avail of a large and eclectic number of external knowledge sources to drive product and process innovation (Presenza et al., 2017; Levebrve et al., 2015; Doran et al., 2012), there is likely to be a trade-off between the innovation outcomes derived and that of the effort to manage such linkages. Further, Vahter et al. (2012) and Lee et al. (2010) found that breadth of external linkages with innovation sources initially increased open innovation-based performance more for smaller firms than larger firms; however smaller firms more rapidly reached the trade off point due to their capacity limitations.

In attempting to balance the need for frequent interactions and a sufficiently broad range of external knowledge sources to drive open innovation with that of capacity limitations smaller companies often rely on a wide variety of networks which are often regional in nature and where relationships have been established over a period of time with high levels of trust established (Doran et al., 2012; Pullen et al., 2012). Van de Vrande et al. (2009) suggest that smaller firms need to effectively draw on such networks as innovation sources and partners and that this approach can enable smaller firms to effectively jointly innovate at a network level with lower cost implications. McAdam et al. (2014), Tierlinck and Spithoven (2013) and Vahter et al. (2012) suggest that careful partner choice in such arrangements is essential if smaller firms are to avoid diluting their resources in establishing relationships which need to be managed and monitored. “Partner or perish” has been a common theme cited within the innovation literature in relatively recent times (Traitler et al., 2011).

In the agri-food context McAdam et al. (2014) found that small firm open innovation networks are horizontal in nature, i.e. where knowledge exchange is based on trust and multiple social exchanges built over time rather than a dyadic hierarchy. McAdam et al. (2014, p. 845) show that trust acts as a cohesive force in horizontal networks,

in which it “helps to build commitment and a feeling of integration between members, leading to increased innovation and improved economic output”. According to Presenza et al. (2017), customers and the public sector are particularly important for developing ideas, knowledge, and resources. Vega et al. (2012) highlight the role of public bodies in policy setting and in helping to establish appropriate and targeted networks of small firms to develop new products and processes based on open innovation knowledge exchanges. Similarly, Lee et al. (2010) and Spithoven et al. (2011) highlight the role of intermediaries in maximising the effectiveness of open innovation by building absorptive capacity at an innovation network level.

In summary, this chapter has highlighted thus far that open innovation models allow small firms to access resources from both inside and outside the firm to support their innovation process. The discussion will now turn to examine the external, network relational dynamics in more detail, through the lens of social networks. As discussed in Chapter Two (Section 2.5), the innovation literature has identified the need for SMEs to develop strong business network relationships with heterogeneous actors in order to help overcome resource restrictions and a lack of multidisciplinary skills and capabilities. In the business networks literature it is not the networks themselves that are critically important but the objects and relations that flow through them and the relationship aspects in more formal networks that involve the sharing or exchange of resources (Huggins, 2000; Gulati, 1998; Yoshino and Rangan, 1995). The focus of analysis is on the interaction between actors as a developmental process, exploring how relationships change and why change occurs within relationships to identify how actors adapt and learn over time (Slotte-Kock and Coviello, 2010).

Social network theory has been widely adopted across various disciplines to explore the nature of business network relationships. The importance of social networks to the success of small, rural firms has been documented, in that social networks allow rural places to overcome disadvantages of location and size (Sanders et al., 2014; Ring et al., 2010; Anderson and Jack, 2002), and informal networks are deemed to be stronger and more important in rural than urban areas (Sorensen et al., 2016; Atterton, 2007). Through social networks owner-managers of SME food enterprises can develop and share knowledge and expertise (McAdam et al., 2016; 2014). Social network theory will now be discussed and specifically the following sections will address the main components of social networks - the nature of network ties and the concepts of social capital and trust.

#### 4.1.2 Social Networks

Social networks have been described in terms of three types of relational interactions (Johannisson, 1995). These include firstly exchange networks, made up of an organisation's set of commercial relationships (e.g. suppliers, customers). Secondly, communication networks which include the set of organisations and individuals that can provide support such as business contacts and knowledge (e.g. consultants, trade associations, and other sources of expertise). Thirdly, personal networks that consist of ongoing communications with family members and friends. Social network theory is based on exploring social action relating to the relationships shared by social actors within collaborative networks (Shaw, 2006). The theory incorporates two models for assessing how network relationships impact innovation – the structural and relational models. Structural network theorists examine the characteristics of stakeholder structures and how they impact on behaviour within firms as opposed to individual stakeholder effects, providing a deeper understanding of relations amongst stakeholders (Prell et al., 2009). Here, two aspects are considered - centrality and network density (Wanzenböck et al., 2015; van der Valk and Gijbers, 2010; Rowley, 1997).

Density refers to a characteristic in the entire network which measures the relative number of ties that link all the actors (Boschma and Lambooy, 2002; Mitchell et al., 1997). Where a network has a higher density, knowledge will flow more freely and smoother (van der Valk and Gijbers, 2010). Centrality refers to the position of an individual actor and it is relative to other members within the network (Rowley, 1997) and is therefore based on the perspective of individuals and their social behaviours (Berge et al., 2017). This approach considers how important an actor is in the network.. To measure this, degree centrality and betweenness centrality are used (Scott, 1999; Wasserman and Faust, 1994). Degree centrality relates to the number of connections that an actor has with other actors in a network (Wasserman and Faust, 1994). Actors will be well connected and therefore have good access to a range of sources (Rowley, 1997). Those stakeholders who have high degree centrality are important for bringing all stakeholders together (Prell et al., 2009). Betweenness centrality, on the other hand, considers the actor's ability to access members who are independent of the network (Rowley, 1997). High betweenness centrality is important for strategic planning and bringing new knowledge to the network (Prell et al., 2009).

Social Network Analysis (SNA) is a technique that is used to analyse relations and structures, providing information on the position of people, the structure of networks of relationships and how they develop (Bichler et al., 2017; van der Valk and Gijbbers, 2010). This approach concentrates on the connectivity and interactions between various people, groups, and organisations and may be described as:

*“...a distinct research perspective within the social and behavioural sciences; distinct because social network analysis is based on an assumption of the importance of relationships among interacting units. The social network perspective encompasses theories, models, and applications that are expressed in terms of relational concepts or processes”. (Wassermann and Faust, 1994, p.4)*

Building on Scott's assessment of relationships within a number of different types of businesses (Ding and Liu, 2011), the SNA approach theorises the environment of a business through a set of “nodes”. Nodes represent stakeholders who are linked by a range of relationships between social actors (Rowley, 1997). By analysing the structure of a social network, mainly made up of relational data including contacts, relationships, or information that is exchanged between actors, which relate one actor to another (Wasserman and Faust, 1994), data that arises from the direct and indirect ties, encapsulates the organisation of the business and stakeholder relationships (Heugens et al., 2002). The network approach enables researchers to extend their understanding of social and behavioural phenomena, offering valuable insights to develop stakeholder theories (Rowley, 1997). Consequently, this helps to develop understanding relating to communication and collaboration processes in networks (van der Valk and Gijbbers, 2010).

The concepts of social capital and embeddedness are addressed in the social network and rural studies literature where it is proposed that economic behaviour is embedded in a social context or in a network of relationships, shaped by social fabric, norms and routines (Tregear and Cooper, 2016; Uzzi, 1997; 1996; Granovetter, 1985). Moreover, embeddedness in networks can help owner-managers develop their businesses with limited capital investment while developing competitive advantage (Hite, 2005). These concepts will be discussed further in the following section.

#### *4.1.2.1 Social Capital*

Social capital is considered a valuable organisational asset emerging from social networking. The concept emanated from sociology and has received significant interest since the 1980s with the seminal works by Coleman (1988) and Bourdieu (1986). The social capital theory postulates that transactions between economic actors are essentially social in nature and identifies the importance of strong personal relations and networks of relations in generating trust (see for instance Alder and Kwon, 2002; Burt, 1997; Granovetter, 1973) and trust and friendship are key elements of social capital supporting networking processes. Social networks are made up of strong and weak ties (Granovetter, 1973). Strong ties are associated with regional embeddedness (McAdam et al., 2016), trust and close relationships through family and friends, whereas, weak ties outside the immediate circle can bring new resources and information.

Social capital can be assessed through the wider networks or communities in which actors are embedded and is deemed to be extremely important to knowledge exchange in rural areas (Sorensen, 2016; Tregear and Cooper, 2016). This infers the importance of strong personal relations and networks of relations in generating trust (see for instance Alder and Kwon, 2002; Nahapiet and Ghoshal, 1998; Burt, 1997; Granovetter, 1973). Social capital facilitates the development of tacit knowledge, and where it is well developed, can facilitate collaboration between firms and institutional actors (Morgan, 1997). Bonding social capital exists within comparatively homogeneous, tight-knit groups, such as families, close friends, and neighbours (Ring et al., 2010). The concept thus refers to closed, dense networks and strong ties (Boutilier, 2007; Leonard and Onyx, 2003; Granovetter, 1973) or the “glue” needed to link community members together (Anderson and Jack, 2002). Bonding social capital has been shown to be essential for the development of trust within a network, however, excessively strong communal ties have been found to be problematic, leading to “overly-embedded” contexts (Eklinder-Frick et al., 2011; Hoang and Antonic, 2003; Uzzi, 1997), where actors may develop an insular reliance upon strong-tie partners, to the exclusion of outside actors and a lack of weak ties (Granovetter, 1973). This insular pattern of behaviour can lead to inertia and loss of market focus due to institutionalisation of norms and over reliance on current network partners, at the expense of innovation (Hoang and Antonic, 2003).

Various limitations have been noted with the social capital concept. There are many definitions of social capital and there have been criticisms around a lack of clarity, its “intangibility” and measurability (Fisher, 2013; Tura and Harmaakorpi, 2005), its exclusivity effects (exclusion of outsiders) (Nardone et al., 2010; Portes, 1998), the inhibiting of individual expression (Woolcock, 1998) and its emphasis on the positive effects of social capital (Portes and Landolt, 1996). In response to some of these criticisms, Putnam (2000) made the distinction between bonding and bridging capital. Where bonding social capital is characterised by inward looking networks and strong ties, bridging social capital is associated with weak ties, inherent in outward looking networks that allows communities to gain access to the valuable resources of more heterogenous groups from the wider economy. Bridging capital is viewed as necessary for real economic development to take place (Leonard and Onyz, 2003). However, a balance between bonding and bridging social capital is deemed to be preferable (Hoang and Antoncic, 2003; Huggins, 2000). The distinction between bonding and bridging capital and strong/weak ties has also been regarded as problematic. There has been a tendency to associate bonding social capital with largely negative attributes and bridging social capital with positive attributes (Sorensen, 2016). Furthermore, there have been calls to move away from the dichotomy of strong versus weak ties towards a more nuanced perspective where ties are differentiated not only by intensity, but also the content of the relationship (Jack et al., 2004). A further type of social capital has been identified by Woolcock (2001), “linking” social capital, which involves connections to people in positions of authority.

Social capital is generally regarded as being particularly rich in rural communities (see for instance Peredo and Chrisman 2006; Westlund and Bolton, 2003; Jack and Anderson, 2002) fostered by the small size and geographic remoteness of these communities (Peredo and Chrisman, 2006). Recent work by Sorensen (2016) has found that bonding social capital is significantly higher in rural than urban areas and bridging social capital marginally higher in urban areas. Primarily this is due to much higher levels of localised trust and reciprocity, in addition to a higher level of participation of citizens within their communities. These findings again reinforce the notion that weak ties are not particularly strong in rural areas.

Trust has been identified as a key component of social capital (Putnam, 1993) and within the rural context has been considered as phenomenon that is indicative of strong social relations in communities, supporting networking processes. In strong

ties and embedded relationships, associated with rural communities, trust and close relationships facilitate the exchange of resources and information (Uzzi, 1996). The nature of trust is viewed to be different in bridging and bonding relationships where trust is deemed to be thicker in bonding social capital, based on commonly shared norms, values, professional standards, and codes of behaviour (Fukuyama, 1995). There have been conflicting views on the direction of the relationship between trust and social capital. Putnam (2000) contends that social capital works to generate trust while others such as Adler and Kwon (2002) and Fukuyama (1995) view trust as necessary for the development of social capital. Nonetheless, given the role of trust in relation to social capital and the rural context, the following section will define trust and will examine its components.

#### *4.1.2.2 Trust*

Trust is widely viewed as a fundamental characteristic of business networks, shaped by actors' performances and the power differentials between interacting agents, situated in relation to specific geographical contexts for exchange and interaction (Murphy, 2006). It builds confidence and in turn increases the likelihood that the information provided will be turned into useable knowledge (Fisher, 2013).

There are many definitions of trust across disciplines and literature in the fields of psychology, economics, sociology and organisational science, where attention has been focused on trust within and between organisations. Although many definitions have been proposed, a commonly used definition is that by Mayer et al. (1995) and in subsequent studies (e.g. McEvily et al., 2003; Rousseau et al., 1998) in that trust is viewed as a willingness to accept vulnerability based on positive expectations about the intentions or behaviour of others. Thus, when one party extends a willingness to be vulnerable to another party, they are expressing their faith, or trust, that the second party will behave honourably. Trust may be understood in terms of the ability to form expectations about aims and partners' future behaviours in relation to those aims (Vangen and Huxham, 2003). In this, each party holds expectations that something will be forthcoming, based on common past satisfactory experiences. The themes of risk and opportunistic behaviour are closely linked to vulnerability, where the act of trusting involves a willingness to assume that a partner will bear the vulnerability stemming from the acceptance of risk (Vangen and Huxham, 2003).



Studies have attempted to provide greater understanding around the complex nature of trust through categorisations. For instance, Mayer et al. (1995) consolidated earlier dimensions of perceived trustworthiness into a threefold categorisation: ability (relevant skills and competencies), benevolence (a positive, caring orientation towards others), and integrity (adherence to acceptable principles/values). Curry (2010) extends the scope of trust beyond the individual trustor-trustee dyad to the social system/network level and proposes that trust exists in three forms: personal (whether individuals trust one another), system (whether partners or networks trust each other), and instrumental (whether individuals/networks have belief in the wider system and things that they cannot actually know for sure). Rousseau et al. (1998) characterise trust in its different forms to include: deterrence-based trust (emphasises the roles of sanctions in place for breach of trust, that would thwart opportunistic behaviour); calculus based trust (based on rational choice and credible information regarding the intentions or competence of another); relational or affective trust (based on repeated interactions over time between trustor and trustee); and institution-based trust (at the organisational and societal levels). The terminology used to describe forms of trust by various authors may differ, but describes essentially the same phenomenon. For instance, Johnson and Grayson's (2005) cognitive trust, which is knowledge driven (for example a firm's reputation or service provider expertise) and based on reputation in the market place, is similar to Rousseau et al.'s (1998) calculus-based trust. Likewise, there are similarities between Rousseau et al.'s (1998) and Uzzi's (1997) institution-based trust and Curry's (2010) system trust.

Trust is developed incrementally, over time in a cyclical way but where there is no history of trust parties must be willing to take a risk and a leap of faith required to initiate the cycle (Curry, 2010). The theme of trust developing over time is addressed in the marketing channels literature (see for instance Morgan and Hunt, 1994), where it is argued that trust grows gradually through one party's developing knowledge and understanding of others, and that this is largely due to direct experience and a growing commitment from each party. Here, trust is seen as central to co-operative behaviours and thus successful relationship management, wherein parties resist short-term alternatives in favour of longer term benefits of staying with existing partners in the belief that their partners will not act opportunistically.

The temporal dimension of trust has been further explored in studies that have sought to explore the processual nature of trust building. Trust is stage dependent and its

forms change over the relationship stages (Akrouf and Diallo, 2017). Calculative trust is proposed to occur in the early stage of the relationship where the risks and rewards in calculative trust are transformed into cognitive trust as instrumental assessment of actual costs and benefits of trusting are derived (Akrouf and Diallo, 2017; Jarratt and Ceric, 2015). Meyerson et al. (1996) who developed the concept of 'swift trust', to account for the emergence of trust relations in situations where the individuals have a limited history of working together, have limited prospects of working together in the future, and are involved in tasks that are often complex and involve independent work, with associated deadlines, and requiring continuous interrelating with others in the group to produce an outcome. Parallels may be drawn with the group of individuals involved in a business support network where many of the characteristics of such temporary systems, requiring a swift trust based on faith in one's own ability and the expected ability of the other members, can be observed. In such cases there is neither enough time nor opportunity in a temporary group for the sort of experience necessary for thicker and stronger forms of trust to emerge (Meyerson et al., 1996). The development of trust that exists in temporary group situations is made possible by the presence of the adviser whose reputation is also at stake because he/she is responsible for assembling the group in the first place (Meyerson et al., 1996). The decision, therefore, to be a part of the temporary group will come about as a result of an assessment of the trustworthiness of the adviser.

In summary, the literature has indicated that social networks, social capital and trust are crucial in facilitating coordination and cooperation for mutual benefit within rural communities and by extension the agri-food context. As indicated in Table 4.1 both the open innovation and social networks theoretical perspectives have potential value in providing insights into the wide variety of networks which small firms may utilise for innovation purposes (open innovation) and the impact of network relations on organisational behaviour (social networks). The following section will explain how each theory is incorporated into an initial conceptual framework, which in turn informs the research questions and empirical phase of the current study. The specific contribution of each theory to the research aim and objectives of the present study will be noted.

## 4.2 Conceptual Framework Development

This thesis will apply a multi-theoretical perspective, utilising ideas from the knowledge exchange (open innovation) and social networks literatures, to investigate both the macro level of network structure and the micro level of dyadic interactions, as called for in previous studies (see for instance Iturrioz et al., 2015; Slotte-Kock and Coviello, 2010), and in response to calls that theory should include both the structure of the network and the interactions between actors, how and why they form and how they may be managed over time (Iturrioz et al., 2015; Besser and Miller, 2011; Hoang and Antonic, 2003; Burt, 1992; Granovetter, 1985).

Figure 4.2 illustrates an initial literature based conceptual framework incorporating open innovation constructs and social networks as discussed. Open innovation constructs are represented through the internal and external knowledge components shown in Figure 4.2. These knowledge capabilities interact to produce innovative outcomes and in doing so are mediated by contextual factors relating to the artisan food sector which include place-based factors (the quality of produce, authenticity and traditional methods of production). The proposed relationship between internal characteristics and contextual factors is two-way, in that perceptions of quality and authenticity are dependent on owner-manager outlook. The business support component is closely linked to external knowledge capabilities but is highlighted separately, given the major focus on business support in this study. Here, actor roles and the nature of knowledge exchange between the business support actor (including type of business support knowledge provided) and micro firm participant/client are considered. In relation to the study's aim and objectives, open innovation will be utilised to address RO1 and RO4.

The social networks themes of social capital, trust relations and network ties pervade external knowledge capabilities and are observable in business support programme delivery through interactions between advisers and clients, and in the social capital (bonding/bridging) likely to be produced in such programmes. The pervasive nature of social networks in respect of external knowledge sources and business support programmes is illustrated in Figure 4.2 through dotted lines around the social networks component. The capacity for involvement in social networks and the type of ties (strong/weak) utilised for knowledge exchange can be related back to internal

resources, knowledge capabilities and absorptive capacity. In relation to the study's aim and objectives, social networks will be utilised to address RO2, RO3 and RO4.

This framework is used as a basis for the development of a number of research questions that guided the data collection process (addressing particular research gaps identified in the literature in relation to the research objectives). These research questions are presented in Table 4.2.

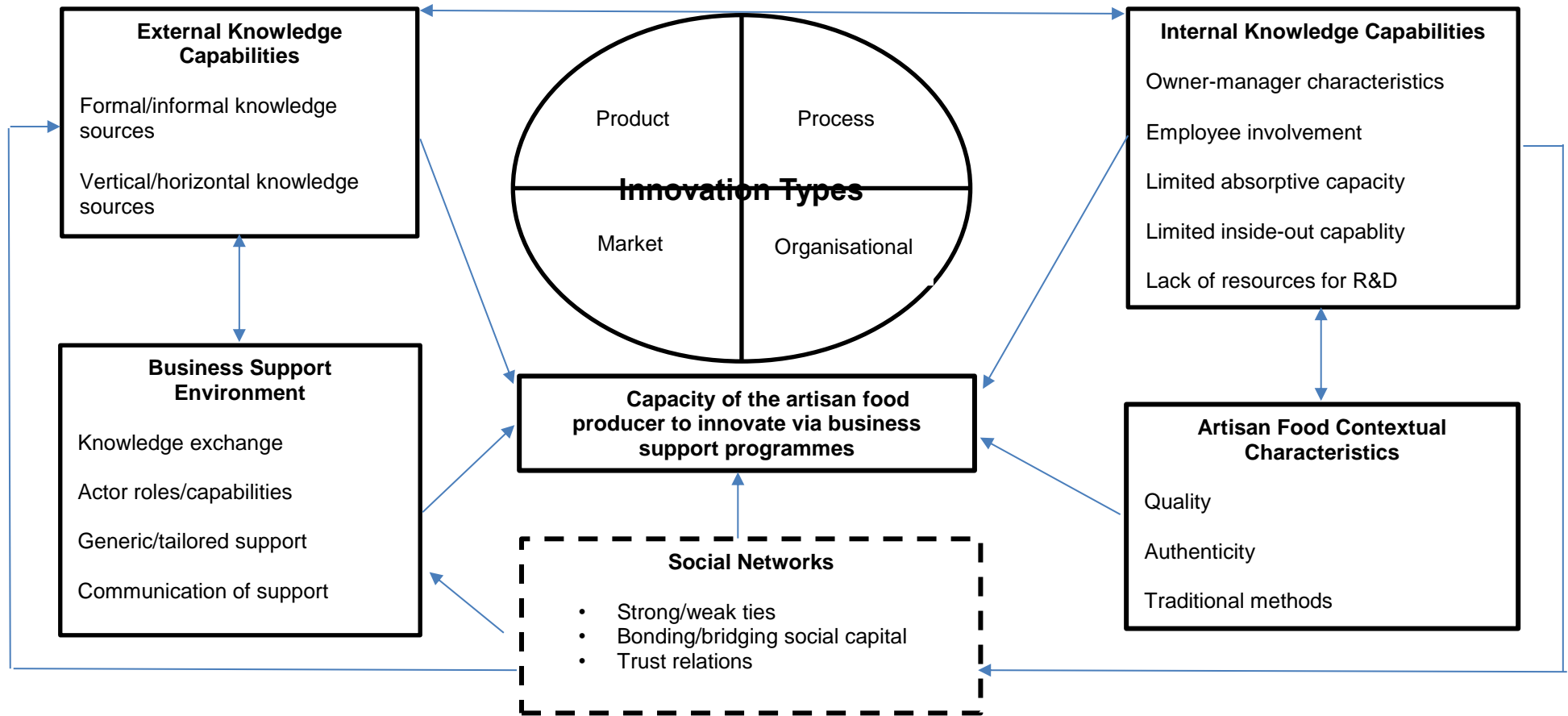


Figure 4.2: Initial Conceptual Framework

**Table 4.2: Research Questions**

<b>Research Objectives</b>	<b>Research Questions</b>	<b>Gaps in Knowledge</b>	<b>Authors</b>
RO1: To explore the knowledge sources for innovation in micro enterprises, within the artisan food sector context.	<p>RQ1: How innovative are micro food producers?</p> <p>RQ2: What are the sources of innovation?</p> <p>RQ3: What are the contextual factors that influence innovation?</p>	<p>Innovation practices of small and micro enterprises and the types of innovation and innovativeness within small food enterprises.</p> <p>The sources of knowledge used by smaller firms and in traditional and low-tech sectors such as food.</p> <p>Innovation knowledge in artisanal craft-based enterprises.</p> <p>Sector specific and contextual studies to provide greater understanding of innovation.</p> <p>Contextually grounded studies of open innovation in smaller firms where key influencing factors are analysed.</p> <p>Open innovation strategies in the food industry.</p>	<p>Hewitt-Dundas and Roper (2018); Alonso and Bressan (2016); Zobel et al. (2016); Baumann and Kritikos (2016); Baregheh et al. (2014); Della Corte et al. (2013).</p> <p>Presenza et al. (2017); Lefebvre et al. (2015); Della Corte et al. (2013); Trippi (2011).</p> <p>Bouette and Magee (2015); Alonso and Bressan (2014); Wischnevsky et al. (2011); Damanpour (2010).</p> <p>Hewitt-Dundas and Roper (2018); Roper and Hewitt-Dundas (2017); McAdam et al. (2016); Levebvre et al. (2015); Reinl et al. (2015); Lamprinopoulou and Tregear, (2011).</p> <p>Presenza et al. (2017); Wynarczyk et al. (2013); Vahter et al. (2012); Huizingh (2011).</p> <p>Presenza et al. (2017); Bayona-Saez et al. (2017); Ferto et al. (2016).</p>
RO2: To explore the factors impacting upon micro enterprise engagement in business support programmes,	RQ4: What are the factors that facilitate engagement in business support programmes?	How micro, artisan food enterprises engage in business support networks for innovation.	Lefebvre et al. (2014); Gorton and Tregear (2008); Henschion and McIntyre (2005).

<b>Research Objectives</b>	<b>Research Questions</b>	<b>Gaps in Knowledge</b>	<b>Authors</b>
within the artisan food context.	RQ5: What are the factors that constrain engagement in business support programmes?		
RO3: To explore the nature of relational aspects, such as trust and reciprocity, in micro enterprise engagement with business support actors, within the artisan food sector context.	<p>RQ6: How can trust and reciprocity impact micro enterprise engagement with business support actors and by extension knowledge transfer and innovation?</p> <p>RQ7: How is trust developed in various forms of support?</p> <p>RQ8: Are there negative as well as positive consequences of trust in actor relations in business support networks?</p> <p>RQ9: How do trust relations compare across the various forms of support and how are these interpreted by both advisers and clients?</p>	<p>The role of trust relations and how it is manifest in rural communities and alternative food networks.</p> <p>The range of intermediaries/agricultural advisers, the types of roles they offer and how these evolve over time.</p> <p>The intermediary/agricultural adviser role in building network relationships.</p>	<p>Richter (2017); Thorsoe and Kjeldsen (2016); Fisher (2013); Hewes and Lyons (2012).</p> <p>Nettle et al. (2018); Phillipson et al. (2016); Niska and Vesala (2013); Kirkels and Duysters (2010); Howells (2006).</p> <p>Bourne et al. (2017); Landini et al. (2017); Faure et al. (2012); Howells (2006).</p>
RO4: To explore the innovation (and other) outputs from such engagement, within the artisan food sector context.	<p>RQ10: What are the outputs from engagement in business support programmes?</p> <p>RQ11: How does business support help to develop</p>	<p>The impact of Government assistance provided to small businesses and how external knowledge may be transformed into innovation outcomes.</p> <p>Knowledge transfer dynamics and collaboration in the food industry.</p>	<p>Chapman and Hewitt-Dundas (2018); Loader (2018); Mole and Capelleras (2018); Cadil et al. (2017); Mole et al. (2017); Radas et al. (2015); Reini et al. (2015); Spithoven et al. (2011).</p> <p>Bourne et al. (2017); Muscio and Nardone (2012).</p>

Research Objectives	Research Questions	Gaps in Knowledge	Authors
	<p>innovation in micro enterprises?</p> <p>RQ12: How is knowledge exchanged across various forms of business support?</p>	<p>Intermediaries/agricultural advisers and the impact of their support tools on agricultural businesses.</p> <p>The ways in which farmers may acquire information within their social networks in ways that enhance their learning.</p>	<p>Knierim et al. (2017); Klerkx et al., (2013); Nettle et al. (2013); Faure et al. (2012); Klerkx and Leuwis (2009);</p> <p>Oreszczyn et al. (2010); Lewis et al. (2007); Sligo and Massey (2007).</p>



### **4.3 Chapter Summary**

This chapter has discussed the theoretical underpinnings for the current study. Several theoretical options have been critiqued and it has been proposed that open innovation and social networks both have potential value as theoretical lenses through which to address the aim and objectives set out in Chapter One. The key components of both theoretical approaches have been incorporated into a conceptual framework that serves as an initial analytical framework guiding data collection. Alongside the literature reviewed in Chapters Two and Three, and the knowledge gaps identified, these theoretical components have helped to formulate several research questions. The next chapter describes the empirical study designed to address these questions.

# **CHAPTER 5**

## **Methodology**

## 5.0 Introduction

This chapter will discuss the appropriateness of a qualitative approach in order to fulfil the overall research aim and the five objectives associated with this research study. Following this, the research design and data collection methods including the data analysis are discussed. Each stage will be described and justified in full. The chapter will conclude with the limitations within the research. This chapter firstly will explain the background to the empirical research and then describe the methodology adopted in some detail. Figure 5.1 outlines the main sections of Chapter Five.

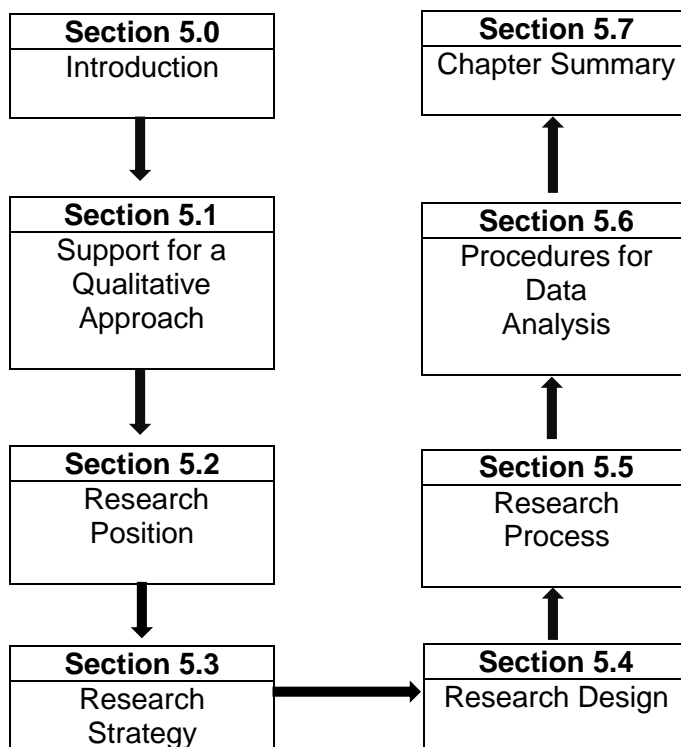


Figure 5.1: Outline of Chapter Five

### 5.1 Support for a Qualitative Approach

The lack of research into the nature of innovation with the micro size (Roper and Hewitt-Dundas, 2017), artisan food context and the role of business support in innovation development (Bouette and Magee, 2015; Lefebvre et al., 2015) led to the formation of broad, exploratory research objectives, which precluded a quantitative approach (Janesick, 1998). To meet the aim and research objectives for this study,

a longitudinal, in-depth and open-ended research design was required to allow time for the development of understanding of the complex and rich nature of innovation in micro size, artisan food businesses and for a deep understanding of specific relationships, and to assess interactions and change within producer-institutional actor networks and agri-food collaborative activities (Aggarwal and Srivastava, 2016; Tregear, 2011; Klerkx and Leeuwis, 2009; Ilbery and Kneafsey, 2000). As such, a qualitative method of data collection, interpretation and analysis in relation to micro size innovation and the role of business support was preferred. The qualitative approach involved semi-structured interviews and group discussions with producers and business support actors, and participant observation.

## **5.2 Research Position**

The nature and type of the present research is described in the context of its theoretical perspective and in respect of the methodological issues involved in the empirical data gathering. There are a number of philosophical perspectives including positivism, interpretivism, realism, and pragmatism (Saunders et al., 2016; 2012). Positivism and interpretivism represent two diametrically opposed philosophical stances in relation to ontology, epistemology, and axiology as highlighted in Table 5.1 overleaf.

Positivist research concentrates on description and explanation, where thought is governed by explicitly stated theories and hypotheses. Researchers remain detached by maintaining a distance between themselves and the object of research. An effort is made to stay emotionally neutral and to provide a clear distinction between reason and feeling, science and personal experience. Researchers seek to maintain a clear distinction between facts and value judgements, search for objectivity and strive to use a consistently rational, verbal and logical approach to their research. Positivism relates to the testing of hypotheses which are developed from existing theory as referred to in Table 5.1. The positivist philosophy is based on objectivity and generalisability, whereby research is undertaken in a value-free way (Saunders et al., 2016). Validity and facts underlie this philosophy, which are gathered through direct observation and experience and are measured using quantitative data collection methods (Saunders et al., 2016; 2012). The advantages of such methods include economy of design, a fast turnaround in data collection, and the ability to identify attributes of a population from a small group of individuals. However, positivism has

come under some criticism for its rigidity in relation to certain types of problem in the field. Quantitative techniques do not permit exploration of firm level processes and activities in everyday settings. In addition, they may be successful in showing how respondents may behave but less so in showing how respondents do behave in normal situations. Statistical data are therefore suitable for answering macro level questions concerning firms at an aggregated level.

**Table 5.1: Research Philosophies**

	<b>Pragmatism</b>	<b>Positivism</b>	<b>Realism</b>	<b>Interpretivism</b>
<b>Ontology</b>	Multiple views developed to address research aim	World is objective and external	Objective, the focus is on thoughts	World is socially constructed and subjective
<b>Epistemology</b>	The focus is on practically -applied research	The focus is on facts / formulating hypotheses and then testing them	Factual / credibility of data is derived from observing phenomena	Develop ideas from induction on data, focus on meanings to try and understand what is happening
<b>Axiology</b>	Objective and subjective viewpoints are adopted	Observer is independent; science is value free	Science is value burdened; the researcher is predisposed	Observer is part of what is being observed
<b>Data collection techniques</b>	Mixed methods including qualitative and quantitative	Large highly structured samples	Qualitative or quantitative to fit the subject matter	Small samples investigated over a period of time

Source: Adapted from Saunders et al. (2016; 2012); Creswell and Plano-Clark (2011)

Interpretivism considers a number of realities in order to understand the differences when conducting research with people and objects (Saunders et al., 2016; 2007). Interpretivism incorporates a wide range of approaches, such as ethnography, hermeneutics, phenomenology and case study. The Interpretive paradigm has been defined by Burrell and Morgan (1979) as being driven by a concern to understand the nature of the social world at the level of subjective experience. Interpretivism is subjective, idiographic, qualitative, insider-based and emic (Lee, 1991). For the interpretivist researcher, empathetic understanding is required, or an ability to

reproduce in one's own mind the feelings, motives, and thoughts behind the actions of others (Bogdan and Taylor, 1975). The final objective is a thick description of process, meaning and understanding through an inductive process of research and an idiographic body of knowledge.

The pragmatism philosophy incorporates various philosophical positions including positivism and interpretivism (Blumberg et al., 2005), adapting a "dualism" 'perspective (Saunders et al., 2016; 2012). Having been referred to as the "third methodological movement" (Creswell and Plano-Clark, 2011), pragmatism offers an alternative view of the world, probing and contrasting from positivism and interpretivism in that it brings together both quantitative and qualitative approaches (Saunders et al., 2016; 2012). Pragmatism is most commonly associated with a mixed methods research, where quantitative and qualitative research are deemed to be compatible and where both inductive and deductive logic can be used. Pragmatism therefore removes the need for the research to be aligned directly to extreme traditions.

Another epistemological position is realism as identified in Table 5.1. A scientific enquiry, realism recognises that the natural and social sciences differ, therefore social reality is pre-interpreted. The philosophy of realism is that there is a reality independent of the mind. Realism is therefore viewed as a branch of epistemology which is similar to positivism in that it assumes a scientific approach to the collection of data (Saunders et al., 2012).

### 5.2.1 Justification for Interpretivism as a Philosophical Stance

There has been a preponderance of quantitative and positivistic approaches to the study of small business and entrepreneurship. Blackburn and Kovalainen (2009, p.129) referred to a "reticence by researchers to go beyond both functionalist paradigms and quantitative approaches". This has had implications for the extent of theory building in the field of small business and entrepreneurship, and a lack of explanation for social and economic phenomena. There have, however, been moves to alternative approaches such as narrative and discourse analysis. It may be argued that an interpretivist perspective is highly appropriate in the case of business and management research, in that business situations are complex, unique and a function of a particular set of circumstances and individuals coming together at a specific time

(Saunders et al., 2016; 2012). The restrictions of quantitative techniques in the study of small business support have been noted. Curran and Storey (2002) outlined the methodological difficulties in employing quantitative techniques in evaluating the impact of small business support policies. These include the heterogeneity of the SME population wherein SMEs are managed by people of different ages, genders, social and educational backgrounds and ethnic origins, and self-selection issues (firms joining programmes are not representative of the population). Added to this is the differing goals of the business, ranging from growth to lifestyle motivations. Curran and Storey (2002) also highlight the lack of suitable sampling frames (few full listings of SMEs at regional or national levels), lack of data on small firms, and low response rates. According to Curran and Storey (2002, p.173), qualitative approaches allow for exploration of phenomena which, it can be argued, are frequently ignored by quantitative approaches:

*“To evaluate the impact of any policy fully it is necessary to understand how it relates to the firm, that is, the owners and their strategies and the way it operates....This might suggest a good case for qualitative approaches focusing on individual firms to find out how training affects management decision making and how this impacts on the operation and performance of the firm. A closer, qualitative, focus might help unravel the chain that links (or fails to link) such training to business performance”.*

As stated in Section 5.1, the lack of research into the nature of innovation with the micro size, artisan food context, and the role of business support in innovation development, led to the formation of broad, exploratory research objectives, in order to provide a rich description of process, meaning and understanding (Janesick, 1998). The research objectives are thus aligned with an interpretive stance and a qualitative approach. Within the agri-food systems literature a qualitative approach has been recommended to help better understand agri-food key collaborative activities (Aggarwal and Srivastava, 2016), and the relationship between institutions and producers (Tregear, 2011; Klerkx and Leeuwis, 2008; Ilbery and Kneafsey, 2000). Furthermore, qualitative research has been deemed appropriate to study networks and the associated themes of trust and social capital (Fiedler et al., 2017; Jarratt and Ceric, 2015; Malecki, 2012; Jack, 2010; Hoang and Antonic, 2003) and entrepreneurship processes (Smith et al., 2013).

### 5.3 The Research Strategy

According to Saunders et al. (2016), a research strategy may be described as a general plan of how the researcher will go about answering the research questions. This section will outline the overall research strategy, including the general research approach taken (qualitative research), followed by a detailed consideration of the nature of the research methods used. The general research approach is now discussed.

#### 5.3.1 Research Approach

Van Maanan (1983) defines qualitative research in terms of an array of interpretive techniques which seek to describe, and come to terms with the meaning, rather than the frequency, of naturally occurring phenomena. Qualitative data consist of detailed descriptions of events, situation and interactions between people and things, providing depth and detail (Patton, 2015). Qualitative approaches lend themselves better to the production of serendipitous findings and are typically broader and more holistic in nature than quantitative tools (Hari Das, 1983).

Strauss and Corbin (1990) have asserted that it makes no sense to start with received theories because these are likely to inhibit the development of new theoretical insights. In this case the researcher would attempt to make sense of the situation without imposing pre-existing expectations on the setting. However, it is questionable whether it is possible to go theory free into any study. Miles (1979) contended that a working framework should be in place near the beginning of fieldwork in order to avoid incoherent and bulky data that is difficult to interpret. This is not to assume that the theoretical framework is self-limiting. Indeed, the research problem may shift during the research as data is gathered. Miles and Huberman (1994) advocated commencing the research process with general research questions, whereby the implicit can be made explicit, without limiting the vision of the research. Pre-understanding from prior knowledge, insights and experience have been deemed important by Gummesson (2000) in order to fully understand organisational processes.

In the present study, the researcher's preunderstanding from prior knowledge relating to this research problem was derived from a literature review and development of a



conceptual framework, as discussed in Chapter Four. Moreover, experiential knowledge was brought into the field from working knowledge of the agri-food industry.

The following section will next move to discuss in more detail the data collection methods used in the present study.

### 5.3.2 Research Methods

Various sources of information and multiple qualitative methods were employed to triangulate data sources and to view the nature of innovation in the artisan food micro producer context as widely as possible. Triangulating by data source (business support actors and micro food producers) was beneficial both in terms of providing differing viewpoints but also to improve the credibility of the information collected, as one source acted as a check on another.

The qualitative methods employed in this study included documentary analysis, focus groups, observation, and semi-structured interviews. The general characteristics of each of these methods will now be considered in the following sections. Further details on how these methods were employed in the current study will be provided in Section 5.5.

#### 5.3.2.1 *Documentary Evidence*

Documentary sources are particularly significant in management research (Thomas, 2004). They provide a rich source of information, contextually relevant and grounded in the contexts they represent (Lincoln and Guba, 1985), and can facilitate longitudinal studies (Thomas, 2004). The use of documentary or secondary data means that findings may be placed within a more general context and allow for the triangulation of findings (Saunders et. al., 2016; 2012). Document sources may include personal documents such as diaries and letters, public documents, organisational documents, and mass media outputs (Bryman and Bell, 2015). The search for documentation relevant to the aims of the research can be an arduous process and requires considerable interpretative skill to understand the meaning of the materials (Bryman and Bell, 2015). It has been argued that documents should be examined in terms of the context in which they were produced and their target readership (Atkinson and

Coffey, 2004). It is important to have assurance that documents are authentic, free from errors and that they meet other criteria of adequacy (Thomas, 2004).

### 5.3.2.2 Focus Groups

The focus group is usually associated with the phenomenological methodology (Collis and Hussey, 2003). Using a focus group enables the gathering of data about opinions from people who share common interests (Collis and Hussey, 2003). The group interaction can produce data and insights that would be less accessible without the interaction found in a group (Morgan, 1988). The advantages and disadvantages of using focus groups are highlighted in Table 5.2.

**Table 5.2: Advantages and Disadvantages of using Focus Groups**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• High degree of flexibility – agendas changed as required</li> <li>• Low cost to set up</li> <li>• Less formalised, participants feel comfortable and open up</li> <li>• Ability to obtain rich data</li> <li>• Provide a guide for key issues to be addressed in subsequent semi-structured interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Limited sampling accuracy</li> <li>• Lower number of participants may take part than anticipated</li> <li>• Can be influenced by a dominant person/ people and therefore the output can be biased</li> </ul>

Source: Adapted from Saunders et al. (2016; 2012); Blumberg et al. (2005); Collis and Hussey (2003)

Ghuri and Gronhaug (2010) identify various forms of the focus group data collection method, including discussion groups, focused interviews, group interviews and group research. The group interview may be used in various situations (Oates et al., 2018; Cassell, 2015). The group may be naturally occurring within an organisation or may be manufactured for research purposes. The aim of the researcher could be seeking exploration of ideas within the group, in order to understand the context. Other aims include the generation of ideas and to intervene within a given group. The terms group interview and focus group are frequently used interchangeably and the distinction is not always clear-cut (Saunders et. al., 2016; 2012; Bryman and Bell, 2015). Group interview has been used as a general term to describe all in-depth

interviews conducted with two or more people (Saunders et. al., 2016; 2012). The focus group is associated with the construction of a group for research purposes, whereas the team group interview is attributed by Cassell (2015) to the natural development of groups within the organisation. In the focus group method the emphasis is on the questioning around a particular tightly defined topic, and the interaction between the group members and the joint construction of meaning, and is deemed to be more focused than the group interview (Bryman and Bell, 2015).

One of the conditions of focus groups is that there should be some homogeneity among the individuals in one specific focus group in order to encourage more in-depth and open discussion (Ghauri and Gronhaug, 2010). Group interactions may lead to productive discussion as interviewees respond to the group moderator's questions and evaluate points made by the group. As highlighted in Table 5.2, there may emerge a group effect whereby certain participants dominate the interview whilst others feel inhibited. This may have the effect of a "consensus" emerging that is not one that all members fully endorse or dispute. There is a strong need therefore to test the validity of emergent views by trying to encourage involvement of all group members through the use of probing questions.

#### *5.3.2.3 Observation*

Observation may be considered in terms of the degree of participation of the researcher in the setting, ranging from complete participant, where the researcher joins the organisation as a normal member in order to carry out the research covertly, to complete observer who has no contact at all with those being studied (Gill and Johnson, 2010). Observation involves two types – overt or covert. Covert observation seeks to minimise the effects of the researcher in the field – the assumption being that with an overt presence people may behave very differently when aware that they are under observation, thereby reducing the research validity. However, rather than attempt to eliminate the effects of the researcher on the phenomenon being studied, the researcher should attempt to understand his or her effect upon, and role in, the research setting and utilise this knowledge to elicit data (Gill and Johnson, 2010). Covert research has limitations, which include ethical problems and the restrictions placed on the researcher such as the norms of the group pertaining to 'ordinary' members (Gill and Johnson, 2010). An overt role is associated with observer as participant and participant as observer roles. Participant observation involves a

period of intense social interaction between researcher and subjects, where data are unobtrusively collected (Bogdan and Taylor, 1975). The participant observer attempts to participate fully in the lives and activities of subjects and thus become a member of their group.

#### *5.3.2.4 Semi-structured Interviews*

Whilst group interviews are able to identify principal issues, they are not able to provide the depth in relation to specific issues that can be obtained from individual interviews (Stokes and Bergin, 2006). Interviews can be structured, semi-structured or unstructured. Structured interviews allow for the objective comparison of interview data across interviewees, enabling the qualitative data to be quantified for analysis (Cassells, 2015). Semi-structured interviews take a range of forms but generally allow the researcher to undertake a list of questions on quite specific topics to be covered, in the form of an interview guide. Unstructured interviews allow for adaptation of questions to the responses of the interviewee.

The major benefit of using semi-structured interviews is that they are adaptable and flexible, allowing the interviewer to follow up on any ideas, probe the interviewees and investigate feelings and motives, something which the survey cannot capture (Saunders et al., 2016; 2012). In other words a “conversation” takes place between interviewer and interviewee with the purpose of eliciting certain information from the interviewee. Semi-structured interviews can take various forms, including exploratory, theoretical, narrative, event-based, comparative, narrative and biographical (Cassell, 2015). Exploratory interviews are used to explore an organisational issue from a range of perspectives, whereas a theoretical based semi-structured interview allows for data to be collected to enable the development of theory – whereby the questions in the interview schedule are thematically organised around theoretical aspects of an organisational phenomenon. Event-based interviews require interviewees to focus on a particular event and aim to explore their experiences of the event. Comparative interviews are used to encourage the interviewee to make distinctions based on comparisons. Narrative interviews allow respondents to make sense of their own experiences of organisational phenomena and found in research on change and identity. Biographical interviews also allow for chronological reflection, but in terms of the respondent’s life more generally and is concerned with how individuals interpret and make sense of their organisational experiences.

Having considered the general characteristics of the methods to be employed in this study, the following section now presents the research design and subsequent research process followed.

#### **5.4 The Research Design**

A research design provides the researcher with a guide to collecting, analysing and interpreting data (Yin, 2014). The research design has been defined as 'the logical sequence that connects the empirical data to a study's initial questions and, ultimately, to its conclusions' (Yin, 2003, p.20). The early formulation of the aim and objectives of the study was linked to a reading of the literature and prior knowledge/theory. Whilst a broad set of objectives informed the selection of relevant literature at the outset, the literature review helped to refine the aim and objectives in order to ensure a strong contribution to knowledge. An initial conceptual framework was developed from the literature review, which led to the formation of research questions. This provided the basis for the data collection.

A sequential approach was followed whereby earlier stage data collection informed latter stages. The research process involved three broad stages of data collection, as depicted in Figure 5.2.

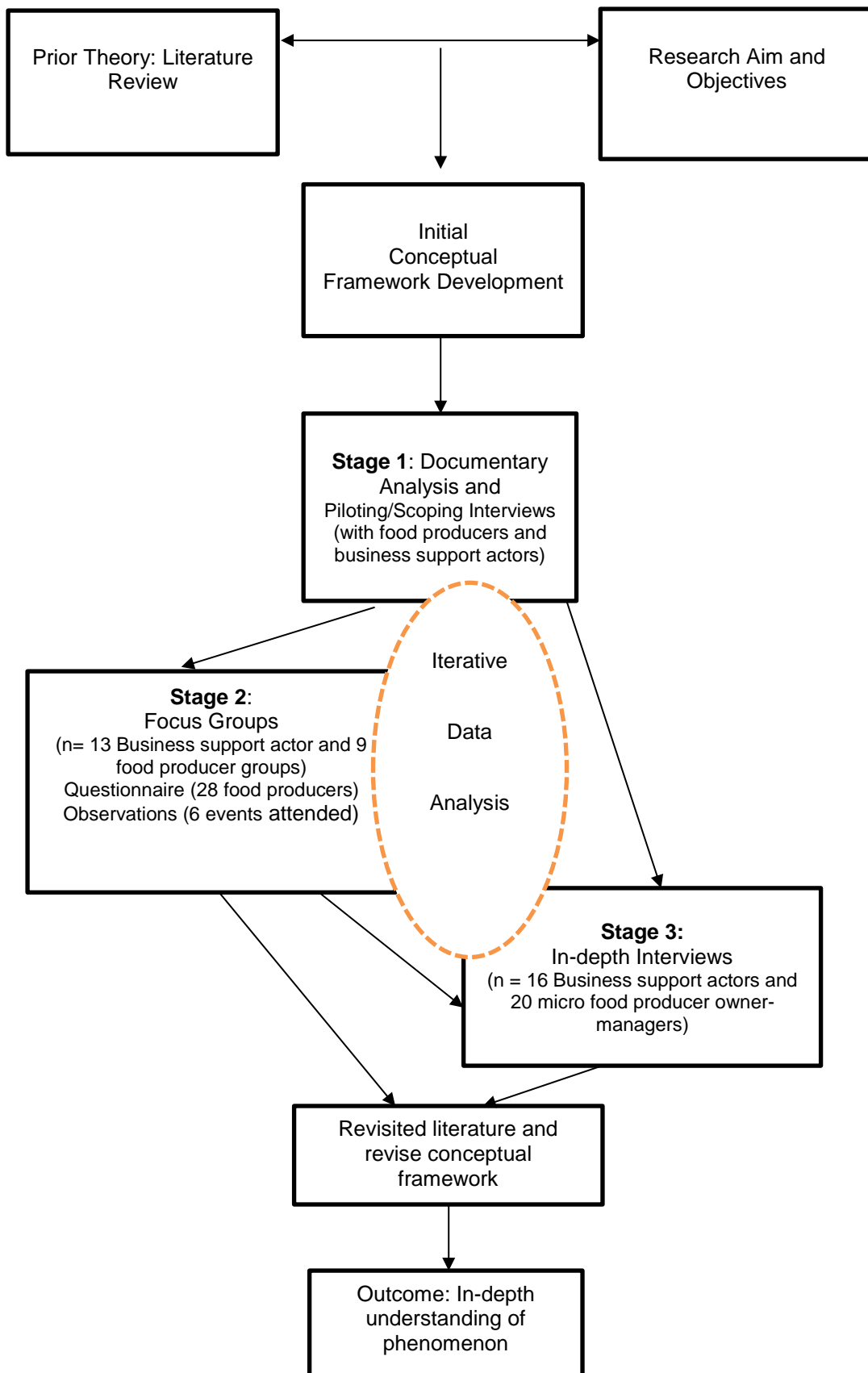


Figure 5.2: Research Design

The first stage of the research design involved a review of the documentary analysis of policies and business support programmes in Northern Ireland relevant to the needs of small food producers. This sought to provide a stakeholder analysis in order to identify existing provision, any duplications in content between policies and programmes, and gaps in support provision. This stage also allowed for the identification of topics for exploration in two further stages of data collection – focus groups and semi-structured interviews. Following this, the empirical data collection commenced with focus groups which aimed to explore themes around business support engagement and innovation at a general level. These took place at business support events at which unstructured observations were carried out (at the group events food producers were also asked to provide data on their innovation practices through a questionnaire – see Section 5.5.3). The third stage involved semi-structured interviews with food producers and business support actors in order to explore research areas and emerging themes in more depth. Figure 5.3 outlines the timescale for each of the research stages.

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
<b>2012</b>						Documentary analysis / Piloting						
<b>2013</b>	Focus groups / Observations / Semi-structured interviews											
<b>2014</b>	Semi-structured interviews		Focus groups / Observation			Focus groups / Observation		Semi-structured interviews / Repeat interviews				
<b>2015</b>	Semi-structured interviews											

**Figure 5.3: Timescale of the research**



Although there was a broad sequential approach to the data collection, it can be seen within Figure 5.2 that the data collection process was largely iterative in nature. The documentary analysis stage continued throughout the period of data collection and went on to involve the review of documents from one particular business support programme during the focus group and interview stages. Furthermore, although the focus group discussions commenced before the interviews and informed areas for further exploration in interviews, focus groups continued after initial interviews had commenced, as opportunities arose to participate in business support events that brought respondents together.

#### 5.4.1 The Empirical Context

The geographical context for the study is Northern Ireland and the study explores a number of research questions in relation to artisan food production based in rural locations across the region, operating predominantly through AFNs. Northern Ireland represents a peripheral economy which consists heavily of small and micro sized enterprises, particularly within the food sector and within largely rural areas. It has a small but expanding base of artisan food production, which has been stimulated by increasing consumer demand for specialist, local food products (Intel, 2017; 2016). The Northern Ireland context for this study will be discussed more fully in Chapter six.

#### 5.4.2 Sample Selection

There are no official datasets on artisan food producers in Northern Ireland, but various sources, including local council listings and food associations, indicate that there is in the range of 180-200 micro size artisan food producers currently operating within the sub sectors of dairy, baked goods, preserves, poultry, soft drinks, oils, meat, confectionary, seafood and alcohol. Purposive sampling was used to select food producer respondents. Purposive sampling was used to ensure that the selected respondents were information rich (Patton, 2015). Purposive sampling may be sequential or non-sequential or fixed – the distinction being whether the sampling is an evolving process, where the sample is gradually added to as the research study evolves, or where the sample is more or less established at the outset of the study (Bryman and Bell, 2015). Theoretical sampling is one form of purposive sampling advocated by the likes of Glaser and Strauss (1967), where using theoretical criteria for sample selection, data collection is continued until theoretical saturation has been

achieved, i.e. the importance of categories have been confirmed and when new data no longer stimulates new theoretical understandings. A further purposive sampling approach identified by Bryman and Bell (2015) is termed “generic purposive sampling”. This broad category subsumes several types of sampling criteria that have been identified by the likes of Patton (2015). Unlike theoretical sampling, this form of sampling is fixed and *a priori* but the criteria employed are informed by the research objectives and questions. In this study theoretical, sequential and snowball sampling approaches were employed to identify respondents. In total, data were collected from 36 artisan food producers. This sample represented a range of food sub sectors, reflecting the sectoral compositions of these producers in Northern Ireland.

A number of relationships were developed with key stakeholders who were able to assist with negotiating access to companies. A strong recommendation from an intermediary strengthens the researcher’s capacity to work in a particular community, and thus improve the quality of the data (Fetterman, 1989). Micro food producers were identified from stakeholders and local council lists of businesses that had previously participated in business support from the local council or were currently engaged in a business support programme – thereby demonstrating a level of engagement in networking activity. The majority of these producers were award winners at various regional and national food taste events in recent years. The criteria for selection included that the businesses had ten or less employees, were involved in either food or drinks production and represented a range of food sub sectors, which included: dairy, baked goods, preserves, oils, meat, confectionary, and alcohol. The respondents included a mixture of diversified family farm enterprises and new entrepreneurial start-ups. The producer respondent sector and participant numbers are shown in Table 5.3 and participant profiles and codes are then provided in Table 5.4.

**Table 5.3: Food Producer Respondents**

<b>Sector/activity</b>	<b>Participant Numbers</b>
Oils/Preserves	12
Baked goods	11
Meat	7
Alcohol	3
Dairy	2
Confectionary	1
<b>Total</b>	<b>36</b>

**Table 5.4: Food Producer Profiles**

<b>Participant Code</b>	<b>Sector/Activity</b>	<b>Profile</b>
A1	Oils/Preserves	This award winning family business specialises in growing, cold-pressing, filtering and bottling a wide range of flavoured oils/dressings on their farm. In response to a growing market for cooking oils, promoted by local award-winning chefs, this business produces a wide range of foods rich with omegas and flavour, which particularly appeal to the health conscious consumer.
A2	Oils/Preserves	A social enterprise. Began as a catering company for a wide range of events. More recently, they have developed a high-end premium product including luxurious jams made from local products including whiskey.
A3	Oils/Preserves	An award winning producer of a range of sauces and chili jellies, the company uses only local produce to manufacture their products. Having lived outside Northern Ireland for a number of years, the owner-managers have been able to learn from and develop their products from leading American international sauce makers. Products can be purchased on-line and through leading food outlets and garden centres. A range of hampers are also available to purchase.
A4	Oils/Preserves	This husband and wife family business produce a range of homemade preserves and pies from their kitchen, which they sell and distribute directly in the local area.
A5	Oils/Preserves	Established in 2009, this owner-manager produces a range of relishes, oils and chutneys. Prepared by hand, the owner-manager has years of barbeque knowledge which has helped to develop the products to provide the best possible flavor. The products are available to purchase at local retailers where sampling is carried out at various times throughout the year.
A6	Oils/Preserves	The owner was born in India and relocated to Northern Ireland. The business started as an Indian restaurant before moving into food production and selling Indian foods (spice packs, dips and chutneys) to local butchers and small retail outlets.
A7	Oils/Preserves	Established initially as a hobby, this owner-manager produces jams, chutneys, pickles and mustard from her kitchen in the evenings and at weekends. Using fruit produced from her local allotment the award winning preserves are sold at local markets.
A8	Oils/Preserves	Produces hot chilli sauces which are hand made in the traditional way. The owner personally collects and tests fresh chillis from his local farmer. The idea of creating such a product came after travelling, living and working in several countries including North Africa, Spain, Portugal, Ireland, England, USA, Sweden and Denmark.
A9	Oils/Preserves	Established in 1994, this is a family run business that produces sauces and deli items that it sells via its restaurant, at private parties and corporate events. The owner-manager has over 25 years' experience in the food production industry, including running an award winning restaurant.
A10	Oils/Preserves	A farming family producing pork, this company provides catering for all events and private parties, specialising in spit roast hogs including for weddings and corporate dinners, offering a variety of alternative meats in addition to the traditional hog roast. These include buffalo, venison and wild boar.

<b>Participant Code</b>	<b>Sector/Activity</b>	<b>Profile</b>
A11	Oils/Preserves	Established in 2014, this father and son team produce sauces and sell them to local food retail outlets. These include a range of flavoured sauces and gravies. The father is also involved in running a number of other businesses including ministering at a local church.
A12	Oils/Preserves	Established in 1988, this is a family run business that produces sauces and deli items that it sells at private parties and corporate events. The owner-manager has over 25 years' experience in the food production industry.
A13	Baked Goods	As the wife of a farmer, baking for family and friends, this owner-manager has grown the business through a purpose-built bakery from funding received from Central Government. Specialising in hand made meringues, homemade scones, pastries and birthday cakes, the meringues are sold across Ireland, including at local outdoor food markets and leading gourmet food outlets.
A14	Baked Goods	Having travelled on several city breaks around Europe, the owner-manager enjoyed visiting local food markets. He felt that there was a demand for local breads to be baked onsite at food events and markets. The only baker in the UK baking onsite', his business has become increasingly popular. Starting off as a hobby, a bakery has recently been built at the family home. The owner-manager hosts bread making demonstrations at local tourist attractions / events.
A15	Baked Goods	Outside caterers who specialise in providing the finest, authentic French Crepes. A mobile crepêrie transports the authenticity and charm of the French countryside direct to small corporate events, food festivals and weddings.
A16	Baked Goods	Having recently diversified through building a farm shop and restaurant, a number of home grown items from the family farm are served and available to purchase including a range of baked goods including breads and traybakes.
A17	Baked Goods	A well-established family business where products can be purchased at the bakery/coffee shop, via local retail outlets and at local food related markets. This award winning bakery has recently targeted the health conscious consumer and changing consumer dietary requirements by offering gluten free products.
A18	Baked Goods	Set up in 2013, this premium coffee shop was significantly inspired by the business owner's passion for travel, including the UK and much further afield such as Australia. A wide range of goods are baked onsite including a range of gluten free produce such as lemon cake.
A19	Baked Goods	A deli / coffee bar recently established by a local entrepreneur selling homemade baked bread including award winning scones, cakes and traybakes. Also sells the goods of other locally based producers in the deli including preserves and cheeses.
A20	Baked Goods	A qualified teacher, inspired by her love of travel and food, patisserie in particular, this owner-manager trained to make macaroons at a leading international patisserie. Hand made using natural ingredients, including a gluten free option, a range of products are available for family/corporate functions. Increasingly there has been a trend for "macaroon towers", replacing traditional birthday/wedding cakes which has enabled the owner-manager to grow the business.
A21	Baked Goods	These award-winning desserts are produced by hand with local ingredients. The business has expanded in recent years with the majority of sales to restaurants. The owner-manager also works with local chefs to develop bespoke products which are sold in upmarket cafes/hotels. Products can also be purchased in smaller retail independent outlets including garden centres. Continued growth has involved the opening of a café that sells all of their freshly made produce.

<b>Participant Code</b>	<b>Sector/Activity</b>	<b>Profile</b>
A22	Baked Goods	A well-established family business, selling a broad range of homemade breads and pre-made take away meals, as well as a catering specialist for weddings and other special occasions.
A23	Baked Goods	The business is managed from a purpose built bakery at the family home. The owner-manager has been baking most of her life. Renowned for her themed cakes, over the last 20 years the business has continued to grow by attending local food markets and supplying goods to a local independent supermarket and the local agriculture college.
A24	Meats	Continuing the family tradition of farming, this business is committed to producing the best quality free range pork and beef from their traditional breeds of cattle. Produce is sold at their farm shop and at various food events, including agriculture shows and a local market throughout the year.
A25	Meats	Specialist breeds are reared on this family farm business. Having ran a butchers and hospitality business for many years, this business has grown through diversification. In 2007 the owner-managers launched a mobile catering business, specialising in private family functions and weddings 'with a difference' and sell their produce through a weekly stall at a leading food market. They have won various awards in local food guides.
A26	Meats	An artisan beef producer of home-grown beef, prepared and ready for sale. Also provides pork, lamb, and poultry locally sourced. The business model is predominantly a home-delivery one, whereby customers order by phone or email.
A27	Meats	The family-owned business has spanned four generations, evolving from a small butchers shop to a modern day food hall and delicatessen, adhering to its key values of providing quality meat from their own farm and a range of foods from other high quality producers. Offers an online service.
A28	Meats	Producers of dry cured bacon, gammon and speciality sausages from their own farm. Also involved in food service activities, including a café whilst providing Hog Roasts for outdoor events.
A29	Meats	Established in the late 1990s, this family business uses traditional methods to produce locally sourced meat. Using their own special curing recipe, they supply independent retailers/foodservice customers. Their authentically dried cured bacon has a special and balanced flavour.
A30	Meats	Established as 'another arm' of a well-established family run pub/restaurant, these home-made pies are made from award winning local produce. Produce is predominately sold at larger food/sports related events and a small number of retail outlets including farm shops, cafes, delis and pubs.
A31	Alcohol	Set up in 2013, this cider business grew from a hobby. The business has grown rapidly and the produce is available in top end bars and restaurants, mainly in the businesses' home county. Using 100% fresh pressed juice, the owners pride themselves on producing a cider that is clearly different in taste from the more commercial and mass produced alternatives.
A32	Alcohol	This cider production business has diversified from a farming background. A wide range of cider products are sold throughout the UK and Republic of Ireland. Having won a number of awards, the business has developed very strong relationships with other food producers, providing them with marketing expertise and assisting with production. The owner-managers provide tours of the farm where tourists/school children can view the cider production process.

<b>Participant Code</b>	<b>Sector / Activity</b>	<b>Profile</b>
A33	Alcohol	In the late 2000s the owner-manager built a 'cidery' beside the family home. Capitalising on a family winemaking hobby, this owner-manager produces a number of award winning ciders. A family member who is also studying at university has been instrumental to the development of the business, providing marketing support.
A34	Dairy	This cheesemaker produces goats milk products. The grandfather of the existing owner was in the process of retirement and sold off the entire farm herd. His grandsons decided to diversify and take the farm in a different direction, moving away from dairy towards production, and identified a niche in the market for goats milk products and artisan cheese.
A35	Dairy	Starting off as a diversification project in 2007, this dairy farmer was keen to develop a sustainable family business and one that took the business "much closer" to the consumer. Having won numerous awards not only for their produce but their farm, this producer supplies their products across the UK, including award winning restaurants. The owner-manager also works closely with established chefs to develop bespoke products for the hospitality industry.
A36	Confectionary	A family business established over 50 years ago, the owner-managers have continued to develop their business based on their principle of not supplying their products to large scale grocery retailers. Diversification has taken place in a number of different ways including through themed birthday parties, chocolate workshops and local food markets. One of the owner-managers regularly hosts business workshops to share "key tricks of the trade" with other local businesses.

Key business support actors were selected due to their experience with network support for the food sector and their knowledge and experience of the industry. These actors were representative of the range of agencies in the region with responsibility for providing business support programmes, or influencing policy for the food sector. The objective was to learn from those representatives who may be described as “information rich” (Saunders et al., 2016; 2012). The business actors included representatives from “public” agencies such as local councils, trade body associations, central Government departments for economic development and agriculture, sector skills bodies, and innovation support agencies. Private support companies providing a range of business support services (e.g. accounting, business plan development, marketing etc.) were excluded from the study. However, consultants involved in the delivery of Government programmes for support were included. Data were collected from 41 business support actors. A summary of the business support actor respondents and participating numbers per organisation are shown in Table 5.5, with profiles and corresponding participant codes provided in Table 5.6.

**Table 5.5: Business Support Actor Respondents**

<b>Industry</b>	<b>Participant Numbers</b>
Local Council	12
Central Government	10
Food Association	5
Food Industry Consultant	4
Education	3
Food Strategy Board	2
Industry Skills Body	1
Rural Agency	1
Bank	1
Farmers' Association	1
Food Distributor	1
<b>Total</b>	<b>41</b>

**Table 5.6: Business Support Actor Profiles**

<b>Business Support Actor Code</b>	<b>Organisation</b>	<b>Profile</b>
BS1	Local Council	Local Development Programmes Manager
BS2		Economic Development Manager
BS3		Economic Development Manager
BS4		Tourism, Heritage, Culture and Arts Development Officer
BS5		Economic Development Officer
BS6		Economic Development Manager
BS7		Tourism Manager
BS8		Senior Environmental Health Officer
BS9		Strategic Director
BS10		Tourism Officer
BS11		Economic Development Officer
BS12		Food Markets Development Manager
BS13	Central Government	Client Adviser
BS14		Agri-food Policy Adviser
BS15		Assistant Director Agri-Food Policy
BS16		Innovation and Policy
BS17		Head of Supply Chain Development
BS18		Markets and Product Development Experience Manager
BS19		Culture and Heritage Officer
BS20		Procurement Manager
BS21		Policy
BS22		Policy
BS23	Food Association	Chief Executive
BS24		Chief Executive
BS25		Food author and business owner
BS26		Project Manager
BS27		Regional Manager
BS28	Food Industry Consultant	Independent Management Consultant
BS29		Independent Management Consultant
BS30		Independent Management consultant
BS31		Management consultant
BS32	Education	Manager
BS33		Head of Food Technology Development
BS34		Lecturer
BS35	Food Strategy Board	Board Member
BS36		Board Member
BS37	Industry Skills Body	Regional Manager
BS38	Rural Agency	Policy Officer
BS39	Bank	Senior Manager
BS40	Farmers' Association	Independent Committee Member
BS41	Food Distributor	Owner-Manager



### 5.4.3 Gaining Access and Research Ethics

The difficulties of obtaining access to individuals and organisations are well noted in business research, with researchers noting that individuals may be reluctant to give the time required to take part in the research. The reasons for this have been noted including that the decision-maker, or gatekeeper, fails to see the value of the research is concerned about confidentiality and has doubts around the researcher's credibility (Saunders et al., 2016; 2007).

In order to overcome barriers to access, due to a hesitancy on the part of owner-managers and business actors to participate, the procedures and good practice for gaining access to individuals and organisations for in-depth study, as advocated by qualitative researchers such as Bogdan and Taylor (1975) and Lincoln and Guba (1985), were followed. These authors recommend an initial approach which guarantees confidentiality and privacy, emphasises that the researcher's interests are not confined to any one particular setting or group of people, and gives a truthful but vague and imprecise summary of the research procedures and objectives in order to reduce the risk of prompting defensive or self-conscious behaviour. Access to producers was assisted by an introduction by business support actors working in local authorities with an economic development role and an involvement in providing support programmes. Other producers were contacted directly, at events, or by email/telephone. The benefits of participating in the research, including helping to identify gaps in business support and thus in impacting upon future support provision, were emphasised.

### 5.4.4 Validity of the Research Design

The epistemological foundations of qualitative research require criteria for evaluation that are different to those in conventional quantitative research. Validity in qualitative methods depends to a great extent on the skill, competence, and rigour of the researcher/evaluator, because the observer is the instrument (Creswell, 2016; Patton, 1987). Lincoln and Guba (1985) have argued for the applicability of distinct validity criteria to qualitative research and that qualitative research should demonstrate "trustworthiness". The trustworthiness of qualitative research may be assessed in terms of four criteria: credibility; transferability; dependability;

confirmability. Each criteria will now be discussed with reference to the steps taken in the present study to ensure that these key validity criteria were met.

#### *5.4.4.1 Credibility*

Credibility is concerned with the relationship between the constructed realities of those observed and the representation of those realities by the researcher, in other words the degree of confidence in the “truth” (or internal validity) that the findings of a particular study have for the subjects (Saunders et al., 2016). To meet this criteria, triangulation was achieved through the deployment of various data collection methods and sources of data. The involvement of both food producer and business support actor informants allowed for information to be collected from individuals with different points of view and understandings about the topic. Data obtained directly from individuals were checked against observed behaviour and various documents. Informal and formal member checks were conducted whereby data and conclusions were tested with members of the stakeholder groups from whom the data were originally collected. Informants (producers and business actors) were invited to review the findings at business support events as they emerged and were asked to assess whether the conclusions were accurate. In addition, the insights gleaned during the focus groups were tested in later interviews. The longitudinal nature of the study allowed for prolonged engagement in the field (over a period of three years), whereby the researcher spent enough time in the context being studied to overcome any distortions or biases that are due to the researcher’s impact.

#### *5.4.4.2 Transferability*

Transferability is concerned with the applicability of research results to other contexts. The researcher is required to make available as much information as possible about the context of the study so that others may judge its applicability to other situations (Saunders et al., 2016; Yin, 2014). Transferability is addressed through the full or thick description of the context of the study to allow for others to judge its applicability to other situations, and through the use of purposive sampling. Rich, thick, detailed description is provided to allow a solid basis for comparison. At a macro level, this includes a description of the regional Northern Ireland market context for agri-food (see Chapters One and Six) and the regional policy and business support environment (see Chapter Six), and at a micro level descriptions are provided of the

producer and business actor respondents (see Tables 5.5 and 5.6 and Chapter Seven and Eight). In addition, data collection and analysis strategies are reported in detail in order to provide a clear and accurate picture of the methods used in this study. The findings provide an in-depth discussion of the interrelationships and the intricacies of the context being studied which is imprecise in terms of defining boundaries and specific relationships but which is very rich in providing depth of meaning and richness of understanding (Erlandson, 1993). In addition, a purposive sampling approach was followed to allow for emerging insights relevant to the study.

#### *5.4.4.3 Dependability*

Dependability is concerned with the stability of the data over time and consistency or reliability. A study must provide its readership with evidence that if it were replicated with the same or similar respondents in the same or similar context its findings would be repeated (Saunders et al., 2016). This is addressed through repeated observations conducted over a longitudinal time period. The simultaneous data collection and analysis processes over a longitudinal period in effect meant that the nature of questions posed during the semi-structured interviews, and the group discussions, changed throughout the study as new patterns and themes emerged. To provide for a check on dependability the qualitative researcher is expected to provide detail around the processes conducted and to allow for an audit trail of documentation linked to the study.

#### *5.4.4.4 Confirmability*

Confirmability is concerned with assuring that data and interpretations are grounded in events rather than in the researcher's personal constructions or the biases of the researcher. The aim is to create trust in the confirmability of the findings, rather than to ensure that the findings are free from contamination by the researcher. This means that data can be tracked to their sources and that the logic used to place interpretations of the data into a coherent whole is both explicit and implicit (Yin, 2014). As discussed under credibility, confirmability is addressed through triangulation of methods, and member checking. This was to ensure that the inferences based on the data were logical and that appropriate analytic techniques were used. Like dependability, confirmability is communicated through an audit trail

by looking at the processes used in the study to reach interpretations, conclusions, and recommendations that may be traced back to their sources.

This section has sought to explicate the processes followed in this study in planning an effective research design, and the steps taken to ensure the validity of the data collected. The next section provides an overview of the data collection and subsequent data analysis strategies employed.

## **5.5 The Research Process: Data Collection and Analysis**

### **5.5.1 Pilot Study**

Preliminary focus groups were conducted with business support actors in order to identify key issues and themes from the data which would then inform the issues to be examined in further focus groups and interviews. A loosely structured interview guide was used, with the aim of exploring the level of engagement in business support programmes and the nature of innovation. The researcher thus took a flexible approach to data collection in the pilot interviews which enabled the interview guide to be adjusted. Two focus groups were undertaken with business support actors at the pilot stage. These focus groups included representatives from various agencies including Central Government, Local Councils, Industry Skills and the regional Northern Ireland Food Strategy Board (see Table 5.8). This allowed for multi perspectives on the subject under study.

The pilot stage also consisted of initial interviews with two food producers (A32 and A35) operating in the alcohol and dairy sub-sectors. The focus groups and interviews were recorded and the transcripts were analysed. It was felt that generating insights from business support actors and producers at an early stage to validate the phenomenon of the study was important. The pilot study provided insights into the nature of support for the industry, the barriers to engagement in business support, the nature of networking and collaboration, drivers of innovation and the barriers to innovation. These insights were considered in light of the initial conceptual framework and the pertinent literature. This allowed for further refinement of the conceptual model and the research objectives before commencing the main data collection phase with the respondents. The resulting findings from the pilot study are considered within Chapters Seven and Eight.

### 5.5.2 Documentary Analysis

Documentary analysis was used to conduct a broad stakeholder analysis of the key organisations supporting the agri-food sector in Northern Ireland, their activities and the reach of those activities. This provided insights into duplications in content, and gaps in support provision for innovation in micro size food businesses. The sources of documentation included publicly available sources such as Government policy reports, industry reports, practitioner reports and websites. This information was used to identify the key stakeholders and their activities, and duplication in roles and gaps in support provision, whilst also serving to provide a high level of knowledge that could be brought into interviews with respondents (both business actors and the artisan businesses). The documentary analysis thus allowed a “mapping” of current business support and key actors for micro food producers, which allowed for identification of key stakeholders or business support actors for data collection, and the identification of areas for questioning and probing with the respondents. For example, reasons for non-engagement in the “Collaborative Innovation Vouchers” scheme administered by InvestNI. A summary of the documentary-based stakeholder analysis is presented in Chapter Six. Appendix One provides an excerpt of the more detailed documentary-based stakeholder analysis. The questions used to guide the document collection and the stakeholder analysis are shown in Table 5.7.

The research also involved the study of internal documents from business support programmes and specifically programmes provided at a local authority level. This provided valuable insights into the programme objectives, their content and structure and the effectiveness of the programmes in meeting their targets. Again, this was used to inform particular areas for probing with those respondents who had been involved in the particular programmes. The access to such internal documents was negotiated with a business support actor from a local council, with responsibility for managing business support programmes for food artisan producers and food service providers.

**Table 5.7: Questions used to Guide Stakeholder Analysis**

1.	Who are the key stakeholders in relation to artisan food production?
2.	What is their role in relation to artisan food production?
3.	What relationships/links exist between the key stakeholders?
4.	What are the main policies for each of the stakeholders?
5.	What consequent programmes have been developed for each stakeholder/policy?
6.	What type of organisation is each programme aimed at?
7.	What are the policy gaps in relation to artisan food production?
8.	What are the programme gaps in relation to artisan food production?
9.	Are there any duplications in the key stakeholders' roles, policies and programmes?

These questions were derived from stakeholder theory, as discussed in Chapter Four. The questions were designed to develop an understanding and further explore the existing policies and strategies concerning artisan food businesses and innovation in the food sector, in Northern Ireland. The limitations typically associated with documentary analysis (bias, lack of depth, and the need to understand the associated circumstances), meant that it was evaluated in light of further data collected from focus groups, semi-structured interviews and observations.

### 5.5.3 Focus Group Discussions

Focus group discussions were conducted to explore broad themes around the aim and objectives of the study and to allow for group dynamics to provide interesting insights. Focus group discussions were held with homogenous groups of two types – groups involving only micro food producers and groups involving only business support actors. These group discussions were held at various business support events that brought producers and business actors together over the period of the research. The group discussions were held with food producers and business actors separately in order to ensure that the informants would feel comfortable to discuss issues that otherwise might be viewed as sensitive.

Recruiting business actors and producers to take part in group discussions at pre-arranged times and locations, away from their business context can prove to be

problematic, which can mean that the size of the groups varies greatly (Oates et al., 2018; Blackburn and Stokes, 2000). Consideration needs to be given to the location and setting for a group interview and it is advisable that the interview is conducted in a neutral setting (Saunders et al., 2016; 2012). In this study, the problem of organising and attracting informants was alleviated by organising the groups at events that the informants were already planning to attend. The numbers participating in the groups varied in size from two to seven.

The groups with lower numbers were impacted by late withdrawals due to non-attendance at the events. It was decided nonetheless to proceed given the limited prospects for successfully rearranging the group gathering at another point in time, outside a scheduled business event. Although the group sizes were relatively small, smaller groups are recommended when participants are likely to have a lot to say on the research topic, i.e. when they are emotionally involved with the subject matter (Morgan, 1988). In this case, the subject of business support attracted strong views and interest from respondents. The business actor groups consisted of various types of business actor organisations and the producer groups consisted of a mixture of sub-sectors (see Tables 5.8 to 5.11).

In terms of facilitation, a group interview guide was developed to create and maintain participants' interest and in order to keep the group focused on the topic in hand and to provide structure (Sanders et al., 2016; 2012). These questions related to the research objectives and the component areas of the conceptual framework. Furthermore, areas identified in the documentary analysis and the pilot study were further explored. The topic was introduced and at the outset participants were assured that their identity would remain confidential and were asked for their consent on the discussion being recorded (Collis and Hussey, 2009).

A total of 13 focus group discussions were held with business support actors at business support events. Several of these actors (12) agreed to take part in more than one focus group over a longitudinal period. The organisations involved in the groups are shown in Table 5.8 and the composition of the focus groups is shown in Table 5.9. The numbers of each organisation reflect their impact on the policy and support environment, in that central Government and local council authorities with greater policy and business support roles are more heavily represented. In total 36 business support actors took part in the focus groups.

**Table 5.8: Business Support Actor Focus Group Participants**

<b>Organisation</b>	<b>Focus Group Members</b>
Central Government	10
Local Council	10
Education	3
Food Association	5
Food Industry Consultant	2
Food Strategy Board	2
Industry Skills Body	1
Rural Agency	1
Bank	1
Farmers' Association	1
<b>Total</b>	<b>36</b>

Organisations such as central Government and local councils are represented by individuals from different Government departments (e.g. for agriculture/rural affairs and trade/economy) and different council areas. The areas for discussion with business support actors were quite broad in scope, seeking the actors' views on the challenges facing the agri-food sector, the role of Government and agencies in supporting innovation and growth in the sector, the strengths of existing policy support and the main gaps in support. The questions for business support actor focus groups are shown in Appendix Two.



**Table 5.9: Composition of Business Actor Focus Groups**

<b>Focus Group <sup>1</sup></b>	<b>Participant Organisation</b>	<b>Numbers <sup>2</sup></b>
1	Central Government	4
	Industry Skills	
	Food Strategy Board	
	Local Council	
2	Central Government	3
	Central Government	
	Local Council	
3	Central Government	4
	Central Government	
	Local Council	
	Food Association	
4	Central Government	5
	Education	
	Local Council	
	Rural Agency	
	Food Industry Consultant	
5	Central Government	5
	Central Government	
	Central Government	
	Food Association	
	Local Council	
6	Rural Agency	7
	Food Industry Consultant	
	Bank	
	Food Association	
	Local Council	
	Local Council	
	Central Government	
7	Central Government	4
	Food Industry Consultant	
	Education	
	Local Council	
8	Food Industry Consultant	4
	Local Council	
	Rural Agency	
	Central Government	
9	Food Association	7
	Food Association	
	Food Association	
	Central Government	
	Local Council	
	Local Council	
	Local Council	
10	Local Council	3
	Local Council	
	Local Council	
11	Food Strategy Board	5
	Food Strategy Board	
	Food Association	
	Food Industry Consultant	
	Food Industry Consultant	
12	Central Government	2
	Central Government	
13	Farmers' Association	5
	Food Association	
	Central Government	
	Education	
	Education	

<sup>1</sup> Focus groups 1 and 2 were pilot studies.

<sup>2</sup> 12 business actor respondents participated in two or more focus groups.

For the producer groups, each participant in the group interview was invited to provide an account of the history of the business and to talk in broad terms about the types of business support utilised as sources of knowledge for innovation. The questions were designed to develop understanding about how these companies innovate and the role of business support actors in that process. Participants were asked to give examples of innovation where possible and to discuss the range of Government and other forms of business support available to them. The questions for producer focus groups are shown in Appendix Three. Table 5.10 illustrates the representation of each sub-sector.

**Table 5.10: Food Producer Focus Group Participants**

<b>Sector</b>	<b>Focus Group Members</b>
Oils/Preserves	11
Baked Goods <sup>1</sup>	6
Meats	5
Alcohol	2
Dairy	2
<b>Total</b>	<b>26</b>

<sup>1</sup> One of the Baked Goods producers participated in two focus groups

The composition of each producer focus group is shown in Table 5.11. In total nine focus groups were held, involving 25 food producers. At the group events food producers were also asked to provide data on their innovation practices through a questionnaire (see Appendix Four). Respondents were required to complete the questions based on their innovative activities from the preceding three-year period. The structure and format of the questionnaire largely followed the structure of the established Community Innovation Survey (CIS) that is conducted biennially to assess innovation levels with EU member states. The CIS survey is not carried out with micro-sized companies. This sought to provide a broad picture of the types of innovation employed, the sources for innovation and the barriers to innovation. It also sought some details on the types of Government support utilised. The numbers were not viable in terms of conducting quantitative analyses (28 responses were received), however the responses were used to help provide a fuller picture of the innovation

activities of the food producers in this study and thus supplement the qualitative data. The questionnaire was also used as a further tool to recruit respondents for follow-up interviews. Thirteen of the group discussion respondents who completed the questionnaire subsequently agreed to be interviewed.

**Table 5.11: Composition of Producer Focus Groups**

<b>Focus Group</b>	<b>Sector</b>	<b>Numbers</b>
1	Alcohol	2
	Dairy	
2	Meats	3
	Oil/Preserves	
	Oil/Preserves	
3	Baked Goods	4
	Meats	
	Meats	
	Oils/Preserves	
4	Baked Goods	2
	Dairy	
5	Oils/Preserves	4
	Oils/Preserves	
	Meats	
	Baked Goods	
6	Oils/Preserves	3
	Oils/Preserves	
	Baked Goods	
7	Meats	2
	Baked Goods	
8	Oils/Preserves	3
	Baked Goods	
	Alcohol	
9	Oils/Preserves	3
	Oils/Preserves	
	Oils/Preserves	

The focus groups with business support actors and producers highlighted a number of themes around sources of innovation (importance of travel), barriers to engagement in support (lack of integration, focus on larger export business, bureaucracy), support types utilized (importance of innovation vouchers), the changing nature of support and network development (informal networks, sustainability of networks) and trust (sectoral mistrust issues). The themes emerging from the findings from the focus group stage of the research were explored in more depth with informants during semi-structured interviews with food producers and business actors.

#### 5.5.4 Semi-structured Interviews

The semi-structured interview was used to fully contextualise the findings from the group discussions and to develop an understanding of the respondents' views and opinions, in other words, how they see things from their "world" (Collis and Hussey, 2009). Interviews were undertaken with micro food producers and business support actors from the public sector due to their assumed knowledge and their ability to provide an overview of the sector (see Appendices Five and Six for interview guides). Semi-structured interviews were held with 20 micro food producer owner-managers, over a period of two years. The majority of interviewees were selected from the business support events and focus groups, with a smaller number contacted outside of these business support events. Table 5.12 summarises the food producers by sector.

**Table 5.12: Food Producer Interviewees**

<b>Sector</b>	<b>Numbers interviewed</b>
Baked Goods	8
Alcohol	3
Meats	3
Oils/Preserves	3
Dairy	2
Confectionary	1
<b>Total</b>	<b>20</b>

In addition to the semi-structured interviews carried out with 20 micro food producer owner-managers, a total of 16 semi-structured interviews were conducted with business support actors. Table 5.13 summarises the business support actors by organisation.

**Table 5.13: Business Support Actor Interviewees**

<b>Organisation</b>	<b>Numbers Interviewed</b>
Local Council	4
Central Government	3
Food Industry Consultant	3
Education	2
Food Association	1
Rural Agency	1
Industry Skills Body	1
Food Distributor	1
<b>Total</b>	<b>16</b>

Follow up contact was made with the participants through telephone calls, emails and, in a small number of cases (producers A32 and A35), further face to face interviews, to clarify points emanating from the interviews.

This study adopted a theoretical-based semi-structured interview approach whereby a conceptual framework was developed from a literature review to provide a broad guide for interview questions (see Figure 4.2). The semi-structured interview was thus structured around essential topics relevant to the study. This enabled the interviewer to obtain a more in-depth knowledge in order to produce a wealth of valuable and rich data (Saunders et al., 2016; 2012). Both producer and business support actor interviews consisted of questions relating to the research objectives and the conceptual framework components, including innovation, engagement in business support programmes, and social network aspects. The interviews allowed for a deeper exploration of issues than was possible in focus groups, in particular around social network themes such as trust. The semi-structured format allowed for the necessary topics to be covered but also allowed a degree of flexibility to follow up any unexpected themes that arose (Yin, 2014). The interview format also allowed the researcher to probe answers and to encourage interviewees to elaborate on their responses. Probe questions were identified *a priori*, to help obtain information that was not divulged by interviewees.

Various steps were deployed to ensure good practice around the logistics of arranging and conducting interviews, as advocated by authors such as Hart (1987). Personal interviewing is most intrusive on organisational time and resources and so researchers must give special consideration to how best to schedule the interview to suit the needs of the respondent (Bryman, 2015). The food producers were thus interviewed at their home, and on their premises, at a time that was convenient for them. Likewise, business support actors were either interviewed at their place of work or at another location convenient to them on the day of the interview. Special care was taken to ensure confidentiality and respondents were presented with a form with assurances regarding confidentiality. The interviews lasted between 45 minutes and two hours. Permission was gained to record interviews using a dictaphone. Recorded interviews were subsequently transcribed, analysed and coded as shown in the data analysis section (Section 5.6). Pertinent quotations in Chapters Seven and Eight will be used to illustrate and support the findings. These quotations allow the reader to judge the quality of the work.

The details of the participants and their involvement in the group discussions and semi-structured interviews are shown in Tables 5.14 and 5.15. For ten of the companies there was a longitudinal element to the research design, in that their progress and views were explored at different stages through focus groups and interviews. Likewise, 11 of the business support actors took part in both focus groups and interviews and thus provided valuable insights at differing stages throughout the data collection stage.

**Table 5.14: Food Producer Data Collection**

Participant Code	Sector	Group Discussion	Interview
A1	Oils/Preserves	✓	✓
A2	Oils/Preserves	✓	
A3	Oils/Preserves	✓	
A4	Oils/Preserves	✓	
A5	Oils/Preserves	✓	
A6	Oils/Preserves	✓	
A7	Oils/Preserves		✓
A8	Oils/Preserves	✓	
A9	Oils/Preserves	✓	
A10	Oils/Preserves	✓	
A11	Oils/Preserves	✓	
A12	Oils/Preserves	✓	✓
A13	Baked Goods		✓
A14	Baked Goods		✓
A15	Baked Goods		✓
A16	Baked Goods	✓	
A17	Baked Goods	✓	
A18	Baked Goods		✓
A19	Baked Goods		✓
A20	Baked Goods	✓	✓
A21	Baked Goods	✓	✓
A22	Baked Goods	✓	
A23	Baked Goods	✓	✓
A24	Meats	✓	✓
A25	Meats		✓
A26	Meats	✓	
A27	Meats	✓	
A28	Meats	✓	
A29	Meats	✓	
A30	Meats		✓
A31	Alcohol	✓	✓
A32	Alcohol	✓	✓
A33	Alcohol		✓
A34	Dairy	✓	✓
A35	Dairy	✓	✓
A36	Confectionary		✓

**Table 5.15: Business Support Actor Data Collection**

<b>Business Support Actor Code</b>	<b>Industry</b>	<b>Focus Group Discussion</b>	<b>Interview</b>
BS1	Local Council	✓	✓
BS2	Local Council	✓	
BS3	Local Council		✓
BS4	Local Council	✓	✓
BS5	Local Council	✓	
BS6	Local Council	✓	
BS7	Local Council	✓	
BS8	Local Council	✓	
BS9	Local Council	✓	
BS10	Local Council	✓	
BS11	Local Council		✓
BS12	Local Council	✓	
BS13	Central Government	✓	✓
BS14	Central Government	✓	✓
BS15	Central Government	✓	
BS16	Central Government	✓	✓
BS17	Central Government	✓	
BS18	Central Government	✓	
BS19	Central Government	✓	
BS20	Central Government	✓	
BS21	Central Government	✓	
BS22	Central Government	✓	
BS23	Food Association	✓	
BS24	Food Association	✓	✓
BS25	Food Association	✓	
BS26	Food Association	✓	
BS27	Food Association	✓	
BS28	Education	✓	✓
BS29	Education	✓	✓
BS30	Education	✓	
BS31	Food Industry Consultant	✓	✓
BS32	Food Industry Consultant	✓	
BS33	Food Industry Consultant		✓
BS34	Food Industry Consultant		✓
BS35	Industry Skills Body	✓	✓
BS36	Rural Agency	✓	✓
BS37	Food Strategy Board	✓	
BS38	Food Strategy Board	✓	
BS39	Bank	✓	
BS40	Farmers' Association	✓	
BS41	Food Distributor		✓

### 5.5.5 Observational Research

For this study, an observer as participant role was adopted, wherein the researcher's background and motives were made clear to the members in the setting. Thus, the researcher participates in activities but makes no secret of his/her intention to observe events (Burgess, 1984). Here, the researcher was able to attend some group gatherings, but was not able to take part in or attend all. The primary role of the researcher was to observe, but informants were aware that there was an ongoing research relationship. The observer as participant role therefore relies upon interviewing informants about events that the researcher has been unable to observe and to use documentary evidence to supplement the primary data collected through observation and interviews.

Observation was carried out at six events specifically aimed at small/micro food producers (see Appendix Seven for details of events attended). This facilitated informal discussions between the researcher and producers and actors, and allowed for observation of peer dynamics and interactions within a food network environment. This allowed for data triangulation, thus ensuring a greater degree of validity, and facilitated information richness, coherence and insight (Perry and Coote, 1994). Observations allowed for investigation to discover the main issues in relation to micro firm innovation and business support. This allowed for subsequent interview questions to be reformulated to be of relevance to the concerns and behaviours of the subjects (Bogdan and Taylor, 1975). Wherever possible, "facts" given by informants were cross-checked with other sources and "opinions" were followed up with other respondents. A useful strategy was to speak with actors immediately before or after events/meetings, which allowed for the generation of useful insights. Notes were taken during formal events and expanded on as soon as possible afterwards. On most occasions this did not seem inappropriate as other participants at the meeting were taking notes also. However, if sensitive issues arose notes were not taken at the time but were recorded immediately after the meeting.

In addition to noting subject matter, records were also made of nonverbal cues or behaviours during meetings/events, i.e. mannerisms, language and general atmosphere of the meeting, which were then pursued and explored during later interviews with some of those present at the event. An important way of documenting discussions and meetings which supports the generation of new insights is the use of



memos (Miles and Huberman, 1994). By writing down ideas and small pieces of data, it was possible to subsequently build this into a larger context. At further events, informants became more open with the researcher in describing their activities and their interaction with business support organisations and actors. As the artisan food sector in Northern Ireland is a small community of actors and producers it was possible to quickly get to know key actors and individuals attending events. With this level of familiarity and contact established, it was possible to pick up information during informal chats during coffee or lunch breaks. This led to the collection of unstructured observation data, comprising data on specific activities and interesting incidents (Mintzberg, 1979). This is purely inductive whereby there is no premeditated structure imposed, and permits the observer to expand one's tacit knowledge and to develop some sense of what is salient (Lincoln and Guba, 1985).

One of the key drawbacks associated with observation is the effect of the researcher's presence on the subject matter, in that the interaction between the researcher and the respondent creates attitudes and behaviours that did not exist previously (Saunders et al., 2016). In this case however my presence was relatively unobtrusive at events and meetings. In addition, the longitudinal aspect and prolonged engagement with the subject guarded against the effects of my presence on the setting. Another problematic issue that can arise is that of objectivity. As the researcher becomes more involved and achieves rapport with respondents, the analysis may not be impartial (Bryman, 2015). This potential pitfall was avoided by discussing issues arising from the data with supervisors and framing these in theoretical terms rather than specific practical problems facing the organisations.

In summary, a range of data collection methods were used to elicit the views of the food producers and the business support actors (see Table 5.16), a substantial amount of qualitative data were derived and the multi-method approach provided a full and rich account of micro food producer engagement with business support actors for innovation.

**Table 5.16: Data Collection Methods**

<b>Methods</b>
Documentary analysis
Semi-structured interviews with food producers (20)
Semi-structured interviews with business support actors (16)
Group discussions involving food producers (9)
Group discussions involving business support actors (13)
Observation events attended (6)
Questionnaires (28)

### **5.6 Procedures for Data Analysis**

The data analysis process has been defined by Marshall and Rossman (2016) as the process of bringing order, structure and meaning to the mass of collected data, and the search for general statements about relationships among categories of data. It is a messy, ambiguous and time-consuming process, but ultimately satisfying as it leads to the discovery of new insights. Qualitative data analysis is an ongoing process and to some extent is carried out simultaneously with data collection. In the present study, a degree of overlap between the data collection and analysis phases of the research allowed the researcher to evaluate the data and explore emerging themes with informants.

The qualitative data analysis emanates from the interpretive philosophical tradition, whereby themes and patterns are allowed to emerge from the data and where the aim is one of making sense of the data. The process of qualitative data analysis has been viewed as eclectic, where there is no right way to conduct the analysis (Tesch, 1990). The core of qualitative data analysis, as asserted by Dey (1993), lies in the related processes of describing phenomena, classifying it, and assessing how concepts inter-connect. The process requires the researcher to be comfortable with developing categories and to be willing to consider alternative explanations for the findings. The effort in uncovering patterns, themes and categories is a creative process that requires making carefully considered judgements about what is really significant and meaningful in the data (Patton, 1987).

The data analysis broadly involved using thematic analysis in order to identify salient issues for the participants/informants in the study and to gain valuable, rich insights into the impact of business support programmes on the capacity of micro size businesses to innovate. This approach is similar to that advocated by King (2012) in the approach known as “template analysis”, or Yin’s (2014) “explanation building” approach, which combines a deductive and inductive approach to qualitative analysis in terms of the development of a conceptual framework or initial theoretical propositions, utilising existing theory, predetermination of codes, and the development of codes as data are collected and analysed. This is a very different approach to procedures such as Grounded Theory, which does not permit the prior determination of codes to analyse data and instead is linked to a purely inductive analytical approach. However, it allows for an initial conceptual framework to be revised and finalised in order to present key themes and relationships in the data, and for the incorporation of emergent issues that arise through the process of data collection and analysis that may not have been considered at the outset of the research. Thus, in this way, literature and theory are used to shape the data collection questions and categories for analysis will emerge from the nature of the focus group and interview questions. Data collection will thus commence with an initial set of categories derived from a conceptual framework, linked to the study’s research aim and objectives (Miles and Huberman, 1994).

A coding framework was developed from the conceptual framework, and was applied to the data. This framework was modified as necessary as themes emerged from the data. The data analysis process therefore sought to inductively build theory by iterating the findings and *a priori* theory. According to Ghauri and Gronhaug (2010, p.206), the *a priori* assumptions “should guide and direct, not dictate, the research”. In this it is assumed that *a priori* insights should “not allow for complete structuring and explanation of the research problem”.

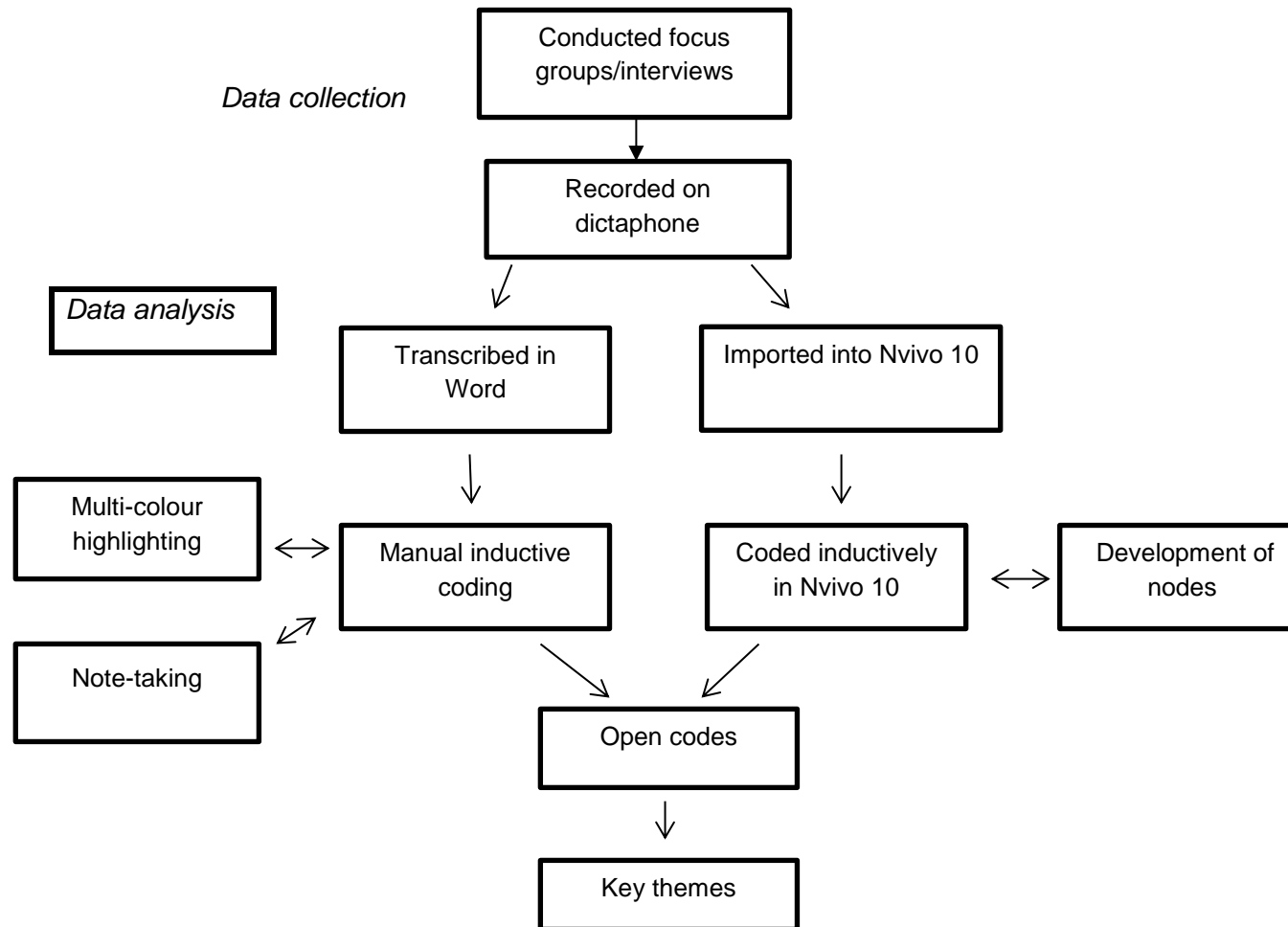
Data analysis was conducted in a number of stages. The procedures used to analyse the data are those advocated by authors such as Lincoln and Guba (1985), Ryan and Bernard (2003) and King (2012). Analysis began with a first reading of the data and codewords that were attached to the text. This involved the data reduction of the evidence base (interview transcripts, focus groups, documents). At this stage, the conceptual framework was used to guide the analysis around the internal and external

environments for innovation, the business support environment, the types of innovation, social networks, and contextual factors.

Once initial categories were developed, the next stage was segmenting the data into small pieces of information (Lincoln and Guba, 1985). A third stage involved coding, or applying categories to the segments. The purpose of coding was to aggregate all data about the same topic or theme, so that each topic could be studied individually. Original categories were renamed, their content modified, subdivided or replaced with new ones. It was important to ensure that data were clearly associated with particular categories and that the categories were clearly defined and sufficiently distinct. Next, more abstract, higher-order categories were developed and further reading of the data undertaken to get a sense of their scope, to check for “recurring regularities” (Guba, 1978) and for “emerging themes or patterns” (Patton, 2015; Taylor and Bogdan, 1984). This activity was accompanied by note-taking, in which the researcher’s observations and ideas were captured (Tesch, 1990).

The final stage of data analysis was the identification of linkages across categories. At this point the analysis followed a thematic approach based on repeated reading of transcripts and fieldnotes, in order to formulate relationships in the data under themes corresponding to the research questions (Bryman and Bell, 2015). The analysis process was completed when sources of information were exhausted, and when clear integration between categories emerged. This knowledge tends to develop from being close to the data, and longitudinal study helps to provide understanding in this respect. Here, the idea was to construct a series of themes and sub-themes. Bryman and Bell (2015) refer to thematic analysis as having few specified steps, however they state that a theme: is a category identified by the analyst through the data; relates to the analyst’s research focus; builds on codes identified in transcripts/field notes; and provides the researcher with the basis for a theoretical understanding. The identification of a theme is derived from first order concepts and is a stage further on from coding data. When searching for themes Ryan and Bernard (2003) recommend looking for: repetitions; indigenous typologies or categories; metaphors, transitions; similarities and differences; linguistic connectors; missing data; and theory related material. Examples of themes generated from the analysis included: “trust”, “perceived value of support”, and “business support actor network bridging role”. The emerging themes relating to the research questions will be discussed throughout the findings and discussion chapters.

The analysis throughout was undertaken using both manual and computer assisted techniques. Manually, codes were applied to transcripts and evidence tables were used to allow the researcher to record responses in relation to the research questions and the emerging themes. Throughout the analytical process, constant reference was made to original transcript material and other sources to check the validity of the emerging theory. The views of business support actors and producer respondents were consulted for verification. The Qualitative Data Analysis software package NVivo 10 was used to assist with analysis of the focus groups and semi-structured interviews and the identification of core themes. The benefits of using this approach is that it allows for a more complete set of data for interpretation than might occur when undertaking this task manually, therefore ensuring rigour within the analysis process (Bazeley, 2007). The package was very helpful in organising the data and provided an efficient system for retrieving and sorting information. Figure 5.3 provides an overview of the data analysis process for the various stages of the semi-structured interviews and focus groups.



**Figure 5.3: Overview of the Data Analysis Process**

A sample selection of the nodes emerging from the NVivo analysis is provided in Appendix Nine.

## **5.7 Chapter Summary**

This chapter has described the research methodology and the research design for the present study. It has outlined the research position, the qualitative approach to data collection, the stages in the research process and the analysis of the data. The research design was explicitly highlighted in the research flow diagram and each stage of the research has been fully described and justified. The topics covered with respondents in relation to the study's main research objectives were outlined. The steps taken to ensure that the study conformed to accepted guidelines on good research practice have been outlined.

Chapters Seven and Eight will discuss the pertinent findings emanating from the empirical research. Chapter Seven will provide an analysis of the nature of innovation in these enterprises and the impact of a broad range of sources of innovation. Following this, Chapter Eight will delve deeper into the role of business support actors in innovation development, the relations between business support and client actors and the implications for knowledge exchange and innovation. Chapter Six now follows and outlines the contextual setting for the study - the Northern Ireland agri-food sector and business support environment.

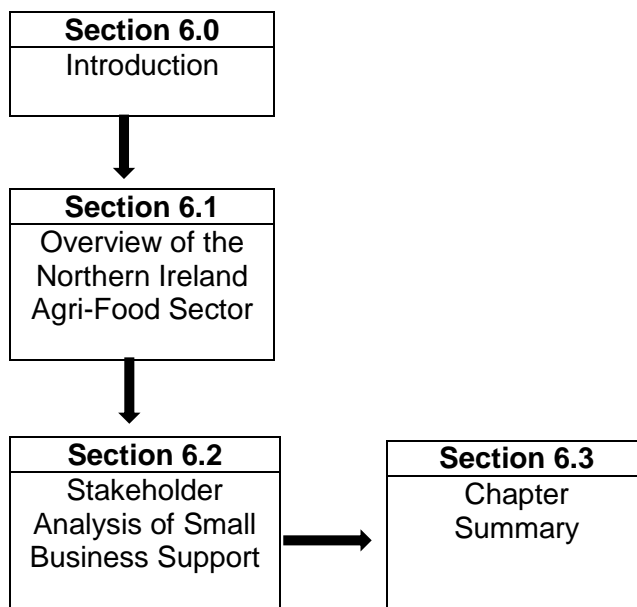
# **CHAPTER 6**

## **Study Context: The Agri-Food Sector in Northern Ireland**



## 6.0 Introduction

This chapter provides a description of the contextual setting for the study – the Northern Ireland agri-food sector. The contribution of the wider agri-food industry to the Northern Ireland economy will be discussed first, followed then by reference to the growing artisan food sector. The chapter will then move on to consider the main business support institutions for agri-food and will attempt through a stakeholder analysis to identify their impact on micro food producers. The stakeholder analysis presented here is a condensed version of the full stakeholder analysis undertaken. The chapter will conclude by highlighting the broad themes emerging from the analysis that were explored in more depth during the empirical phase of the study. Figure 6.1 provides an outline of the chapter structure.



**Figure 6.1: Outline of Chapter Six**

### 6.1.1 Current Situation

Agri-food is the largest manufacturing industry and the major employer in Northern Ireland. The industry demonstrated resilience throughout the global economic downturn during the last decade, and over the period of the recession the output of the food and drink industry remained largely stable (Grant Thornton, 2016; Goldblatt and McGuigan, 2010). The Department for Agriculture, Environment and Rural Affairs (DAERA) publishes an annual report on the performance of the industry, based on statistics for businesses that are involved in processing activities destined for human consumption. In the most recent report, it was estimated that direct employment figures for the food and drinks processing industry (over 400 food and drink processing companies) increased by 2.3% to 22,017 full-time employee equivalents (DAERA, 2017). This does not take account of the estimated 47,000 employed in farming (Agri Food Strategy Board, 2013).

Following 15 years of continued growth in sales, the value of sales for the Northern Ireland food and drinks processing sector decreased from £4,567million in 2014 to £4,424million in 2015; a fall of 3.1%. Provisional figures estimate sales in 2016 at £4,423million (marginally lower). In 2015, the food and drinks processing sector is estimated to have contributed approximately 2.3% of Northern Ireland's total gross value added; this is up 0.2% from 2014. The agri-food sector generates considerable sales through the export market, operating within a supply chain which utilises a significant percentage of domestic raw materials and services (InterTradeIreland, 2011). The sector contributed 23% of external sales, 21% of export sales and 25% of total sales in the Northern Ireland manufacturing industry in 2015. Great Britain is the largest market with sales increasing to £2,098million and representing 47% of total sales in 2015. The Republic of Ireland is the most important export destination, despite an 11% decrease, and accounted for £625million in 2015; 14% of total sales. In both 2014 and 2015, the size of value of the Northern Ireland domestic market was smaller than those markets outside of the UK. The sector's proportion of total manufacturing employment increased to 26%, while the share contributed to the value added of the manufacturing industry was 18%. Within the sector, the beef and sheepmeat and milk products subsectors continue to be the largest subsectors in terms of gross turnover for both 2015 and 2016. Together, they account for 49% and 48% of the sector's total gross turnover in these years respectively.

### 6.1.2 Strategic Developments

The development of the agri-food sector has been a strategic priority for the Northern Ireland Executive as evidenced by the Programme for Government 2011-2015, which has awarded the industry priority one status. This led to a Strategic Vision and Action Plan for the industry to 2020 under the auspices of the two Government departments with responsibility for the Agri-Food industry, the then Department of Enterprise, Trade and Investment (DETI) and The Department for Agriculture and Rural Development (DARD). Subsequently in 2012 the Departments jointly set up the Agri-Food Strategy Board, consisting of leading representatives from food production and processing. The purpose of the Board was to ensure that the potential of the industry would be maximised over the next three years. The Board established 10 industry sector groups, each chaired by a Board member, to consider specific opportunities, challenges and priorities for the industry's key sectors. In 2013 it published its report ("Going for Growth") setting out a number of ambitious targets and recommendations for the growth of the sector, in terms of sales, job creation, and export sales. A key recommendation to bring about this growth was the call for the establishment of a single agri-food marketing organisation for Northern Ireland to consolidate all marketing and promotional activities for the industry with a clear food promotion strategy. This effectively would mirror bodies in the Republic of Ireland and Scotland such as Bord Bia and Scotland Food and Drink. A further recommendation sought to address the issue of skills shortages (science/technical and business management) in the industry at primary and processing levels. The Northern Ireland Executive's response to Going for Growth was published in 2014 and cited the Executive's commitment to the sector, outlining actions to be taken by departments to deliver on agreed recommendations. The majority of actions are interdependent, with sustainable growth in the sector reliant on a number of measures being delivered through a collective approach, both within individual sectoral supply chains and between industry and Government. In March 2015 the DETI Minister announced that a new industry-led body would be established, welcomed by the then DARD Minister. The AFSB have committed to develop the proposal for the new agri-food marketing body, and have established the Northern Ireland Food Marketing Association Ltd (NIFMA).

In comparison to other sectors of the economy, the agri-food sector in recent years has recorded relatively low levels of innovation. Figures from the United Kingdom's

innovation survey for Northern Ireland, in the category of production and construction where food is represented (Food, clothing, wood, paper, publishing and printing) indicate that while the recorded levels of innovation activity increased from 46% to 51% between 2013 and 2015, in 2015 this was 10% less than the UK average and the second lowest production industry in Northern Ireland (Northern Ireland Statistics and Research Agency, 2016).

### 6.1.3 The Artisan Food Sector

Artisan producers and food sector micro-enterprises are a key component in any economy in developing a diverse, sustainable economy that reflects local cultural heritage and pride in local food (Alonso and Bressan, 2015; Lefebvre et al., 2015; Brinkmann et al., 2014). Northern Ireland has the highest concentration of small businesses in the UK, with 99% of businesses classified as small, employing less than 50 people (Northern Ireland Chamber of Commerce, 2014). Northern Ireland has a rapidly growing base of entrepreneurial, smaller and artisan enterprises (Intel 2017; 2016; 2014), many of which have already won international awards for products combining outstanding taste, quality and innovation (Intel, 2017; Agri-Food Strategy Board, 2013). Consequently there is an increasing demand for Northern Ireland food product on a global scale (Intel, 2017; Agri-Food Strategy Board, 2013).

Domestic growth has been stimulated by increasing consumer demand for specialist, local food products representing authenticity and freshness (Intel, 2017; 2016), InterTradeIreland, 2011), driven by food scares and concerns around food security. In recent years the quality of its regional produce has been recognised in Protected Geographical Indication (PGI) status being awarded for three food products (Armagh Bramley Apples, Comber Potatoes and Lough Neagh Eels). Across Northern Ireland's ten food industry sub-sector groups there are a number of opportunities for growth in artisan food products. For instance, in the bakery sector opportunities for expansion (Intel, 2016) have been identified as including exporting niche, gluten free products (Bord Bia, 2017; Agri-Food Strategy Board, 2013). Northern Ireland's flourishing artisanal food culture is apparent in the emergence of artisan specialist products such as cheese and craft beer and has been celebrated in the Northern Ireland Year of Food and Drink in 2016 - a year long programme of promotional events right across Northern

Ireland. An increasing interest in artisan food has helped to see the value of the artisan or speciality food market for Northern Ireland increase by an estimated 6.6% between 2014 and 2015 (Mintel, 2016). Mintel (2017) reports that the artisan food market in Northern Ireland is estimated at an approximate value of €208 million and the market is predicted to grow around 10 per cent by 2021 (Mintel, 2016), despite relatively low disposable incomes and the impact on consumer confidence as a result of the UK's decision to withdraw from the European Union. Arguably one of the key selling points of artisan food in the eyes of Irish consumers is the fact that it is more likely to be made by smaller-scale producers, often with local ingredients and by hand – which appeals to a large section of consumers who want to support local companies, and those who prefer to buy food with natural production. Therefore, small/micro food producers have a very important role to play in meeting the increased demand for local food (NIFDA, 2012; InterTradeIreland, 2011) and helping to accelerate economic recovery in the region (Mintel, 2017; Agri-Food Strategy Board, 2013).

## **6.2 Stakeholder Analysis of Small Business Support for Food Businesses in Northern Ireland**

There are a broad range of business support actors that provide programmes and network support for artisan food producers in Northern Ireland. A summary of these key business support actors and an analysis of the reach of their activities are presented in Table 6.1.

**Table 6.1: Business Support Actor Roles for Agri-food in Northern Ireland**

<b>Business Support Actor</b>	<b>Policy Role</b>	<b>Network Development Role</b>	<b>Network Implementation Role</b>	<b>Reach</b>	<b>Impact on Artisan Food Enterprises</b>
Agri-Food Biosciences Institute	No	Yes	Yes	International	Low
Department of Agriculture, Environment and Rural Affairs (DAERA) (including CAFRE)	Yes	Yes	Yes	Regional	High
Department of Employment and Learning	Yes	Yes	Yes	Regional	Low
Department for the Economy (DfE) (including InvestNI)	Yes	Yes	Yes	Regional	Medium
Food NI	No	Yes	Yes	Regional	Medium
Food Standards Agency Northern Ireland	Yes	No	No	Regional	High
Food Strategy Board	No	Yes	No	Regional	Medium
Further and Higher Education Colleges	No	Yes	Yes	International	Low
InterTradeIreland	No	Yes	Yes	International	Low
Local Authorities	No	Yes	Yes	Local	High
Northern Ireland Chamber of Commerce	No	Yes	Yes	Regional	Low
Northern Ireland Food and Drinks Association	No	Yes	Yes	Regional	Low
Queen's University Belfast (including the Institute of Agri-Food and Land Use)	No	Yes	Yes	International	Low
Rural Development Council	No	No	Yes	Regional	Low
Ulster University (including Northern Ireland Centre for Diet and Health)	No	Yes	Yes	International	Low

Table 6.1 provides some evidence that actors have a clear supporting role for the business development needs of small rural food enterprises, particularly DAERA and local authorities, which reflects the relevance that micro rural food businesses have to economic development, rural development and tourism in local areas. Industry bodies such as FoodNI also have a sector specific focus and provide marketing and promotional support for local produce. As indicated in Table 6.1 Central Government bodies, such as InvestNI and the Department for the Economy (DfE - formerly the Department of Enterprise, Trade and Investment), are engaged strongly with SMEs. There is some duplication of provision and traditionally there has been a lack of connectivity between actors. This has been recognised by the Government and the agri-food sector and has led to the establishment of the joint Government and industry initiative for the development of innovation and collaboration within the sector, the Agri-Food Strategy Board.

#### 6.2.1 Regional Policies

Regional policies consistently identify growth ambitions for the agri-food sector in Northern Ireland. The development of a regional agri-food strategy is identified in the Northern Ireland Executive Programme for Government and the subsequent Economic Strategy identifies the sector as one of five areas of the economy with the greatest growth potential. Both these policy instruments, at a more general level, also recognise the importance of SMEs to the economy and identify programmes to foster innovation and growth. However, there are only a few instances where programmes are identified specifically for small enterprises.

The programmes identified within the Economic Strategy to support growth in the agri-food sector and more widely in SMEs and small enterprises are designed to encourage knowledge generation, exchange and exploitation and there is evidence also of supports that requires collaborative approaches. For example, the “Agri-Food Research Challenge Fund” supports knowledge generation through collaborative research and development between a group of SMEs and a research institution. More generally, the “Innovation Vouchers” programme supports collaboration and knowledge exchange between small enterprises and further and higher education institutions. A further collaborative approach is provided by the “Collaborative Network Programme” which supports networks of SMEs and larger businesses to exploit new areas of market opportunity. These examples also illustrate that

programmes range from those specific to the sector to those available on a cross sector basis.

Two departments in the Northern Ireland Executive have primary responsibility for the development of policies and programme actions relevant to the agri-food sector and more generally to SMEs and small enterprises; DAERA and DfE respectively. DAERA assists with the competitive development of the agri-food sector and has a leading role in the development of policy and programmes for this sector. At a policy level the DARD/DAERA Strategic Plan 2012-2020 identifies the need to support research and development, knowledge exchange, innovation and skills to support the sustainable economic development of the sector. Policy implementation in this area is through funded programmes such as the Agri-Food Research Challenge Fund and also through the provision of innovation and skills development services at the College of Agriculture, Food and Rural Enterprise (CAFRE). CAFRE offers a range of training programmes to help agri-food SME/small enterprises to meet their legislative requirements, enhance technical competencies and business skills. They also offer a broad range of innovation services to support product and process development including incubation facilities for new enterprises. Programmes have been designed specifically for small food enterprises, for example, initiatives such as the Food Enterprise Development Programme (FEDP) provide the opportunity to market test ideas where no immediate investment in food manufacturing equipment and facilities are required. In 2015 CAFRE opened a £3million Food Innovation Centre, supporting 2000 agriculture and food businesses to innovate and adopt new technologies each year.

Aligned to these economic development roles, the DARD/DAERA Strategic Plan also identifies the need to support rural communities and a key programme in this area has been the Rural Development Programme. The programme exists primarily to implement EU policy and support in this area including funding measures to support primary producers in the marketing of products or capital expenditure to support processing. A Farm Business Improvement Scheme has been included in the draft Rural Development Programme 2014-2020, which includes “Knowledge Transfer through Business Development Groups”. The scheme is designed to help improve competitiveness and productivity in primary production, through increased efficiency, upskilling on farm, farm modernisation and a commitment to working with supply chain partners to improve performance.



DAERA representatives are also involved in a number of steering groups including the Bank of Ireland Open Farm Weekend. The principal sponsor is the Bank of Ireland and is organised by the Ulster Farmer's Union (UFU) and support is provided via DAERA's Northern Ireland Regional Food Programme (NIRFP). The objectives of this programme are to promote quality regional food, increase the consumption of local produce in the region, reconnect consumers to the supply chain and to tell the story of farm to fork. A steering group of representatives from DAERA, the UFU and other food industry bodies and participating farmers participate in the event. The initiative began in 2012 and has been very successful, year-on-year the number of farms participating in the event has increased. The Open Farm Weekend provides evidence of the private sector, in this example, the Bank of Ireland playing an increased role in developing the food industry and helping small/micro food producers to promote their products. In summary, DAERA provides a wide range of programmes to support the specific needs of the agri-food sector and there is evidence that supports provided by CAFRE and the NIRFP have been designed to meet the needs of small rural food enterprises.

At a more general level in the region, DfE formulates and delivers economic development policy for Northern Ireland including the agri-food sector. The Innovation Strategy 2012-2020 is a key policy and is designed to support the delivery of the innovation objectives articulated in the Northern Ireland Economic Strategy. This strategy is focused on knowledge generation relating to high value-added technologies for priority areas such as the agri-food sector. The strategy also focuses greater attention on collaborative and open innovation approaches to enhance knowledge exchange and develop the regional infrastructure to support and accelerate knowledge exploitation. For example, innovation programmes support knowledge generation in the agri-food foresight areas identified by MATRIX, Northern Ireland's science industry panel. However, these interventions may be more relevant to larger food enterprises with the capacity to innovate (Akman and Yilmaz, 2008).

InvestNI has a dedicated Food Division which encompasses all food industry development activity including food start-up activity. This team supports market development and sector engagement with other InvestNI programmes. The division is mainly focused on supporting export focused food enterprises and engagement with small rural enterprises that are focused on local markets is likely to be limited. Evidence drawn from the InvestNI Corporate Plan (InvestNI, 2011-2016) and

Business Strategy (2017-2021) suggests that innovation policy objectives continue to be implemented through a continuum of programmes ranging from those that are short term in perspective and designed to build innovation awareness to those that drive new knowledge generation and are focused on long term reward.

InvestNI acknowledges that increasing the innovation capability of SMEs remains a significant challenge and identifies this as a priority area. Consistent with the Economic Strategy, there is also an increased focus on support focused business collaborations (Collaborative Network Programme) and business to academia collaborations (Innovation Vouchers, Competency Centres). Innovation Vouchers are a key scheme used to build innovation awareness in small enterprises. The target for this scheme is small enterprises or medium enterprises who have not engaged with any form of innovation support previously. This programme has successfully introduced small food enterprises to introductory innovation support from InvestNI, see Table 6.2.

**Table 6.2: Breakdown of Food Related Research and Development Applications to InvestNI (2010-2012) <sup>1</sup>**

	Year		
	2010	2011	2012
<b>Total Food Applications</b>	22	12	19
<b>Applications from Small Food Enterprises</b>	7 (32% of Food Applications)	9 (75% of Food Applications)	9 (47% of Food Applications)
<b>Applications from Micro Food Enterprises</b>	5 (71% of Small Enterprises)	4 (44% of Small Enterprises)	2 (22% of small Enterprises)

<sup>1</sup> Data only made available until 2012

Source: Data obtained from InvestNI.

The scheme also offers the potential for small businesses to work collaboratively and pool vouchers, however, this has seen less engagement by small food enterprises. Applications for research and development support has also tended to be lower particularly amongst small/micro enterprises. Similarly, there were no applications to

the collaborative network programme from small food enterprises during this timeframe. This suggests that these more advanced forms of innovation support may be less relevant to the needs of small food enterprises or they may lack the capability or resources to engage in these innovation programmes that require collaborative approaches. To summarise, InvestNI provide a comprehensive range of generic innovation programmes and there is evidence that small local food enterprises are engaging at the introductory levels of this support.

In 2015 InvestNI secured approval from DETI for funding for a new Agri Food Competence Centre made up of £5million of research and development assistance from InvestNI and a £1.7million investment from industry partners. Hosted at Queen's University, Belfast, the new Competence Centre draws upon the research capabilities of Ulster University (UU), Queen's University Belfast (QUB) and the Agri-food and Biosciences Institute (AFBI). The centre's primary focus is on improving the international competitive position of the Northern Ireland Agri-food sector through innovation and co-operative research. In 2016 InvestNI launched the Dunhumby Market Intelligence Service (Tesco Club card) which provides small producers with category reports and interpretative support leading to new product development opportunities.

In the past, regional policy has been criticised by the agri-food sector representatives for failing to deliver one overall approach for the agri-food sector and despite the numerous business development programmes in the area of food, at regional and local levels, there has not been an integrated approach taken to their delivery (Agri-Food Strategy Board, 2013). As discussed earlier in this chapter, under the leadership of the Northern Ireland Executive, DARD and DETI jointly set up the Agri-Food Strategy Board made up of agri-food stakeholders. The aim of the board was to develop the existing "Focus on Food" Strategy (DETI/DARD, 2010) into a longer term vision for the sector. The resultant report "Going for Growth", presented a strategic action plan for the Agri-Food Sector in the region (Food Strategy Board, 2013). The major focus of the plan was on development of the food supply chain regionally to enable greater efficiency and greater focus on export markets. The plan identified that the region has a growing base of small and artisan producers and acknowledges the innovation, taste and quality they bring to food products. It also recognised the opportunity to build stronger alliances between food and tourism and the important role for small rural food enterprises in this regard. While the need to grow the artisan

sector faster in terms of sales, product and business size was articulated within the plan, the recommendations were generally more broadly based and there were few specific to artisan or indeed to small rural food enterprises. There is therefore a need to ensure that specific needs of small rural food enterprises are more fully represented.

There is evidence of the needs of small rural food enterprises being addressed at local authority level. Small rural food businesses have relevance to economic development, rural development and tourism in local areas and there are examples of programmes designed specifically to meet business development needs. These programmes typically are supported by European Union funding and other regional funding such as InvestNI and tend to engage clusters of council areas. One such example is the South Eastern Economic Development (SEED) Consortium, led by Down District Council who managed food programmes (2011-2015) which have been designed specifically for the needs of local food producers.

Another recent example of an EU funded programme is “Access 6”, led in Northern Ireland by the Northern Ireland Food & Drink Association, in association with the Irish Exporters Association and Scotland Food & Drink. The Programme aimed to provide extensive training and mentorship for Food and Drink SMEs in Northern Ireland and the border region of the Republic of Ireland and Western Scotland, to develop new routes to market in the UK and international markets. As part of the project six clusters of Food and Drink SMEs were established to help them to develop marketing skill-sets and logistical support to successfully supply and trade in the main UK and international markets. The focus of this project was on helping SMEs to export to Europe and North America.

In terms of the food tourism and food experience agenda, Tourism Northern Ireland and FoodNI work to promote Northern Ireland produce including through the Taste of Ulster and “Our Food So Good” brands. Part of FoodNI’s remit is to promote local food through key agricultural events in Northern Ireland, including the Balmoral Show (Northern Ireland Food Pavilion) and other major food events, such as the Northern Ireland Year of Food and Drink in 2016 - a year long programme of promotional events right across Northern Ireland. Their role is to “support the food and drink industry to connect with consumers in local markets” and they also promote local produce in restaurants through their Taste of Ulster Guide. FoodNI promotes a number of

small/micro food producers in Northern Ireland through their online members directory. In summary, FoodNI assists small/micro food producers to promote their businesses through their on-line directory and assisting food producers to exhibit at local food events.

### **6.3 Chapter Summary**

This chapter has presented the geographical context for the study, the peripheral region of Northern Ireland, and the state of play in the agri-food sector for the region. The agri-food sector makes a major contribution to the Northern Ireland economy. Recent years have seen the emergence of a thriving artisan food scene. Broadly speaking this review of policy relevant to small rural food enterprises has revealed a range of relevant policies and programme supports. It is evident that the majority of these supports have more relevance to medium to large food businesses with greater capacity to innovate and collaborate. There is some evidence of programmes that do support the business development needs of small rural food enterprises but there appears to be a lack of integration or progression among these interventions. Whilst there is support available for small food producers, the evidence suggests that more tailored support could be provided. Furthermore, small/micro food producers are engaging in introductory levels of support but not availing of more advanced forms of support to further help develop their innovative capabilities.

This chapter has identified some themes around micro size firm engagement with support agencies for innovation, including a lack of collaborative activity, and a limited engagement, which involves mostly basic forms of innovation support. In so doing this chapter has contributed to the research objectives of this study, in particular research objective one - the knowledge sources for innovation in micro enterprises, within the artisan food sector context. The themes identified in this chapter were explored and teased out further with respondents during the empirical phase of the study and will be discussed further in Chapter Eight in the findings on business support programmes. But first, the findings on the innovation capabilities of the micro enterprises in this study will be discussed in Chapter Seven.

# **CHAPTER 7**

## **Findings on Innovation Forms and Knowledge Sources**

## 7.0 Introduction

This chapter presents the findings of the empirical research. It specifically seeks to address research objective 1 (RO1): to explore the knowledge sources for innovation in micro enterprises, within the artisan food sector context. Within this research objective the chapter will seek to answer the following research questions:

RQ1: How innovative are micro food producers?

RQ2: What are the sources of innovation?

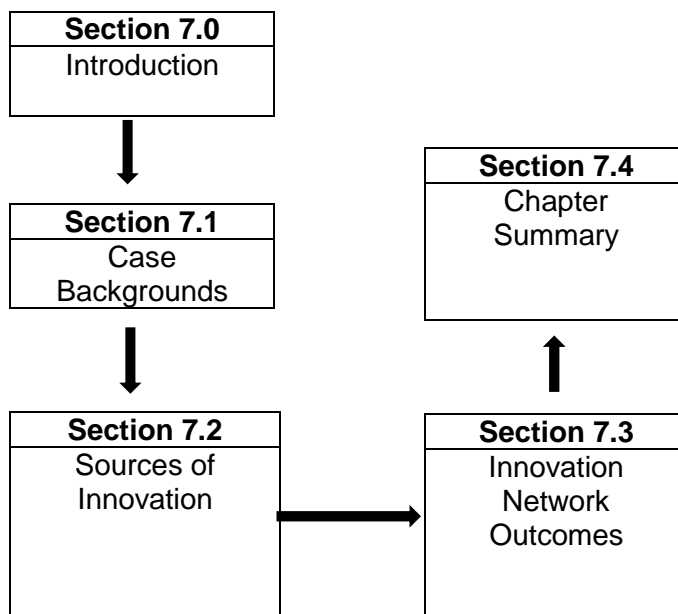
RQ3: What are the contextual factors that influence innovation?

The findings discussed in this chapter will address and build upon a number of elements shown in the initial conceptual framework (Figure 4.2), as presented in Chapter Four (Section 4.2). These elements include innovation types, internal and external knowledge capabilities, and artisan food contextual characteristics. Quotations from respondents will be used to illustrate themes. The source of the data is provided (respondent code, sector/organisation). The bulk of the quotations are from interviews, however focus groups quotations are identified (e.g. A1F).

The chapter begins by outlining the background characteristics of the responding firms, including an overview of the origins of the businesses, and further details on the scope of the businesses' activities. Thereafter, it discusses the sources of innovation and finally the types of innovation activity that the respondents undertake. Throughout the chapter reference will be made to contextual factors. These factors will relate to unique firm and network level influences on the development of the innovation process in this context. Contextual factors or innovation antecedents lead to and influence the manner in which micro firms and their innovation networks develop knowledge exchange to drive innovation outcomes, as proposed by Curado et al. (2018), Chiaroni et al. (2011) and Chesbrough and Swartz (2007).

This chapter seeks to provide insights into the knowledge sources that the micro enterprises engage in broadly for innovation. These include a range of internal and external informal and collaborative sources that extend beyond the influence of business support programmes. Full documentation of these broader knowledge sources is required in order to provide a rich and full picture of the nature of innovation in these micro enterprises, and *how* they actually innovate. The role of business

support programmes are not considered at this point but will be covered in depth in Chapter Eight. Figure 7.1 illustrates the outline of this chapter.



**Figure 7.1: Outline of Chapter Seven**

## **7.1 Case Backgrounds**

This section provides some background on the micro enterprise respondents in this study including the context for their involvement in artisan food production, and an overview of the nature and scope of their current activities. This section will therefore provide a contextual description that will aid understanding of the nature of innovation in these enterprises that will follow in this chapter and of the nature of their involvement in business support that will follow in Chapter Eight.

### **7.1.1 Origins of the Business**

The artisan food producers in this study have been inspired to develop their businesses and new products from various backgrounds (see Table 5.4, Chapter Five for further information on company profiles). Some of the businesses have diversified from family farm enterprises while others have been new entrepreneurial start-ups where producers have relocated to Northern Ireland. Family members have been instrumental in supporting the development of these businesses, including siblings



working together, wider family members, and husband and wife teams. The following quotes illustrate how family members are integral to these enterprises:

*“Well basically we are a well-established home bakery, we have been in business since the sixties, my parents started it, my brother and I took over about five years ago”.* (A17F, Baked Goods)

*“...My husband does this really well, you know because it’s, we’re family and we’ve decided to do this together, and that’s important, but .... put it this way, if xxxx (husband) wasn’t making cider I wouldn’t be selling it on anybody else’s behalf”.* (A33, Alcohol)

Some of the businesses started out as hobbies and developed into businesses in their own right. Several cider brewers (A31, A33) started their craft cider business from an interest in home brewing that was inherited from the owner managers’ fathers. One such example is of a cider producer (A33) starting the business from an interest in home brewing that stretched back 35 years. The owner developed an interest in brewing from his father, who passed on his enthusiasm for brewing beer and wines. Each product comes from hand pressed apples to produce a unique range. This producer has juggled the cider producing business with other unrelated horticultural interests. Others went on to develop their businesses from a passion for baking, developed from a young age, from studying home economics at school (A18, Baked Goods) or where they helped out their mothers and grandmothers in the kitchen after school and during the holidays:

*“Well my granny baked a lot, my mother baked a lot, actually the two grannies baked a lot, it was a family tradition from we were very young, all of us including my brothers were in the kitchen helping granny or mummy bake. My mother was a domestic science teacher and I suppose everything catered towards baking, catering or cooking”.* (A23, Baked Goods)

Respondents across a number of sub-sectors acknowledged the encouragement of family members and their rural/farming background in developing an interest in artisan food production. A pies producer (A30), a recent start up business, grew out of the family pub/restaurant business selling through delis, cafes, garages but mainly through food markets and food events. A cider producer diversified into cider production from the family apple farm that was there for more than 100 years (A32). The decision to diversify came about opportunistically due to an overreliance on a large processor for a market leading cider product. A lack of orders left the company with no market for its produce. This producer then took the decision to diversify into

cider production and branded produce. An artisan producer of goats cheese knew from first-hand experience the importance of sustaining his grandfather's farm, where he had helped out since being a young boy. The owner's grandfather was in the process of retirement and sold off all the farm herd. His grandsons and successors sought to take the farm in a different direction away from dairy towards the production side and identified a niche in the market for goats' milk products and artisan cheese. They knew that in order to sustain the farm for future generations they had to think 'outside the box. The brothers bought a few kid goats and that is how they diversified into producing goats cheese:

*"With my work with the Farmers Union I knew on a 27 acre farm you had to do something different. So we wanted to make it sustainable and viable by doing a diversification project. That is where food production came in". (A34, Dairy)*

Other businesses emanated from hobbies but not directly related to family traditions. A specialist meats producer (A25) started out as a "hobby". The owners had a bed and breakfast business and some land which they felt was ideal for rearing rare breed pigs. A cider producer (A31) had an inauspicious beginning, wherein the product was given out to friends as a Christmas present, as the owner recounted:

*"I made it for a local guy for years...and he kept harping on at me about doing it commercially, so I developed it and shelf life tested it and the rest is history".*

These selected examples highlight a number of themes in relation to the origins of artisan food production. The role of family members, family traditions and a rural background are largely significant factors but not the only ones. The food production business has in some cases come about opportunistically, despite the long-held family traditions in agriculture and rural enterprise. The theme of family influences and traditions will be discussed further in this chapter as a key contextual factor influencing innovation for these enterprises. The current activities of the respondents will now be reviewed.

### 7.1.2 Scope of Activities

The scope of the businesses' activities for many of the respondents has moved beyond the confines of the local market. The majority of respondents had a regional presence (i.e. beyond a 30 mile radius of the business and within the region of

Northern Ireland). Twelve businesses have sold produce to the Republic of Ireland and two businesses are involved in further export activity. In addition, a further five businesses indicated that they had aspirations or export goals to sell beyond Northern Ireland (see Table 7.1).

**Table 7.1: Market Reach**

<b>Producer</b>	<b>Market Reach</b>
A1	Regional / Republic of Ireland
A2	Local
A3	Regional / Republic of Ireland
A4	Local
A5	Local
A6	Regional (export goals)
A7	Local
A8	Regional (export goals)
A9	Local
A10	Regional / Republic of Ireland
A11	Regional
A12	Regional / Republic of Ireland
A13	Regional / Republic of Ireland
A14	Regional
A15	Regional
A16	Regional (export goals)
A17	Local (export goals)
A18	Local
A19	Local
A20	Local (export goals)
A21	Regional
A22	Regional
A23	Local
A24	Regional / Republic of Ireland
A25	Regional / Republic of Ireland
A26	Regional
A27	Local
A28	Regional
A29	Regional
A30	Regional
A31	Regional / International
A32	Regional / Republic of Ireland / International
A33	Regional / Republic of Ireland
A34	Regional / Republic of Ireland
A35	Regional / Republic of Ireland
A36	Regional / Republic of Ireland

The limited scope of activities and focus on the local/regional market reflects the owner-managers' passion regarding the quality of the products they produce, their depth of conviction and feelings on the authenticity of the core product offering including using locally sourced products. Moving beyond the local market and export activity implies larger scale processing and commercialisation, which sits uncomfortably with some. Further to this, relatively modest growth ambitions were revealed during the interviews and group discussions with the producers. There was an appreciation of the need to focus on the home (regional Northern Ireland) market before exploring export opportunities and to stay focused around the core business: "...get the core business right...rather than go down the line of more innovation" (A25, Meats). Several respondents commented on lifestyle aspirations ("*It has always been a hobby*", A7, Oils/Preserves) and they were at a stage in their lives where they wanted to maintain a work life balance whilst still making a living:

*"We want to make a bit of money out of it, but we both enjoy the banter I suppose with the customers and dealing with people as well. You get to the stage in your life where you do not want to work 60 hours a week and you cut it down slightly. But we still need to make a bit of money".* (A15, Baked Goods)

Likewise, this producer stated that the nature of the business suited his needs at his stage of life, where he was happy to focus on developing a niche product rather than pursuing commercial growth:

*"I would love to be able to make a living out of it. And I know I could and I would not need to turn a massive wheel to do it because I am mortgage free, my wife has a good income... the one thing I am not going to do is mass produce and sell it cheap".* (A31, Alcohol)

The reservations around commercial growth were linked to a level of scepticism around selling to the multiple retailers which would possibly lead to a loss of product quality, as an artisan sauce producer further explained:

*"Our product, we are not interested in the big market, the big multiples, mainly because you lose the quality, you lose control, and you lose the interaction of us making it..."* (A3F, Oils/Preserves)

These viewpoints epitomise a cautious approach to growth that was evident among many of the producers. While none of the enterprises here are purely lifestyle orientated their growth ambitions are relatively modest. They seek out commercial opportunities, yet want to grow their business in a measured way where there is a

certain altruistic motivation in producing a quality product that will be valued, and that demonstrates strong authenticity. This mix of motivations is illustrated by this quote from a cider producer who had moved into the cider business relatively late in life and was still in the early days of growing the business:

*“Money has never been the driver. I suppose it is getting people to have an appreciation of the cider....Am I going to turn into a Mr Magners? I don't think so. I don't think I want to. I want to certainly be able to make myself a living out of it”. (A33, Alcohol)*

In summary, these case backgrounds illustrate a range of owner-manager motivations and backgrounds. They are all recent start-ups, either through farming diversification or as a new business, and thus it may be argued are innovative by default. The owner-managers' passion regarding the quality of their products and their depth of conviction and feelings on the authenticity of the core product and offering have been intrinsic to the development of their businesses. Product quality/authenticity and family influences/traditions are contextual factors that will be discussed in relation to the nature of innovation in these enterprises later in this chapter. The following section will now explore the knowledge sources underpinning the nature of innovation in these enterprises. According to the initial conceptual framework in Figure 4.2, the sources of innovation will be considered in terms of internal and external knowledge flows.

## **7.2 Sources of Innovation**

The knowledge flows for innovation, as suggested in the open innovation literature (Chesbrough, 2006; 2003) are expected to consist of “inside-out” (where the firm uses its internal resources to commercialise innovation) and “outside-in” (where external knowledge is accessed, evaluated and assimilated using environmental scanning) flows. From the data collected from the micro enterprises and business actors, there was evidence of extensive use of a broad range of knowledge sources and networks for innovation (Table 7.2). There is a strong reliance on internal sources, and these will be discussed next.

**Table 7.2: Knowledge Sources**

INTERNAL				EXTERNAL						
Producer	Owner-Manager's Intuition & Know-how	Family / Friends Influences	Employees	Benchmark from Travel	Sectoral Trends/Competitor Activity	Customers	Supply Chain Actors	Food Awards	External Networks	Business Support
A1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
A2	✓							✓	✓	✓
A3	✓	✓		✓	✓	✓		✓	✓	✓
A4	✓	✓				✓			✓	✓
A5	✓					✓			✓	✓
A6	✓	✓		✓	✓	✓	✓		✓	✓
A7	✓	✓			✓	✓		✓	✓	✓
A8	✓	✓								✓
A9	✓	✓							✓	✓
A10	✓					✓			✓	✓
A11	✓	✓						✓	✓	✓
A12	✓	✓			✓	✓	✓		✓	✓
A13	✓	✓		✓		✓	✓		✓	✓
A14	✓	✓		✓	✓	✓	✓	✓	✓	✓
A15	✓	✓		✓		✓	✓		✓	✓
A16	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
A17	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
A18	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
A19	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

INTERNAL				EXTERNAL						
Producer	Owner-Manager's Intuition & Know-how	Family / Friends Influences	Employees	Benchmark from Travel	Sectoral Trends/Competitor Activity	Customers	Supply Chain Actors	Food Awards	External Networks	Business Support
A20	✓	✓		✓	✓		✓	✓	✓	✓
A21	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
A22	✓					✓			✓	✓
A23	✓	✓	✓	✓	✓	✓	✓		✓	✓
A24	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
A25	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
A26	✓					✓	✓		✓	✓
A27	✓					✓			✓	✓
A28	✓								✓	✓
A29	✓					✓			✓	✓
A30	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
A31	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
A32	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
A33	✓	✓		✓	✓	✓	✓		✓	✓
A34	✓	✓		✓	✓	✓	✓		✓	✓
A35	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
A36	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

### 7.2.1 Internal Environment

Internal knowledge capabilities were tacit in nature and contributed to open innovation based product development more so than would be expected from micro firms with scarce resources. The importance of information for innovation within the business was identified among focus group respondents in their qualitative and supplementary survey responses. At interview stage the internal environment was explored further and a number of internal knowledge sources were identified, namely: owner-manager intuition and know-how, family influences, and employees. Each of these internal factors will now be discussed in turn. In addition to these knowledge sources for innovation, key contextual factors emerged from the analysis of the data (product quality/authenticity, family influences/traditions, and traditional methods) and were significant in the development of radical product innovation and innovation outcomes more generally. The interactions between the internal knowledge sources and the contextual factors will be discussed as the chapter progresses.

#### 7.2.1.1 Owner-manager's Intuition and Know-how

A prominent internal knowledge capability was fostered through the role of the owner-manager's intuition and know-how and sensory capabilities. For instance, the cider producers in this study (A31, A32, A33) placed great emphasis on their own qualities as a strong judge of cider, taste and flavours and their own palate. The role of the owner-manager's intuition and know-how was cited. Ideas for new flavours of cider came from the owner's own "palate", his/her's own intuition and feel for what would work based on previous experience:

*"Regards new products and new things, it's very much dependent on my, it's like your wine maker, it's dependent on his palate, working with things...the flavour thing very much is me...on my own wanting to produce something like that..."* (A33, Alcohol)

This producer further explained that he has a book containing "*everything you need to know about making cider*", and he has let others use it, but the book and the information contained in it isn't enough:

*"....you act on information that's in that, I mean you process it yourself and then you do something, so it's very much being able to work with information that is readily available and process it in your own way".* (A33, Alcohol)



The owner-managers' emphasis on the quality of the product and its provenance and authenticity came through in their innovation activities. The interviews revealed the owner-managers' passion regarding the quality of the product and their depth of conviction and feelings on the authenticity of the core product and offering. The majority of the respondents cited the quality of the product as the most important aspect of their business and indeed as the fundamental reason why they started the business. As one owner-manager explained: *"that is the only reason that I started to do it. I thought to myself that it has to be quality every day of the week"* (A31, Alcohol). Very simply, as another owner-manager commented: *"the bottom line is the quality"* (A25, Meat).

The respondents exhibited extreme levels of confidence in their produce and its superiority over mass market products that were viewed as commercially processed and "corrupted", due to the preservatives needed to maintain the consistency of the product at high volumes. They took great pride in extolling the virtues of their product, whether it be on a one-to-one basis to consumers at local food events or during food tours that they were involved in, either independently, or through a Government support initiative (see Chapter Eight).

An issue pertinent to the quality of products for many of these producers was using fresh products and avoiding the use of preservatives in the making of their products. According to one desserts producer (A20, Baked Goods): *"...ingredients that people know are fresh, organic where possible and have not done a lot of food miles to get there"*. Another baker highlighted how fresh produce adds to the quality of the product, refusing to use any artificial products:

*"....I don't use any preservatives or additives. So that is a big sell for me. In none of my products do I use any form of preservatives... I am an artisan producer and I am making everything from scratch in that bakery. I make a hundred scones in a morning, it takes me, from mixing them and getting them into the oven, half-an-hour. Why would I want to buy a 25 bag mix and add water to it? I am not going to make the scone any quicker...."* (A13, Baked Goods)

A cider producer further emphasised the importance for only using local, fresh products when producing his cider: *"I would love to have everything exclusively from Co Down. It would be a complete unique selling point, no-one else is doing it, plus the varieties that I want to use (apples) are not available"* (A31, Alcohol). He also highlighted the importance of producing products naturally, without adding anything:

*“I need to put it in at the start to make sure there is no micro-organisms within the juice - I don't use any other chemicals at all” (A311, Alcohol).*

The product freshness and provenance, and focus on natural ingredients and quality was viewed as a strong justification for higher priced produce, as one respondent explained:

*“What we hope is, the money that they have earmarked for luxury purchases, you know, we grab part of that. So that's where, you keep your quality, all that side of things is very, very important”. (A35, Dairy)*

### *7.2.1.2 Family/friends Influences*

Family members have been instrumental in supporting the development of these businesses, including siblings working together, wider family members, and husband and wife teams. Many of these businesses are impacted by seasonal demands and rely on family members to enable them to produce their bespoke hand-crafted products. The cases demonstrated several examples of radical innovation, from family and friends networks. For instance, an innovative craft strawberry cider had its origins 35 years previously in strawberry flavoured juices that the owner had developed with his father from a pastime of home brewing of fruit wine and beer (A33, Alcohol). The idea had stayed with him and many years later he resurrected it but with cider.

Likewise for another cider producer (A31) an elderflower flavoured cider idea came about because the owner's father made elderflower champagne: *“my mother used to make elderflower cider and my father made elderflower champagne... the two flavours seem to go well together”*. Thus in both these cases the contextual factor of family influences/traditions appeared to impact on knowledge capabilities and led to subsequent (radical) innovation. In a number of cases social capital from family relations was the driving force for innovation and business development. The role of family members in influencing decisions affecting innovation was evident in the case of a preserves artisan who noted: *“my sister who is a commercial manager for a big company says you really need about half a dozen core products which you then establish and sell” (A7, Oils/Preserves)*. In this case the owner's sister was advising her to cut back on creativity and focus more on actively selling a core range of products.

The knowledge and expertise of the owner-managers' children have proved highly valuable. Children have been involved in the business during holiday time: *'we try to work with people that we know, more than sort of going out trying to pick a name out of the phone book. ...'* (A31, Alcohol). In the case of a cider producer (A32, Cider), the owner-manager's son was the driving force behind the recent expansion of the business: *"If it was left to (my husband) and I, we would not be pushing at the rate we are pushing... (my son) will take this on and that is the way we are looking at it"*.

Furthermore, the support of parents was noted. For instance, the owner-manager of a preserves company explained that his father helped to run the business more efficiently including with the design side: *"My dad was sort of doing the design for the product, just to try and streamline it"* (A6F, Oils/Preserves). Another respondent relied on his parents who had a well-established business including a commercial kitchen. This enabled the producer to set up his own pie-making business using their premises to make the products during the night. His parents played an instrumental role in his start-up: *"Because of my experience in catering it has kind of always been drilled into me"* (A30, Meats). Furthermore, this relationship helped him to develop his start-up: *"to be associated with a company is good for us"*. This owner-manager was able to utilise the relationships his parents had built with other food producers and to address resource gaps and uses a local cider company to assist with marketing at the various events where he sells his products across Northern Ireland, explaining: *"I am juggling two jobs"*.

Other producers explained how family supported them in using the family home/grounds to set up and expand their businesses:

*"I started off from my own kitchen and used one of the bedrooms...Used a bedroom to produce out of and then I decided to go a bit bigger so I moved to a shop in xxxx and had my own retail shop there. At that stage...the first child came along, it all got a bit much and we decided to go back home again where I built myself a purpose unit, knowing it was going to be my bakery"*. (A23, Baked Goods)

For another owner-manager who was then living in Edinburgh and who had decided to return home to set up business in rural Northern Ireland, family played a key role in making this decision to relocate: *"We knew people here in Northern Ireland, uncles...who could do things like knock down walls, build kitchens..."* (A18, Baked Goods).

The involvement of family members has thus provided a “support network” (A17, Baked Goods) which has sustained the business, and without which the business would not have survived. This is representative of bonding social capital which exists within comparatively homogeneous, tight-knit groups, such as families, and close friends and which tends to emerge from strong tie networks and provides the “glue” needed to link community members together.

Friends, to a lesser degree, have also been invaluable in providing support, including recipe ideas and feedback on products, particularly in the initial stages of set-up:

*“I have got a couple of friends; one is finishing up a degree the other works with the civil service, the other PwC. They are not by any stretch of the imagination chefs, but they are foodies. They might contact me to say ‘I saw this in a magazine’, you can get really good ideas from people and when you talk to people who are into food. It is very easy to talk about the right things”.* (A19, Baked Goods)

Two of the cider producers in this study have developed a friendship and despite being in competition, were happy to try one another’s products and give feedback: *“XXXX will sit down and have a glass of my dry and he really does like it”* (A31, Alcohol). This cider producer further commented on the positive feedback about his produce from friends: *“As soon as they tasted it the eyebrows just jumped about an inch. And they were going this is so different, bla, bla, bla”.*

### 7.2.1.3 Employees

As indicated in Table 7.2, whilst employees were not a significant source of knowledge for these enterprises, given their obvious size and resource restrictions, the role of employees was signalled by a number of respondents. The importance of recruiting employees with relevant personal and professional experiences of international food, was noted as a source of innovation. This owner-manager was keen to use these experiences to develop their product range:

*“And X who is working just now, her mum is South African, they have lived in India for a number of years, they are very well travelled. Her mum is a brilliant cook, they eat interesting food, her mum makes interesting food. So folk like that who we have deliberately employed”.* (A18, Baked Goods)

Another respondent agreed with the importance of hiring people who have relevant experience, particularly gained outside of Northern Ireland. This was very important

for developing twists on local well-known dishes:

*“We talked about it and came up with those ideas together... he went to school with me and then he went to work in the Cayman Islands for a year as a chef”. (A19, Baked Goods)*

More structured forms of utilising contributions from employees were recorded. This occurred in the case of a confectionary producer who sought to harness the knowledge of employees through innovation “*reinventing nights*”. The owner believed in empowering his employees to be honest and forthright. The owner-manager explained:

*“There is like a reinventing night and we would make all different things. We would throw different things in. We are looking at the moment at making white chocolate, honeycomb with white chocolate and peppers. Another one is the ground pepper. So there is going to be a white Belgium chocolate with honeycomb and hot chillies, just to try and see”. (A36, Confectionary)*

Another owner-manager sent her staff on best practice trips on her behalf to collect ideas for product development. This was viewed as a useful way for staff to bring ideas back into her business, thus compensating for her own lack of time.

*“I didn’t get to go to Dublin, but (staff member) went and it was fantastic. Loads of very good feedback. You really need to take the time out to see what is happening elsewhere and it is very hard to do that. Also to hear what they buyers want, we all know that, but to hear it again...” (A21, Baked Goods)*

In summary, a number of internal knowledge sources were identified as important knowledge sources for these micro enterprises, namely: owner-manager intuition and know-how, family influences, and employees. In addition to these knowledge sources for innovation, key contextual factors emerged from the analysis of the data (product quality/authenticity, family influences/traditions). The interactions between the contextual factors and external knowledge sources and innovation outputs will be discussed as the chapter progresses.

## 7.2.2 External Environment

In addition to the internal, inside-out knowledge sources for innovation, there was also a strong reliance on external, outside-in knowledge as indicated in Table 7.2. The outside-in knowledge sources that were highlighted by respondents as leading to

innovation are now discussed in turn. These include benchmarking from travel, sectoral/competitor trends, food awards, vertical networks, external networks and business support programmes. Business support programmes will not be discussed in this chapter but rather will be examined in depth in Chapter Eight. In addition to these external knowledge sources for innovation, once again key contextual factors emerged from the analysis of the data and were significant in the development of radical product innovation and innovation outcomes more generally.

#### *7.2.2.1 Benchmarking from Travel*

Benchmarking from travel has been a highly important external source of knowledge and a key factor behind not only in the formation of some of the enterprises but also the further process of developing new products and ways of doing things. This knowledge source was identified at the focus group stage and emphasized again during the interview stage of data collection. There were examples of radical innovation that arose from travel whereby the travel had allowed for the identification of something that was “different” and “unique” in the local market. This was very important for developing “twists” on local well-known dishes. In some cases this led to the introduction of new products and novel services into the businesses, particularly in the initial stages of set-up. For instance, a cheese producer (A34, Dairy) illustrated how he started his business following a holiday in France and was inspired by the quality of cheese that was being produced there in comparison to the typical imported cheese: *“that was my inspiration to try and make something that bit fresher and different”*. (A34, Dairy). Furthermore, a recently established bakery utilised ideas from a trip to Paris:

*“It was based on one of the ones I saw in Paris it was a vanilla pecan one. It had vanilla cream and had chopped pecans on the top, so it looked a bit different than your standard éclair that you would get in your local bakery. It looked a bit fancier and a little more upmarket”*. (A19, Baked Goods)

An ice-cream producer, (A35, Dairy), grew rapidly in recent years from a long established dairy farm business, starting out as a diversification project with LEADER funding and won numerous awards over the last few decades including UK Grass Farm of the year, Dairy Farmer of the year and lots of regional and local titles. The farm business had a background of success but that had *“never, ever translated into hard cash for the business”* (A35, Dairy). They looked at a number of areas for diversification including cheese making, yoghurt making before finally deciding on

producing a dessert ice-cream. This they believed was “*something that was completely different, we found a niche in the market that really was not being occupied by any-one else*”. The owner-manager explained how the idea for diversification from the original dairy farm came about as part of a Nuffield funded project where he had travelled to Central Europe:

*“Well we were away in Slovenia and we discovered a farm, only a few acres, and they were making a good living (having diversified) and I thought well, my goodness, I could make something, a product from the milk, and then it was the ice-cream”.* (A35, Dairy)

Another respondent, an artisan baker, who specialises in producing a local bread delicacy (soda bread) product through cooking on site at food events, identified a major gap in the market in that breads tend not to be baked on site at food events. Although the product is very familiar in Northern Ireland, the process of baking it on site in front of the customer adds to the food experience. The business started from an idea that the owner had from short city breaks in Europe:

*“I used to take city breaks...around Europe. I was always drawn to markets to see bread being brought into the markets and I always thought why can't they bake bread on site? Soda bread being the type of bread it is, would lend itself to baking onsite so that is eventually what I did”.* (A14, Baked Goods)

Following a trip to Oman, the owner-manager of a pastry business started making French patisserie products. The owner had visited a luxury hotel and saw how macaroons were being made, gluten free, and felt there was a market for that in Northern Ireland, “*...something kind of different and new to bring to the market*” (A20, Baked Goods).

A Baked Goods owner-manager (A18, Baked Goods) was significantly inspired by his and his wife's passion for travel. He was able to use their travel experiences to develop a “*coffee brew school*”, where people could learn about coffee and take part in the making of it, comparing it to “*wine tasting really*”. He further explained the importance of offering something different whilst also generating income for the business:

*“...Every second night in Melbourne I was out in a different coffee shop doing brew school or whatever and it is something we thought, well this is something we can incorporate into our business as a way of maximising resources, bringing in more income into the business...we could not survive on just*

coffee”.

On numerous trips to America and Paris another owner-manager of a bakery visited many patisseries to source ideas to develop her desserts. This research also included visiting well established, quality focused cafes, which ultimately led to her introducing a new product into the business:

*“Well, I like to go out and about to see how other people do things. When building the dessert café I have been round to most of the good places in Northern Ireland. I know what I like and I know what my friends like. I wanted to bring those elements in... I was on holidays in America in June and we had a look to find what was different. We came up with the wedding cheesecakes because we saw those in New York four/five years ago”.* (A21, Baked Goods)

#### 7.2.2.2 Sectoral Trends/Competitor Activity

Another important knowledge source that was highlighted by respondents was research into sectoral trends and competitor activity. These small artisan food producers look to other well-established artisans and larger firms including multinationals for inspiration and in order to adapt and develop their ideas, helping them to overcome their limited resources. These ideas came largely from businesses outside the local area, thus demonstrating the use of weak ties for innovation. A well-established bakery spoke about “*picking the brains*” of other successful food artisans at food award events (A17F, Baked Goods). Information was primarily obtained through secondary sources such as the Internet and social media. Producers found websites particularly useful for generating ideas on presenting and developing products in a resourceful way. They were not in the position to invest too much time or expense in searches, and these resources could be accessed at a time best suited to them. Respondents highlighted the value of regularly undertaking research on particular websites including Pinterest, Google images and YouTube to get ideas for developing products:

*“I am constantly looking at things such as Google images and Pinterest and magazines and trying to, like Pierre a Mere, a huge macaroon company in London, and looking at what they are doing and just looking at nice ways of presenting them”.* (A20, Baked Goods)

*“...All you are really looking at is YouTube and seeing what someone is doing in YouTube in their factory and trying to steal some ideas. Because no-one is going to share trade secrets are they?”* (A30, Meats)



*“...I go through magazines, look through what everyone else is doing, go on the Internet, find out what’s going on, sort of get ideas, and get them in the melting pot...”* (A18, Baked Goods)

Given developing consumer tastes, changing dietary requirements and emerging product knowledge, this respondent noted the benefits of investing time in literature searches and conducting online research to develop knowledge:

*“We have also spent a lot of time and money buying cook books, especially stuff that is good for folk with celiac and dairy and stuff like that and a lot of our ideas come from researching different cook books and online”.* (A18, Baked Goods)

The research helped the owner-manager of this bakery and food service business to develop a gluten free range of products, which are baked onsite. The importance of addressing changing dietary requirements was also noted by other respondents.

To a lesser degree these small artisan food producers look to the larger firms including the multinationals in order to adapt and develop their ideas, helping them to overcome their limited resources. A Government representative who dealt with small-businesses on a day to day explained:

*“So they let the bigger players take the lead and spend the money on research and development because they don’t have the resources or the finances to go into that... so they would like to do something similar”.* (BS13, Central Government).

Another baked goods producer highlighted the benefit of undertaking research online to source ideas from the “bigger companies” such as the long established English Cheesecake company who cater for both domestic and corporate clients across Europe:

*“...I am always on the Internet to see what is happening. There is the English Cheesecake company who are a big company. They do wedding cheesecakes, cakes, different flavours as well. Sort of high end, so I am always looking to see what is happening”.* (A21, Baked Goods)

### 7.2.2.3 Food Awards

The interview stage of data collection identified food awards as an important source of knowledge. Some of the more established producers who entered food awards explained the numerous benefits in terms of knowledge source. In addition to the

endorsement and promotion of their award-winning products, the insights gained and knowledge developed was highly valued. The value came from the impartial advice received on how to further develop their product portfolio. A producer of preserves further stated the intrinsic value of entering food award competitions:

*“...They are pretty good in that they give you feedback on your specific products and tell you to do technical things like improve the sugar ratio for instance. Maybe add specific products which is helpful. I think they are very good, like the Great Taste Awards, they are really good for marketing and feedback”.* (A7, Oils/Preserves)

A well-established bakery has a family member who has been involved in judging at national food competitions. As a result they have been able to enhance their innovation-based knowledge exchange and networking capabilities. Another award-winning preserves food producer mentioned her positive experience of attending the awards dinner for the Great Taste Awards. When asked why it was so useful, she responded:

*“Because they were the Great Taste Awards and you were tasting all the food and meeting other producers...I was able to get perspectives from different people. Meeting different producers from different places”.* (A1, Oils/Preserves).

A food industry consultant, who had extensive experience of delivery food programmes, commented on the benefits of attending events such as the Great Taste Awards, including the networking and promotional opportunities, in addition to sourcing ideas for product development and packaging:

*“You are getting to see all of the top artisan foods and all of the innovation...You are seeing all the new products, new ideas for packaging, you are seeing new ideas for labelling, for merchandising, you see how the smaller companies are doing it...”* (BS33, Food Industry Consultant)

These events provided opportunities for producers to develop networks with a range of bodies. The networks that these enterprises are engaged in are now discussed in the following sections.

#### *7.2.2.4 Vertical Networks*

A range of vertical networks for knowledge sources were cited as highly important sources of knowledge for innovation. As with social and family networks, these

business networks represent locally embedded network ties. These vertical networks included knowledge derived from customers and supply chain actors (chefs, suppliers and distributors). Of these networks, information from customers was cited as an important source of knowledge for product innovation.

*Customers:* At all stages of data collection producers noted the critical importance of seeking knowledge and feedback from customers. Aside from innovation, positive customer feedback helped the producers to develop confidence about the quality of their products: “...a guy who got some Elderflower and said without question the nicest cider he has ever tasted and I have got that quite a number of times.....” (A31, Alcohol). The value of direct, honest feedback was noted. A confectionary producer owner-manager felt that information from customers was probably the most important source of innovation for her. To help with this she organised new products and tasting nights to get in touch with customers:

*“So you are always diversifying, changing, you are like a chameleon, changing the colours to suit, whether it is your product changes, your packaging, we have new products and fudge tasting nights and we can get in touch with customers”. (A36, Confectionary)*

The knowledge from customers was for the most part gained during day-to-day interactions. Formal market research was only undertaken in one case. An ice-cream producer carried out market research and from interviewing consumers he found that there was a market for a premium product that was “... local, perceived to be regional, something that is perceived to be natural and healthy...” (A35, Dairy). He did a scoping exercise with the help of some students:

*“There was no great money thrown at it; a couple of students asked questions and wrote letters and emails and so on. And there were things that came back that were absolute gems, absolute gems...People were wanting local flavours, they wanted regional groups, they weren’t prepared to pay much extra for them that also came out very clearly, but that was their preference. And we moved on from there and the upshot of that is we have developed things like a sorbet range... If you keep listening, looking, you will find these trends happening out there. And you obviously respond to it”.*

The owner-manager also stressed the importance of regularly seeking feedback from customers: “I spent yesterday out with customers but also listening to the ordinary “5/8” about what they like” (A35, Dairy).

A range of informal methods were used to illicit information from customers. The

value of getting direct feedback from consumers in person, by email and telephone was instrumental. Customers would make contact by email and telephone, to make suggestions on new flavours and other aspects. In the early days of product testing and development, respondents have given out samples and received feedback from people the owners personally knew. In addition, attending food events and trade shows was viewed as a key way to illicit customer feedback. One baker considered the benefits of attending food events that “...gives you a wider chain of thought from the public and what they are buying... and good feedback” (A14, Baked Goods). Another stated: “I actually take a stall in Georges Market every Sunday just to kind of get feedback from the public and see how they are going down” (A20F, Baked Goods). Another source of feedback was from consumers who attend the Open Farm weekend, and the impact of word-of-mouth business obtained from this. Open Farm weekend is an annual showcase event for the Northern Ireland farming industry to celebrate the farming and the food industry where the public can visit farms and small artisan food producers. A cider producer highlighted the value of participating in this event:

*“This is our third year. Over the two days we had over 1000 people here and now it was a really good weekend...Yesterday I was speaking to the ALDI buyer. He said I love your product, he says my wife and kids were at your open day. They made juice and brought home cider, it was brilliant they raved about it. I had sent them some samples last week and I have an email in. I have to talk to them”.* (A32, Alcohol)

*Supply Chain Actors:* To a lesser degree other supply chain actors have been influential. These included the role of local chefs/restaurants, retailers, butchers, suppliers and distributors. The role of local chefs as customers in the innovation process was emphasised, through the sharing of new trends and in some cases gaps in the market:

*“Chefs being chefs, particularly at the top end, are always looking for things that bit different for their menus and if you can offer them that option you probably have the opportunity to have your whole range in there”.* (A35, Dairy)

This producer noted how he worked with a lot of chefs and developed products with them. A business support actor highlighted the role of an annual “restaurant week” event organised by Belfast council. While the event primarily supports restaurants, the profile of Belfast as a food destination is enhanced: “*Restaurant week has been a great way for business people to come up with ideas for products all year round...*”

(BS4F, Local Council). Another producer who regularly attended food related events explained:

*“I would go to events and even chat to chefs and there is a great network and they will say if you are doing this, they will give more and pass on other information. And as well as that you can get different information about suppliers as well”.* (A18, Baked Goods)

Butchers were also a source of ideas for other producers. A respondent referred to an agricultural show he attended each year where he got ideas from butchers' stalls: *“So I went round the various outlets there and .... I would take a leaflet to see what varieties they have, to give ideas to our guys.”* (A24, Meats).

Suppliers have been influential. For instance, several respondents noted how they consulted with suppliers on potential new product flavours: *“...suppliers of equipment would be a (source of) innovation for us, and, so anything they told us that was of benefit would have been important”* (A32, Alcohol). Another cider producer (A33, Alcohol) explained how they benefitted from a long-term relationship with an equipment supplier:

*“...A few contacts, a bit of experience is an incredible thing you know. In fact getting somebody that is prepared to give you snippets of information is a difficult thing at times, you know I've learned more probably from talking to the company I would buy the equipment from, because he is a cider maker of 40 years and if I had a problem, I would probably turn to him quicker than anybody else”.*

#### 7.2.2.5 External Networks

The importance of knowledge obtained from other businesses was noted by respondents at various stages of data collection. The types of networks used by these businesses were explored in focus groups and interviews. The producers used several networks to exchange knowledge and information. The more established businesses (A1, A17, A21, A31, A32, A33, A35, and A36), tended to be more effective at networking, overcoming any perceived barriers to working with other producers: *“I suppose the problem is if you are a small producer you can't interact with a lot of people on an ongoing basis”* (BS27, Central Government). These owner-managers tended to have a much better understanding of the importance in investing time in networking and how this could develop their businesses.

Two owner-managers discussed how they liked to give regular talks at Womens' Institutes events to obtain feedback from the female consumer who they felt was the main household shopper: *"Sure I have talked to more Womens' Institutes than enough! We are happy to do that"* (A32, Alcohol). Another producer commented: *"...the Chambers of Commerce are full of males... probably most of them don't see one end of a shop from one year to the next!"* (A35, Dairy).

The use of networks for collaboration between producers was largely horizontal in type (within-sector). For instance, an informal, horizontal network of sauce producers had come together to share ideas on a range of issues from recipes through to production of the product and packaging and labelling: *"we all share back and forth...it's a constant back and forth"* (A3F, Oils/Preserves). In this case, the informal network was used to address any practical day to day problems the participants were having. In other sub-sectors, such as cider, there were examples of reciprocity and the sharing of resources. This was the case for two producers who shared equipment: *"we have become quite good close mates...his mill broke down and he borrowed my mill."* (A31, Alcohol). The role played by the more established and experienced of these producers (A33, Alcohol) in introducing a new producer to new networks was noted: *"He then invited me to join Cider Ireland"* (A31, Alcohol). The largest cider producer in the study (A32, Alcohol) undertook contract bottling for their "competitors". This resulted in a greater knowledge and a better understanding of how competitors do things: *"you see what is selling better for them...you are bottling more so you are getting insight, not that I would ever admit to them that I am getting insight!"*. The role of informal networks is illustrated further in the case of this cider producer. The son of the owners utilised networks he had built during training courses in England on cider production: *"...he lifts the phone and rings them and says, look we have a problem here, or what do I do about this"* (A32, Alcohol).

Collaboration and trust developed from underlying shared values around product quality and authenticity. These served to generate bonding social capital which is typically embedded in strong-tie networks (see observation notes, Appendix Eight). For instance, this cider producer expressed a strong belief in only collaborating with other producers who shared his values on the authenticity and quality of the product:

*"...some people care more about produce than others...I would share with people that I would perceive to have the same values that I have. And I tend to find that you tend to gravitate towards people that are of a like mind to you".*

(A33, Alcohol)

This producer highlighted a previous experience of working with another cider producer on a collaborative project, which came to an end early in the process, once it became clear to him that the company was importing its produce and not using locally grown apples. The producer (A33) started their craft cider business in the previous decade, from an interest in home brewing. Each product comes from hand pressed apples to produce a unique range. This producer's values were reflective of strong associations between the quality of the product and authenticity. In this case, the producer espoused a strong belief in the quality and taste of the product and also its provenance. For instance, he questioned other producers' activities in labelling their products as Irish cider, having sourced the fruit from England: *"I could probably get English cider apples that are geographically closer to me, but I buy Irish because that way you can say it's an Irish product."* This damaged the authenticity of the product in his view.

In both the lateral and horizontal networks observed here a high degree of socialisation takes place. Friendships and a sense of togetherness characterised bonded social capital. Respondents highlighted lateral networks that had emerged organically for the purposes of knowledge exchange. For instance, a gourmet food group lateral network lasted six years:

*"That gourmet group was good because we were like a band of brothers and if someone's group was not going well and something happened you knew you could ring somebody...and we all helped each other".* (A24, Oils/Preserves)

The networks were not particularly active in the sense that the producers would meet formally at regular intervals but the sense of friendship, trust and reciprocity was clearly evident. This is exemplified in the following quote:

*"...there is a network but it is not an active network...we only meet at markets, or at shows, they know me. There is a good relationship there".* (A20, Baked Goods)

Such collaborations have developed into friendships based on the exchange of experiences and linked to a high level of trust and shared values around the quality and authenticity of the product. The collaborations have provided guidance and reassurance on the product ingredients, which has given these producers confidence

in their methods of production.

Whilst horizontal network forms were primarily for knowledge exchange purposes, the use of informal networks and collaboration across sectors has more directly led to innovation. There were examples of involvement in lateral networks across food sectors leading to radical innovation from the local market strong ties. For example, an ice cream producer (A35, Dairy) introduced a new product range of alcohol ice creams, and a yoghurt dessert ice cream ("*the first one on the market in Ireland*"), as a result of a collaboration with members of the fast-growing craft brewing market and a yoghurt company.

In summary, the external knowledge sources and network ties were mostly strong, local and vertical in nature, where a high degree of social capital is evident. The knowledge sources that were used varied among the producers, however the process could generally be described as informal and intuitive.

### **7.3 Innovation Network Outcomes**

This section will examine the types of innovation undertaken by the enterprises in this study. The conceptual framework (Figure 4.2) highlights a range of potential innovation outcome categories from internal and external knowledge sources. The conceptual framework also proposes that innovation outcomes are influenced by contextual factors.

The four types of organisational-wide innovation as identified by Avermaete et al. (2003) will now be explored. Throughout the remainder of this chapter reference will be made to the contextual factors that have been derived from the data analysis

The findings from the various data collection stages indicated that a large number of respondents cited involvement in more than one form of innovation with the majority of producers having been involved in product innovation during the preceding three years. The following section will consider the four main types of innovation in turn: product, process, marketing and organisational.



### 7.3.1 Product Innovation

Respondents provided examples of both incremental and radical product innovation were evident across the cases. Incremental innovation was evident through new ingredients and the introduction of related products. For instance, a meats producer (A30) used fresh ingredients “...*kind of a mix between an Australian and Irish mix pie...using blue cheese, cider...port apple and different things*”. This owner-manager referred to his pies as “*little twists on tradition*”.

Some producers’ desire for product innovation was particularly pronounced. One owner-manager of a dairy farm and ice-creams business explained that “*if you are standing still either in terms of product range or packaging, you are probably going backwards*” (A35, Dairy). Furthermore, a cider producer explained how they had a few years previously introduced a new cider product taste, a sweeter cider for strong commercial reasons and in response to the influence that the market leader had in shaping consumer tastes and preferences. Another producer of desserts also realised the importance of responding to changing consumer needs including offering smaller, lower calorie versions of desserts presented in an unusual way, for instance, at weddings, a “*tower of macarons... it is just something a bit different*” (A20, Baked Goods).

Relatively high levels of radical innovation were recorded. Just under half of all respondents recorded levels of radical product innovation. While there may have been a tendency for respondents to overstate the degree of innovativeness of their products, nonetheless respondents did offer examples of products that were introduced new to the market, before competitors. Given the relatively small numbers of respondents in particular sub-sectors, it is difficult to identify any patterns in the data, nonetheless there was a lower proportion of those in the meat sub-sector highlighting radical innovation, compared to baked goods.

A confectionary producer (A36) showed a strong orientation towards new product development and “...*at least once a month*” added a new product to a range. The owner-manager talked about “*looking in the cracks*”, to find something different to competitors:

*“If we have to look in the cracks, everyone is working to the black and white. I say if you are working in black and white, you are just the same as them. And*

*there is people out there like Cadburys and Nestle who are much better than us at packaging and advertising...so you are always diversifying, changing, you are like a chameleon, changing the colours to suit, whether it is your product changes, your packaging..." (A36, Confectionary)*

The owner-manager gave an example of this in her sales and marketing, looking at a new sales channel that was slightly unorthodox. She decided to target "*people who don't buy confectionary!*" By that she meant that she looked at tourist attractions across Northern Ireland and were the first supplier at heralded attractions such as the Giant's Causeway. They have since been followed by Cadburys and others.

An ice-cream producer (A35, Dairy) also highlighted the importance of "looking outside the box" in order to develop his product range. This included moving with the times and offering desserts that were that bit different, including low fat options:

*"Now there are restaurants who are offering sorbets in their dessert menus which was also unheard of a decade ago and I think this is how if you keep listening, looking, you will find these trends happening out there. And you obviously respond to it".*

The cross fertilisation of ingredients from other food sectors leading to radical product innovation was evident, for instance in the case of the desserts producer (A35, Dairy) who had introduced a range of alcohol ice-creams through collaboration with craft brewers, and between a pie maker (A30, Meat) and cider producer (A32), which came about following a long-standing business relationship. The cross fertilisation of ingredients from other food sectors was also evident in the case of a producer of baked goods who had introduced an award winning specialist bread - "guinness wheaten" (A17F, Baked Goods). The focus for these enterprises on product innovation was underpinned by context specific factors of product quality and authenticity and family traditions. The owner-manager's passion for product quality and authenticity, and an emotional involvement in production processes, has led to product innovation. This inherent belief in the value of the product has provided owner-managers with the confidence to "try things" that would lead to innovation outcomes around the product and therefore allow for differentiation from the more mainstream brands and market leaders.

The owners' protectiveness of the authenticity of the product means that they will not consider any activities that they perceive would serve to undermine the quality of the product, exhibiting extreme levels of confidence in their products. The approach to

product quality/authenticity is reflective of the owner-manager's modest growth ambitions, as discussed earlier in this chapter, wherein the owner-manager is willing to proceed slowly and deliberately along a path that safeguards product quality. Here, control of production and of the business more generally is an overriding factor.

A further contextual factor, family influences/traditions, was cited by the respondents as key in their product innovation processes. For instance, a cider producer's innovative strawberry cider had its genesis in the family tradition of home brewing going back many years (A33, Alcohol). Subsequently, he identified a market gap for strawberry cider:

*"...if I go to a show it is the one thing that will make me completely different from any other cider producer...there is nobody else in Northern Ireland or the South of Ireland doing a flavoured cider, on a craft basis, and I think that is one the things that definitely sets us apart".*

While there are other flavoured ciders on the market, they are "*on the commercial side*" which this producer inferred means an emphasis on processing rather than natural flavourings. This is a further example of a case of taking the traditional product and adding a "twist", resulting in a unique product range.

Incremental product innovation was thus evident through new ingredients and the introduction of related products with producers basing much of their experience on their individual "roots", including their rural/farming backgrounds where they initially began developing their interest in food production whilst also developing their palate. The implementation of radical innovation was much more time consuming, but networking and collaboration was used to provide market information, enabling the commercialisation of new products.

### 7.3.2 Process Innovation

Process innovation was evident but was highlighted by these enterprises only to a lesser degree than product innovation. This is perhaps not surprising given the artisanal nature of these businesses and the focus on traditional methods and tacit knowledge-based elements, and the added value through the embeddedness of the product in their local area. The method of operations, mostly by hand and tacit in nature, had not changed significantly and in some cases had been passed down through generations. For instance, a free-range meats producer remarked that

*“...production is low-tech, pretty much what people have done for centuries”* (A24, Meats). Other respondents supported this viewpoint, for instance: *“We have been making it the same way since 1940, so it hasn’t really significantly changed, it is all the old traditional handmade chocolates and sweets”* (A36, Confectionary).

These findings demonstrate that there were producers who were able to undertake process innovations and develop their innovative capabilities whilst staying true to their traditional, artisan credentials. Some of these activities differed radically from the activities owner-managers had been involved in previously. These included acquiring new machinery to produce cider more efficiently, whilst still involving traditional methods. A cider producer (A32, Alcohol) moved to pasteurisation but noted that *“most cider producers don’t pasteurise”*. This producer also moved to greater automation in order to reduce labour costs. Another cider producer (A33, Alcohol) referred to their product labelling evolving in the same way as the cider, rather than *“drastically changed”* and felt that they didn’t do anything that is specifically different from other producers aside from letting the cider mature for a bit longer.

For some of these enterprises there were no perceived benefits in introducing machinery into the business, particularly in relation to reducing the time involved to make the product. Therefore, there was a preference for persisting with traditional handmade methods:

*“We did buy a hopper. It is like a big stainless steel funnel. It measures the product and the product gets mixed and is put into it. But the countdown time, by the time you cleaned it all down, it wasn’t any quicker than doing it that way or by doing it by hand...We physically make the bases and they have to be in the fridge for so long and then physically mix it and do it by hand”*. (A21, Baked Goods)

Whilst there were restrictions to making products by hand, there were also associated benefits, including the uniqueness this brought to the product offering:

*“The disadvantage is the time and the labour – there is a lot more preparation time that goes into it when buying something in. But it always comes back to what we make is different here. People like it more. We found people said that was nice where can we buy that? We say you can get it here and it is handmade and you can get it onsite”*. (A19, Baked Goods)

Thus, traditional methods, and the way of doing things, was a contextual influencing

factor that played a role in restricting capacity for inside-out knowledge and exploitation of process innovation within this context. However, hand produced goods provide the producers with a unique selling point and thus the source of competitive advantage over larger competitors.

### 7.3.3 Market Innovation

The strong focus on product quality and product innovation has to a degree been at the expense of the development of marketing capabilities and market innovation. The enterprises thus lacked the marketing capability to exploit product innovation. This is typified in the case of an owner-manager of a desserts company who explained she had encountered difficulties when it came to marketing her product, which restricted the growth of the business:

*“I would benefit hugely from someone who has skills and expertise in the area of marketing...I don't have the time to do the marketing. And the online and the digital side of things and going out and talking to clients and so on. If anything, that has held me back (marketing of produce) I would have to say”.*  
(A20, Baked Goods)

Where market innovation occurred this mainly involved the expertise of family members, including sons and daughters of owner-managers, and friends, where they were heavily involved in new label design and branding, reflecting the originality and traditional background of the product. Story telling helped to communicate the authenticity of products and the history of how businesses developed. This was conveyed predominately through attending food related events and demonstrations, enabling producers to promote their brands. The attitude and actions of the owner-managers were the driving force behind market innovation, as well as their capacity to develop meaningful relationships inside and outside the business.

Maintaining close contact with network partners such as customers and competitors was critical for market intelligence purposes and there were opportunities to compensate for marketing skills deficiencies through opportunistic collaborations with external parties. The owner-managers were opportunistic in identifying ways to develop their business, including for instance identifying and supplying high quality restaurants that used a wide range of local produce on their menus. A producer of homemade pies, who had recently launched the company, explained how he developed awareness of the business and the marketing offering, through his

relationship with an established company: *“to be associated with a company is good for us... you may not have everything ready yet, but there is awareness there”* (A30, Meat). One of the more established producers in this study worked closely with a distributor, and through the marketing budget they had with them, they were able to pay a share to advertise their logo on some of their lorries. They maximised this “on the road” branding via social media. Facebook has played a very important role in raising the profile of the business at very little cost:

*“Facebook basically is the way to go. I’m saying that and I haven’t a clue how it works (laughs). My son does it, or my daughter has it and they manage it, and I simply say, get that on to it or something like that...”* (A32, Alcohol).

Barriers to fully exploiting market innovation included, primarily, lack of time to adequately market product ranges, and limited capacity and resources. As discussed in Section 7.1.2, for around half of these producers the scope of activities were at the local and regional levels within Northern Ireland. For those producers who were able to access markets outside of Northern Ireland, predominately the Republic of Ireland, through assistance from business support agencies (see Section 8.4), there were increased sales and expansion through exporting their products. Nevertheless, the largely regional focus of these enterprises suggests a limited knowledge base, and dependence on strong ties for innovation.

#### 7.3.4 Organisational Practices Innovation

Respondents highlighted a level of innovation around organisational practices. This mainly involved organisational learning and development “on-the-job”. Nevertheless, a very small number of owner-managers invested time and money into staff development, and time to develop new methods of organisational practices, mainly relating to training and restructuring of current practices (A6, A16, A18, A25, A34, A35). For instance, the owner-manager of an artisan bakery explained:

*“We have taken our staff team down in August and spent a morning with his staff (an award winning bakery in Belfast) ... We close six days a year just to concentrate on staff development. So we knew that we could do all the coaching and mentoring in the background, customer service was absolutely key.....”* (A18, Baked Goods)

However, not surprisingly, organisational practices were constrained by limited resources and few staff members. Family members were largely responsible for

running all functions of the business. Methods of decision making and organising work were very much shaped by the previous experiences and knowledge of the owner-manager, to some degree compensating for their limited internal capabilities. However, the management of all the key business functions took up a lot of their time, and was a key barrier in developing organisational practices. One owner-manager, the wife of a farmer who had received funding through the Rural Development Programme to invest in a diversification project (to build a bakery on the family farm) provided an insight into the realities of day-to-day activities:

*“...there are people who ring me and say could I speak to your accounts. Well you are speaking to accounts, the sales person, the baker and you are also speaking to the delivery woman, so I am everything and anything. I am doing what I have to do and then more....”* (A13, Baked Goods)

Other owner-managers provided similar accounts of the tasks they undertook on a day-to-day basis, and how this impinged on their abilities to devote the time and resource to develop organisational practices in their business. Beyond the production side, common issues related to the associated day to day business tasks and paperwork and the amount of information that had to be processed and responded to:

*“To do payroll, to keep everybody in line, do this here, you do not get time to even look at these other things, there is that many emails coming in on the computer and half the time you don't even have time to open them. And I think this is the problem where you are a small or medium business, it's getting then somebody who is going to specifically do that job, that paperwork job and so forth that way, and look at different ideas”.* (A16F, Baked Goods)

Limited resources and time therefore impacted on the development of the business, and forced the owner-managers to be a “*jack of all trades*” (A6F, Oils/Preserves). As a result, these owner-managers were, for the most part, not in a position to introduce new business practices for organising procedures. Nevertheless, through their involvement in Government support programmes they were able to introduce new methods of organising work relationships which included the development of new networks through involvement in Government support programmes, leading to innovation and knowledge exchange opportunities and outputs. This will be discussed further in Chapter Eight.

In summary, the findings reveal insights into innovation activity across the four main types. In relation to the innovation outcomes highlighted in Figure 4.2, the focus for

these enterprises is very much on product innovation, with examples of radical innovation, which is somewhat contrary to the view in the literature of food innovation as incremental in nature. The process form of innovation is less apparent here due to typical size, resource and sectoral constraints. The contextual factor of traditional production methods restricts process innovation in the artisan context. The contextual factor of product quality and authenticity has led to product innovation but this has been at the expense of the development of marketing capabilities and marketing innovation. These enterprises thus lacked the marketing capability to exploit product innovation.

#### **7.4 Chapter Summary**

The micro, food artisan enterprises in this study relied on extensive use of informal and formal networks for innovation. As proposed in the initial conceptual framework (Figure 4.2, Section 4.2) several contextual factors had an impact upon both inside-out and external knowledge capabilities and innovation practices, and in turn facilitated and restricted innovation. The findings presented here revealed the contextual factors of family influences/traditions, traditional methods, and product quality/authenticity.

In relation to the innovation outcomes highlighted in Figure 4.2, the focus for these enterprises is very much on product innovation, with examples of radical innovation, which is somewhat contrary to the view in the literature of food innovation as incremental in nature. The cases of radical product innovation were derived both from internal and external knowledge sources, moderated by contextual influencing factors, rather than through a reliance on science-based knowledge sources. The contextual factor of product quality/authenticity has led to product innovation but this focus on product has been at the expense of the development of marketing capabilities and opportunities for market innovation, in order to fully exploit product innovation. The process form of innovation is less apparent here due to typical size, resource and sectoral constraints. The contextual factor of traditional production methods restricts process innovation among these micro, artisan food producers.

The findings will be considered further in relation to the pertinent literature in the Discussion Chapter (Chapter Nine). The following chapter will explore external knowledge capabilities in relation to business support networks. The chapter will



examine the factors impacting on involvement in business support programmes and the outcomes from involvement in business support.

# **CHAPTER 8**

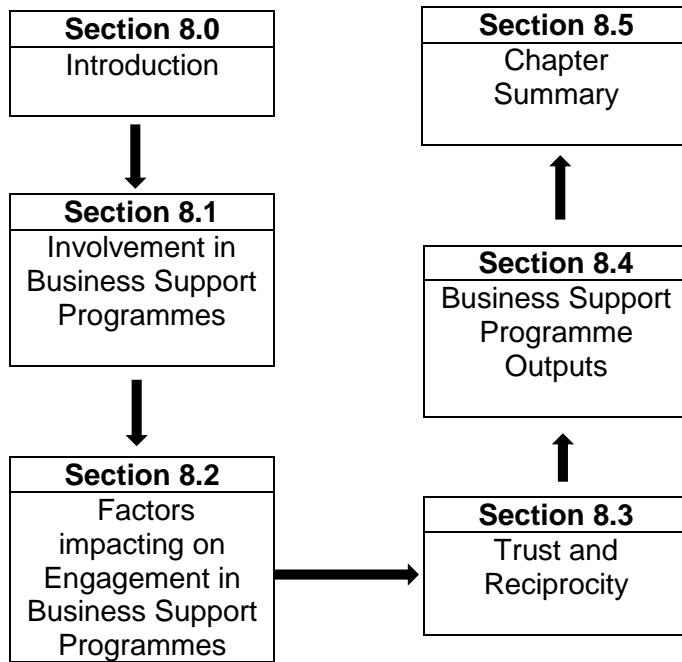
## **Findings on Business Support Programmes**

## 8.0 Introduction

This chapter presents the findings from the research that address research objectives two, three and four:

- RO2: To explore the factors impacting upon micro enterprise engagement in business support programmes, within the artisan food context;
- RO3: To explore the nature of relational aspects, such as trust and reciprocity, in micro enterprise engagement with business support actors, within the artisan food sector context; and
- RO4: To explore the innovation (and other) outputs from such engagement, within the micro firm, artisan food sector context.

The chapter will address research questions that emerged from the literature review and conceptual framework (RQ4-12) and that are linked to the above research objectives. The chapter will begin by providing an overview of the types of business support that the artisan food respondents in this study participate in. The chapter will then proceed to examine the factors impacting upon engagement in business support. The importance of trust within the business support environment will then be discussed and the factors impacting on trust development will be presented. Trust is identified here as a contextual factor that can restrict and facilitate engagement in business support. The chapter will conclude with a discussion of the outputs from business support programmes. Figure 8.1 depicts the structure of Chapter Eight.



**Figure 8.1: Outline of Chapter Eight**

### **8.1 Involvement in Business Support Programmes**

All of the producers in this study have utilised knowledge at some point from business support networks, which included providers such as regional Government, universities/colleges, local councils and trade associations. Table 8.1 outlines the key forms of support utilised by these enterprises during their period of operation.

**Table 8.1: Business Support Involvement**

<b>SUPPORT ACTORS</b>	<b>PROGRAMMES</b>	<b>PRODUCER INVOLVEMENT</b>		<b>PROGRAMME OUTCOMES</b>
<b>Department of Agriculture, Environment and Rural Affairs (formerly DARD)</b>	Rural Development Programme: Focus Farms	A32	Total = 1	Development of farm site facilities to provide farm tours and demonstrations to share experiences and encourage learning.
	Rural Development Programme: Mentoring Programme	A32	Total = 1	Mentoring to include aspects of the farm business that were of particular concern, and support the farm family in identifying options that met the needs of the farm business and the family. Development of a plan of action to help farm diversification.
	Processing and Marketing Grant Scheme (PMG)	A32	Total = 1	Financial assistance towards a capital investment project including installing machinery to increase production.
	Leader Funding	A13/A35	Total = 2	Funding for diversification including business creation and development.
	Research Challenge Fund	A32	Total = 1	Funding to undertake research and development.
	Regional Food Programme	A1/A2/A3/A15/A16/A20/A21/A24/A25/A26/A31/A32/A34/A35	Total = 14	Promoting local artisan foods via food markets / events in Northern Ireland helping small food artisans to assist the Northern Ireland agri-food industry to develop and sustainable businesses.
<b>Department for the Economy</b>	CERT Programme - Providing recruitment and training	A21	Total = 1	Assistance with recruitment and equipping employees with specialised skills in food to help drive innovation within the businesses.

<b>SUPPORT ACTORS</b>	<b>PROGRAMMES</b>	<b>PRODUCER INVOLVEMENT</b>		<b>PROGRAMME OUTCOMES</b>
<b>Local Authority</b>	<b>Down District Council:</b> South Easter Economic Development (SEED) 1 Programme	A1/A2/A21/A24/A26/A32	Total = 6	Stimulated and supported innovation within and between small companies in the food sector in the South Eastern region of Northern Ireland. Led to the development of new products/services; business collaborations; job creation and support from external bodies for advice and support.
<b>Local Authority</b>	<b>Down District Council:</b> South Easter Economic Development (SEED) 2 Programme	A1/A2/A3/A15/A16/A20/A21/A24/A25/A26/A31/A32/A34/A35	Total = 14	Stimulated and supported innovation within and between small companies in the food sector in the South Eastern region of Northern Ireland. Led to the development of new products/services; business collaborations; job creation and support from external bodies for advice and support.
<b>Local Authority</b>	<b>Craigavon Council:</b> Food Heartlands Programme	A1/ A32	Total = 2	Provided practical support and bespoke mentoring, export strategy development, access to industry buyers and stakeholder workshops for participants.
<b>Local Authority</b>	<b>Magherafelt Council:</b> Business Mentoring Programme	A18	Total = 1	Helped the small business owner-managers to develop their business skills and knowledge to introduce innovative products and new ways of doing things into the business.

<b>SUPPORT ACTORS</b>	<b>PROGRAMMES</b>	<b>PRODUCER INVOLVEMENT</b>		<b>PROGRAMME OUTCOMES</b>
	<b>Magherafelt Council:</b> Food Development Programme	A4/A6/A8/A9/A10/A18/ A23/A28	Total = 8	Helped food companies to develop new products enabling them to increase their economic sustainability whilst helping to develop links between local food producers and the hospitality industry.
	<b>Belfast City Council:</b> Retail Programme	A7	Total = 1	Increased knowledge and expertise to market products.
	<b>Belfast City Council:</b> General Assistance	A7	Total = 1	Helped this owner-manager to develop her business skills and knowledge to introduce innovative products and new ways of doing things into the business including marketing her product range.
<b>Local Authority</b>	Plato EBR Programme	A1 / A21	Total = 2	Provided SME owner managers with one to one mentoring support; specialist expertise and advice; the opportunity to network with other producers and business development training.
<b>Local Authority</b>	Down Area Rural Partnership	A31	Total = 1	Provided funding to convert a barn into a production plant.
<b>Local Enterprise Agencies</b>	Ards Enterprise Agency	A21	Total = 1	Provided assistance with financial software and the development of PR.
	Dungannon Enterprise Agency	A21	Total = 1	Provided assistance for developing a website.
	Down Business Centre	A15/A31	Total = 2	Writing of business improvement plans to secure funding.

<b>SUPPORT ACTORS</b>	<b>PROGRAMMES</b>	<b>PRODUCER INVOLVEMENT</b>		<b>PROGRAMME OUTCOMES</b>
<b>Invest Northern Ireland</b>	Innovation Vouchers	A1x 2 (CAFRE / QUB) A8 (Ulster University) A11 (CAFRE) A20 (CAFRE) A21 X2 (CAFRE) A23 (CAFRE) A30 (CAFRE) A32 (CAFRE) A34 (CAFRE) A35 x3 (CAFRE)	Total = 14	Assisted with product innovation leading to improved products and processes.
	Marketing Design Programme	A17, A20, A32, A35	Total = 4	Assisted businesses to improve the marketing of their products through innovative labelling.
	Meet the Buyer	A32 / A35	Total = 2	Provided assistance on exploring export opportunities with groups of buyers from outside Northern Ireland and received feedback as to how products could be developed.
	Food Support Team	A35	Total = 1	The Food Support Team advised on product and packaging development.
<b>InterTradelreland</b>	Mentoring Programme	A30	Total = 1	Helped the business to develop marketing materials and create a strong culture of innovation.
	Marketing Consultancy	A3	Total = 1	Provided consultancy support to undertake cross border research including the gathering of market and sectoral information.
<b>CAFRE</b>	Food Programme	A12	Total = 1	Assisted this owner-manager with the skills and qualifications in order to successfully set up a home business in line with legislative requirements.



<b>SUPPORT ACTORS</b>	<b>PROGRAMMES</b>	<b>PRODUCER INVOLVEMENT</b>		<b>PROGRAMME OUTCOMES</b>
<b>CAFRE cont'd.</b>	Food Business Incubation Centre	A34	Total = 1	Gaining access to CAFRE premises to manufacture food, this enabled this business to develop their product concepts and ideas into a business.
	Placement student	A1	Total = 1	A placement student helped grow and develop products including assistance with marketing and undertaking market research to influence product development.
	Study tour	A34	Total = 1	Provided this farmer with the opportunity to visit similar businesses in the RoI to share and exchange experiences and good practices.
<b>Further and Higher Education Colleges</b>	Health and hygiene certificates in level 3 / cake decorating courses	A21	Total = 1	Ensured that staff were constantly developing their skills to develop products and adding variations to existing products.
	Belfast Met Innovative Plus Programme (consultancy through a digital market consultant)	A20	Total = 1	Led to the development of a website and social media presence enabling the owner-manager to promote and grow the business.
<b>Universities</b>	General consultancy	A35	Total = 1	Provided student support to undertake market research with consumers.
<b>FoodNI</b>	FOODNI Membership	A7 / A12 / A13 / A14 / A20 / A21 / A32 / A33 / A35	Total = 9	Individual profiles of each business features in the local producer brochure, distributed across Ireland (suppliers, tourism providers etc). In one case this led to food producer A14 presented his produce to leading international food judges.

<b>SUPPORT ACTORS</b>	<b>PROGRAMMES</b>	<b>PRODUCER INVOLVEMENT</b>		<b>PROGRAMME OUTCOMES</b>
<b>NIFDA</b>	Access 6 Programme (EU ERDF INTERREG IVA)	A21 / A32	Total = 2	As a result of being involved in the programme, these small-business owner-managers received mentoring advice and support. This led to products being exported and sold in South America (A32)
<b>Business in the Community</b>	N/A	A20	Total = 1	Provided general business support and advice to the business, including how to obtain student support within the business
<b>Women in Business</b>	N/A	A21	Total = 1	General business support and networking activities.
<b>Bord Bia</b>	N/A	A1	Total =1	Provided general business support including information on farmers markets and distributors.
<b>Good Food Ireland</b>	Good Food Ireland Members	A1/A35	Total = 2	As Good Food Ireland members this enabled the businesses to further promote their businesses outside of the country of origin through their website and promotional materials.
<b>Reformat</b>	N/A	A21	Total =1	Development of knowledge and networks for this owner-manager and access to a group of professionals (solicitors, architects), to discuss general business-related issues.

A prominent form of business support engagement was involvement in the Innovation Vouchers Scheme. Of the enterprises taking part in the present study, 14 partnered with an educational institution on an innovation project under the Innovation Vouchers Scheme. Of these, the majority of respondents (n=12) partnered with CAFRE in the completion of the innovation voucher, as highlighted in Table 8.1. As discussed in Chapter Six, the Innovation Vouchers Scheme in Northern Ireland is administered by the regional development agency, InvestNI, and is used to build innovation awareness in small enterprises. As one business commented about their involvement in innovation vouchers, *“It really opens up your eyes and you are always learning”* (A30, Meats).

The data in Table 6.2 (Section 6.2.1) suggested that this programme has successfully introduced small food enterprises to introductory innovation support from InvestNI. Nevertheless, a local authority respondent who managed economic development programmes acknowledged that there was a lack of awareness about innovation vouchers amongst food companies: *“Just picking up on that from what we have done, it is clear that... quite a lot of small food companies are still unaware of the existence of innovation vouchers”* (BS1, Local Council). Furthermore, the interviews and focus groups with respondents provided support for the official figures illustrated in Table 6.2, in that there were no recorded applications to the collaborative network programme from small/micro food enterprises. Indeed, collaborative networks are generally not rated highly as a driver of innovation for these businesses.

Involvement in business support networks for these producers was also evident through funded business development projects, supported by European and regional Government funding, and delivered by local councils. These programmes provided more specialised and practical support, focused on the food sector, and were more tailored to company needs, than would have been available from regional Government departments, as illustrated by this producer: *“One of the bigger pluses for me was having that flexibility. I was not signing up to a programme that was set in stone”* (A34, Dairy). Such programmes have been organised by single councils or by a group of local councils. The aim of these programmes have been to address business development and support requirements of small scale food producers, to increase economic sustainability in rural areas and to create new employment and tourism opportunities. These programmes have had a mixture of innovation and knowledge exchange objectives which included the development of new products and

markets, the identification of collaborative opportunities in production and marketing, and access to new supply chains. The target companies for the programmes included micro-businesses in the food sector, typically specialist and artisanal in nature, employing less than 10 people located in the area. Only those companies that for reasons of scale, location or for other suitable reasons were unable to access other regional support programmes support were typically recruited to the programmes.

A broad range of supports have been used throughout the Local Council programmes which included structured elements such as daytime workshops across business management topics (including for instance, finance, sales, marketing, and product development), one-to-one mentoring, and best practice visits which included meetings with retail buyers and other local businesses. The structure of involvement in these programmes allowed for interaction with buyers from major retailers which provided the participants with valuable experience in business development and marketing.

Other forms of support that these enterprises used included various forms of mentoring and financial assistance from the Department of Agricultural, Environment and Rural Affairs. Perhaps not surprisingly, there has been a lack of engagement with university and local colleges as sources of knowledge. However, the main educational and innovation centre for agri-food in Northern Ireland, CAFRE, has been widely utilised. There is evidence from the respondents in this study that supports provided by CAFRE have been helped greatly to meet the needs of small rural food enterprises and the focus groups and interviews with the enterprises suggests they value these supports, and particularly the services provided by CAFRE in the development of new products and product testing.

Producers have engaged in trade association activities, and mainly FoodNI. FoodNI has assisted micro food producers to promote their businesses through their on-line directory and assisting food producers to exhibit at local food events. In terms of the food tourism and food experience agenda, Tourism Northern Ireland and FoodNI work to promote Northern Ireland produce including through the Taste of Ulster and “Our Food So Good” brands.

Whilst there is a wide range of support available for small food producers, the evidence suggests that the more tailored forms of support are being utilised. These

enterprises are engaging in introductory levels of support but not availing of more advanced forms of support to further help develop their innovative capabilities. These findings therefore support the themes developed from the stakeholder analysis in Chapter Six.

The following section will explore in more the factors impacting upon engagement in these business supports.

## **8.2 Factors Impacting on Engagement in Business Support Programmes**

This section will address RO2, which is concerned with the factors that impact upon artisan producer engagement in support programmes. The themes that emerged from the Nvivo (10) and qualitative analysis will be discussed and include: *growth ambitions; understanding and coherency of support, regulations and level of bureaucracy, and cost of engagement*. The analysis is derived from both artisan food enterprise and business support actor perceptions of support.

### **8.2.1 Growth Ambitions**

As discussed in Chapter Seven (Section 7.1.2), the producers had relatively modest growth ambitions that in turn restricted engagement with the business support networks or certainly a belief that there were constraints that the business had to work with. Friction between support providers and producers, and differing aspirations were evident. For instance, a cider producer (A31, Alcohol) recounted how his vision for the business differed somewhat from the business support actor who was *“coming to me talking about Harrods and Fortnum and Mason....and I am thinking, hold on, let me establish myself locally”*. He accused the same actor of *“thinking too big”* (A31, Alcohol), with promises of export opportunities and supply arrangements with premium retail outlets in London. For others, who more fully participated in the business support programmes, there were still obvious constraints to their growth ambitions, as highlighted for instance in the case of this well-established ice-creams producer who did not foresee any scope for export development: *“I don’t think we will move to a point of being a European player. I think that would be quite unwise...going down too many roads at once and not doing anything terribly well.”* (A35, Dairy). This was very much indicative of the prevailing attitude among respondents, as noted in Chapter Seven (Section 7.1.2) which was to act conservatively, focusing on producing

high quality products, and keeping the business small and manageable. Respondents highlighted fears around growing the business too quickly and losing control of their business as a result of feeling pressurised or “*pushed by somebody else*” (A31, Alcohol). A respondent, who placed great emphasis on his capabilities for innovation through intuition and “*palate*”, highlighted an attitude of self-sufficiency that was prevalent among respondents:

*“...someone may give you suggestions, but it’s up to me to work that through and get it into the final product...it’s very much up to me to be able to work through, again me making a change at this time to the final product, you know, I have to try and predict what that is going to be and I think that whole side of things is down to me”.* (A33, Alcohol)

Therefore, external bodies were viewed as being limited in their provision, and there was an inherent danger of the business taking too much advice, to the extent of eventually losing its identity:

*“...sometimes what happens with businesses is when they accept help like that they end up with a totally different business to what they basically started with, because they have taken everybody’s advice and they got lost in the middle of it all”.* (A17F, Baked Goods)

## 8.2.2 Understanding and Coherency of Support

The analysis identified a number of sub themes under a more general theme of producer understanding of available support and the coherency of the support. These sub-themes include: *perceived value of support; accessing support; adviser-client relations; lack of cohesion (or “joined up” approach); and specialist support*. Each of these sub-themes will now be discussed in turn.

### 8.2.2.1 Perceived Value of Support

The focus groups and interviews with food producers highlighted issues around the perceived value of business support. For the majority of the producers in this study there was generally some confusion around business support actor programmes. The sheer range of information, offerings and sources of knowledge stretched the enterprises’ ability to absorb such knowledge. The perceived value of the business support network was largely formed by previous experiences from involvement with business support networks. The negative perception of business support networks was evident in the views expressed by producers who felt business support

programmes from their experiences were really only “box ticking” exercises and that the nature of the support needed to be more practical and tailored to the specific needs of the business. Selected comments included, for instance: *“(My husband) doesn’t understand why you need someone from outside”* (A32, Alcohol) and, in relation to a food association body, *“they sign you up to a programme that means nothing”* (A34, Dairy). These enterprises did not see sufficient value in participating in regional Government knowledge sources, where such sources were perceived to be generic in nature and not sufficiently relevant to their particular context and operating needs.

In evaluating the level of available support, respondents made references to the environment in other countries. New Zealand was highlighted as an example of good practice in this respect. The Republic of Ireland, in particular, was cited as a supportive environment for small food production, more so than in Northern Ireland:

*“They (Republic of Ireland) seem to be producer focused, people seem to drive them as opposed to people in this country who seem to be a hostage to the Government”*. (A25, Meats)

*“The South have a different attitude.... The funders in the South is, we have this money, how can we give it to you? Up here (Northern Ireland), we have this money, how can we stop giving it to you....Shows down south (i.e. Republic of Ireland) are much better organised, Taste of Donegal is normally very good. Taste of Cavan last year was also very good”*. (A32, Alcohol)

Interviews revealed how the producers’ interpretation and understanding of an innovation labelled programme played a significant part in their assessment of the value of the programme. They seemed to engage in innovation implicitly and instinctively without thinking of themselves as being typically innovative:

*“To be honest I don’t apply for any funding or help regarding innovation because I always think that is something that goes towards technology or engineering or I don’t see that, and very often when I look into the criteria it is not about my product. I just think I do not fit into that”*. (A20, Baked Goods)

This theme was picked up on by a local council respondent who felt there was *“...still a perception that with knowledge transfer innovation there are people in white coats and labs and it’s nothing to do with smaller companies”* (BS1F, Local Council). This respondent believed that local council support programmes played an important role in creating awareness of the existence of other forms of support such as innovation vouchers.

There were mixed views on the usefulness of trade associations. While positive impacts were noted, respondents questioned their value: *“I am also a member of XXXX and I wonder why...”* (A32, Alcohol). This producer also took issue with the annual membership fee they were required to pay. Another producer commented in relation to the same organisation, *“XXXX (trade association) are probably on the periphery”* (A35, Dairy). In helping them to develop relationships with other local artisan producers, an artisan baker (A19, Baked Goods) stated in relation to a food body: *“they could probably be more proactive in setting up local links”*.

The findings illustrated a conflicting set of goals and a disconnection between some of the main business support actors (Government and trade bodies) and the artisan producers. Whilst the producers strove for embeddedness within the local market, they perceived Northern Ireland’s regional Government bodies and food trade associations to be focused primarily on larger businesses and export to the detriment of expanding the food market in Northern Ireland.

A commonly cited perception was the regional Government economic development agency focusing primarily on export to the detriment of support for local market development. A producer who had diversified from a long established apple growing farm business into cider production, commented during a focus group: *“they (Government economic development agency) are only interested in you whenever you are going to export....there is absolutely no help for doing anything at home”* (A32F, Alcohol). This was probed further with this producer during an interview:

*“...With (the economic development agency) ... or the bodies that are supposed to help you, they only focus on export. You get absolutely no help to grow your business locally which is, if you don’t have a base market to fall back on, what do you do?...There is a lot of products that can do very well in Northern Ireland without ever being exported...There is a lot of wee companies out there that truthfully, they are not geared to it, they don’t really want to be there, and if you say that, that’s a bad word”.* (A32, Alcohol)

This view was supported by other companies including an award-winning producer of artisanal breads, who had started out as a home bakery:

*“The only criticism I have with (the economic development agency) is they are not really interested within the family of Northern Ireland, I think there needs to be more help within the Northern Ireland family to promote within the family itself...and you know, there should be more in-roads into helping us within as*



*opposed to pushing us (outside Northern Ireland)". (A17F, Baked Goods)*

This respondent referred to the support received being more beneficial in terms of networks rather than "knowledge" gained and also emphasised that ultimately it was "...ourselves, we produced the right products and we entered the competitions, they (the external agencies) didn't, you know...". As discussed in Section 8.2.1, the producers' growth ambitions were not always aligned with the goals of the agency and this led to situations where owner-managers felt "pressurised" to export:

*"I have a chip on my shoulder, but unless you are exporting they don't really want to know you, and every time I spoke to them they kind of went, and will you be exporting out, and I was saying, well no I don't think so, and he kind of was telling me that, you know, you are supposed to say yes...they just want to fill in the wee box that said export, they weren't really interested in whether you were able to do it within Northern Ireland, and when I mentioned exporting even to the South, then they sort of took it a wee bit more seriously, and it wasn't really for export but it may have led to that at some stage". (A9F, Oils/Preserves)*

Respondents cited the need for a "voice" or collective body, which would provide scope for knowledge exchange, and which would also represent their views as a lobbying group for further support from Government. Despite a proliferation of associations and sectoral groups within the region, there was a lack of awareness in some cases of the existence of such bodies. There was also a perception that trade bodies increasingly tended to represent and reflect the interests of larger food businesses, who were not artisanal or specialist in nature, and that the enterprises were very much on their own, without a platform to air their views and without an overarching body that they felt could effectively promote the role of small artisan food businesses within the local economy. The changing nature of the effectiveness of such bodies was reflected in quotes from a number of producers who felt that such bodies have moved away from a focus on the needs of artisan producers, towards the larger food enterprises, which in turn made the producers question the value of their membership:

*"...(food body) to me has lost its way, because they started off for small artisan food producers like ourselves, and now they have been taken over by the big multiple food companies, the big boys...they (food body) have more interest in promoting the big things in Northern Ireland, and the big companies of Northern Ireland...for export outside of Northern Ireland...it's all export led". (A24F, Meats)*

The lack of understanding of business support network programmes, and the sense

of disconnection from the services of the business support actors, suggests a degree of rural isolation from the regional Government actors and trade associations. This feeling of disconnection and isolation largely was related to the type of support provided, as opposed to the negative effects of geographical distance.

#### *8.2.2.2 Accessing Support*

The respondents highlighted a lack of understanding of how to access support networks and which agencies to approach. Comments from a range of producers clearly illustrate this as a significant issue. For instance: “...we don’t know who to talk to”, (A36F, Confectionary); “I find it confusing because I don’t think anyone knows where to go” (A1, Oils/Preserves); “I find that unless it’s...an email that comes through about something I have signed up to, it is hard to find out” (A18, Baked Goods); “I don’t feel as if I have an easy portal or place to go. I feel it is like a big chore” (A25, Meats); “I could not tell you what is available out there and that is the truth” (A20, Baked Goods); and “...the message is not out there” (A13, Baked Goods).

Furthermore, there was a perceived reactive approach by Government agencies and a frustration at the time investment involved in identifying support programmes: “They do not come forward and say this is available, is it of any benefit to you? You have to realise it is there...” (A32, Alcohol); “I can only invest so much time in getting in touch with these folks” (A25, Meats); and “...have I time to go to InvestNI or read an email? That may sound silly but that is the point where I am at the moment” (A14, Baked Goods). Not surprisingly, the typical issue of time pressures for micro businesses arose as the producers were focused strongly on getting the product made and delivered to shops on time. This became all consuming with little free time for research aspects.

The nature of involvement in business support networks tended to be ad-hoc, rather than systematic or as a result of a proactive approach from the business support network broker. This came about due to word of mouth from family members, friends, and associates, for instance in the case of A30 (Meats) who availed of support through the innovation vouchers scheme: “You kind of hear about it from someone else who has done it before”. Another respondent accessed business support through customer contacts:

*“It was actually a customer that came to us and said we should look into it....my wife’s cousin who had worked for XXXX for years...it was kind of through a customer and family that we became familiar with that”. (A3F, Oils/Preserves)*

For others the purely opportunistic nature of involvement through personal networks was evident for owner-managers who noted the value of social networks in gaining access to business support networks:

*“By chance, I had been out with xxxx on the Business Programme and through it she had invited me to an event that was happening in the racecourse at Downpatrick, Down Council were putting on”. (A15, Baked Goods)*

*“The only way we started to get help was I ended up in a meeting with xxxx (named local prominent politician) who is very closely connected with those at the top of xxxx through marriage. Within a week I had xxxx (senior manager) standing on my doorstep, who apparently I went to school with”. (A32, Alcohol)*

To a lesser degree, for others the access to support was as a result of being on a particular mailing list or through the media: *“I know NIBusinessInfo would send stuff through about innovation vouchers which is how I found out about that” (A20, Baked Goods)*. Another owner-manager explained how he accessed a particular support programme: *“Through the internet I think. Probably an ad in the paper as well” (A32, Alcohol)*.

Not all of the respondents, however, bemoaned the lack of proactivity from support providers. A small number of owner-managers felt that adequate support and information was available. Several respondents signalled the need for the businesses themselves to be proactive in relation to enquiring about business support:

*“It is a case if you don’t ask, you don’t get. I have not found them (Government Agencies) proactive in coming to you. It is more if you ask them for something or say you need help or something. At that point they may come in. When you do ask, they have been good at it but in my experience, you have to be proactive”. (A19, Baked Goods)*

Some producers took a more reflective approach towards their own role and acceded that they could have taken more responsibility and actively developed their networks and interaction with business support actors, for instance: *“Maybe I am not proactive but I just wait to hear from them and react accordingly” (A20, Baked Goods)*. There was a difference of views between the business support actors and the producers on this. The business support actors felt that there were high levels of network support

available but that these needed to be communicated more strongly to producers. A Central Government representative simply said: *“It is a communication issue”* (BS14, Central Government). Communication of the objectives of the support programme was also deemed to be critical in avoiding misconceptions:

*“I think if you are doing any programme you set out what you want to get out of it, you manage expectations right from the start, some people you can tell them, but you can’t make them listen. They are going thinking this is going to sell all their problems, and it is about how you manage that and being very, very clear what the aims of the programme are at the start”.* (BS3, Local Council)

### 8.2.2.3 Adviser-client Relations

The respondents highlighted an issue of lack of consistency in the adviser-client relationship. The change in advisers has constrained the development of the relationship between the client and the support organisation, and which has led to much frustration on the part of the producers. These respondents explained:

*“I have never had someone I could call or ask. I have never had it...it has been on/off, on/off and then they send someone for one day and you never see them again. I haven’t had, I feel like XXXX for example hasn’t just done the things I need. I would have needed someone consistent who I could ring and you can say I am looking for funding and I want to do this. And they can say right here are your options, I have never had that”.* (A25, Meats)

*“...the major problem is the major changes from within and I certainly find on a personal level it is quite disconcerting for staff in there, one minute they have a portfolio, the next their job spec is changed either marginally or completely.... Continuity is a major problem in there, particularly for developing businesses for people like ourselves”.* (A35, Dairy)

Other respondents cited the frequency in which advisers were changed: *“this has been my third one – he seems to get things done”* (A32, Alcohol) and *“I have had about five client executives but to be honest...I have been passed all around the place”* (A20, Baked Goods).

Another issue that emerged was the lack of consistent and accurate information communicated from the client executives about available support to the producers. This varied depending on the capabilities of the adviser in question:

*“My client executive, I have no contact with, I find it hard to get any response from her and I have actually given up. I have not had any help and I have not*

*heard from my client adviser maybe in about a year and a half". (A20, Baked Goods)*

*"What he (the client executive) didn't tell me was that I had to apply for jobs funding before I applied for the Processing & Marketing Grant (PMG) Scheme because if I applied for PMG first I was not allowed the jobs fund. He knew we needed what we needed and he did not tell me that". (A32, Alcohol)*

#### 8.2.2.4 Lack of Cohesion (or "joined up" approach)

A lack of cohesion or "joined up" approach between Government departments was cited as a key factor contributing to some confusion among producers, and in turn restricting involvement in business support networks. The recently established Agri-food Strategy Board for Northern Ireland (as discussed in Chapter Six) would appear to be timely as there is a perception of a lack of a coordinated approach to support the sector, as this quote from a focus group respondent highlights:

*"I think all of the Government bodies need to kind of join up together, you know they seem to have different people working on different things... why aren't other bodies in partnership, working together and getting together and focusing and getting all the money in the pot together". (A29F, Meats)*

Other producers vented their frustrations at the lack of cohesion and communication between Government departments, and consequently a lack of a joined-up approach, for instance: *"We need an umbrella approach for all the sectors, all the support that's there...somebody you go to for whatever you need..." (A32F, Alcohol); "I have met with a lot of different people, and they have all been very helpful and so on, but to me I feel...that there isn't cohesion, it isn't joined up..." (A20, Baked Goods); "Very poor, not joined-up at all" (A9F, Oils/Preserves); "They (Government agencies) don't talk" (A28, Meats).*

Business support actor respondents acknowledged that the wide range of supports can be confusing, not well known, and not well understood (BS16, Central Government). Several business support actors (for instance, BS1, BS7 and BS35) noted the importance of clarifying to companies the types of existing support, and the agencies involved, in order to provide a "signposting" service. Central Government actors referred to informal arrangements for signposting and communicating basic information about other Government department programmes:

*"I know how our schemes work....but the other ones, I would have to be (given)*

*a contact, and say this is the person to speak to, here is the website, here is whatever else and send them away and let them pick it up, because we can't talk through all the schemes. (They) will be able to explain better. But at least tell them it exists". (BS13F, Central Government)*

Local Government also highlighted the importance of communicating within their organisations and sharing this information with small businesses. As one Economic Development Manager said:

*"I think by working with the council they can get access not just within Economic Development, a lot of our programmes also involve environmental services, access in terms of health and safety regulations, risk assessments, access and help, so it is not just economic development, it is other developments as well". (BS6, Local Council)*

Several respondents referred to the proliferation of staff contact points in each of the agencies as a particular issue:

*"The employer, particularly the small employer, would much prefer one person to come along with a potential portfolio of solutions, rather than ten people with one each. Because the indirect consequence of the ten people with one each is that the SME manager/owner becomes completely switched off from Government because they think that Government is completely overstaffed". (BS35, Industry Skills Body)*

*"You need somebody to go out and signpost and say this will do, because there are so many things...it is very convoluted and there are different bits and pieces and we recognise that". (BS13F, Central Government)*

These quotes again emphasise the need for consistency in the adviser-client relationship and the building of strong one-to-one contact.

Business support actors referred to the duplication in offerings between support providers, with too many organisations with interests in food. One respondent highlighted the duplication in offerings within Government but cautioned against the "huge undertaking" in eradicating this duplication, inferring a level of protectionism on the part of the support providers (BS13, Central Government):

*"I think one of the problems we have in Northern Ireland is that we have too many offerings. And it is confusing and a lot of stuff does cross over, not hugely but a bit. So they could probably streamline a lot better but that would be a huge undertaking...it is peoples' ownership of those programmes and whether they would relinquish the particular sectors which they are supporting. Which isn't perfect, but kind of where we are".*

#### 8.2.2.5 Specialist Support

The artisan food sector in Northern Ireland is still at an early stage of development compared to other regions (for instance in the Republic of Ireland). In relation to this, respondents highlighted a need for more industry expertise within the agencies in growing areas of artisan produce and referred to the need for “champions” for specific food categories. In some cases, and particularly among those producers in emerging areas of artisan production, such as cheese and cider production, there was a clear disdain shown for business support actor knowledge:

*“There was no-one else doing artisan cheese making in Northern Ireland at that stage. So their perspective is probably the same as a creamery, the likes of Ballybroshane or those big guys who produce thousands and thousands of kilos”. (A34, Dairy)*

*“There is nobody there really with the right relevant expertise, maybe on the brewing side, yes, not on the cider”. (A33, Alcohol)*

The need for targeted advice and guidance and mentoring, based on industry expertise and contacts, was highlighted in reference to support from the local development agency, InvestNI. However, perhaps not surprisingly a representative from the regional development agency would dispute that perception to a degree:

*“...a big part of our service which does not get as much recognition as it should is the advice. So we know who is doing what roughly in the industry...So a lot of that advice has worked very well, but it is probably not as well known, people who have availed of it are very appreciative”. (BS13, Central Government)*

This suggests that there is information and support available but the breadth of support is not always recognised by these businesses.

#### 8.2.3 Regulation and Levels of Bureaucracy

The food producer respondents recorded their dissatisfaction with the enforcement of regulations and levels of red tape that were generally viewed as restricting development and the spirit of innovation. This is encapsulated in the following quote:

*“We are all full of good ideas and everything, but from a support point of view I’m not too sure, I think probably what happens to me is when you hear about different things and different funding. It all becomes so complicated and so full of red tape that I just give up”. (A25, Meats)*

Various issues were highlighted such as the expense of meeting requirements that were constantly changing: *“they keep changing the rules”* (A21, Baked Goods); the length of time needed to complete paperwork; and the length of time taken on decision making on funding applications: *“it takes too long - you need the money now, not next year”* (A17F, Baked Goods). The relatively stronger impact of restrictions and legislation on smaller businesses was highlighted, where it was felt that there was: *“a tendency to burden the little guys much more than the big ones”* (A3F, Oils/Preserves).

The application process for financial support was viewed as highly burdensome, complicated and not worth the time invested. A respondent explained the amount of work involved in applying for Government assistance:

*“...There are so many hoops you have to jump through to get anything these days, there is form after form, meeting after meeting, only for someone to tell you, well you don't really qualify for that option....”* (A1, Oils/Preserves)

Issues were encountered with the requirements for match funding, regarding the information that had to be obtained in order to complete the application, in addition to the actual match funding itself.

The eligibility criteria for forms of support led to increased bureaucracy and associated costs. Whilst innovation vouchers were widely used, they were not without criticism. For instance, the requirement to form a limited company to apply for an innovation voucher was cited and described as *“an expense that I don't really need at this point in time”* (A3, Oils/Preserves). Another producer referred to the cost that they had to incur when using innovation vouchers: *“The vouchers you get are four grand, but you have to pay the vat on it so it's costing you 800 quid”* (A5F, Oils/Preserves). Another owner-manager reiterated this point: *“...they made me pay £800, which was a mission for them!!!”* (A1, Oils/Preserves). The restrictive conditions associated with the innovation voucher were highlighted:

*“Anything under the innovation voucher cannot be sold commercially, you have to give it away as samples. £4000 does not go a long way. I think it was six productions. The first three were purely on a 40/50 trial basis to make sure the recipe and the milk was working right”.* (A35, Dairy)

The “joined up” theme was highlighted again, in relation to variations across Northern Ireland and a perceived harsher regulatory environment in Northern Ireland compared



to other regions of the UK:

*“There certainly is the impression that environmental health in Northern Ireland, it does vary from place to place in terms of how strict some councils are as opposed to others, but not only that, there is the feeling when you talk to anyone within this sector that it is impossible to do things in Northern Ireland that can be done in Northern Ireland, Scotland, England or Wales in terms of doing something in the farm shop or on the farm. You hear and experience something from someone in England, no could not do that here. I don’t know if that is your experience as well?”* (BS36F, Rural Agency)

On several occasions respondents once again compared the situation in Northern Ireland less favourably with other markets, namely that of the neighbouring markets of Republic of Ireland and the British Isles:

*“...Some regulations we find quite irksome, some a bit more common sense can be applied, as someone, as I have told you, has travelled fairly extensively throughout Europe you know. There are certainly standards within Europe that are interpreted much more laxly than they are in Northern Ireland, indeed than they are even in the Republic of Ireland”.* (A35, Dairy)

This viewpoint from producers was supported by a senior industry representative:

*“...it is difficult to underestimate the effect of regulation and environmental control in businesses in Northern Ireland. It is much more difficult to trade in Northern Ireland and do business in Northern Ireland than it is in any other neighbouring countries, the UK, England, Scotland, Wales and the Republic of Ireland”.* (BS37F, Food Strategy Board)

This respondent also felt that the emphasis among agencies has been more on the “policing” of regulations and bureaucracy, rather than an “enabling role” to foster business growth, leading to a generally unsupportive business environment. This theme was picked up on by a number of business support actor respondents who referred to the need for the regulatory bodies to be “educated” on the nature of artisan food:

*“I have worked in the food industry specifically for 22 years now and it is really important to produce safe food, but there are EHOs out there who will be incredibly pedantic and unhelpful and do live up to their scary reputation”.* (BS25F, Food Association)

#### 8.2.4 Cost of Engagement

Costs and availability of finance was highlighted as a general barrier to innovation for these enterprises in their survey responses during the focus group stage. In terms of business support engagement, the role of monetary incentives in galvanising interest in collaborative networks was identified by business support actors. As noted in Section 8.2.2.1, a theme from the focus groups and interviews with the food producers was the need for a “voice” or collective body to represent the views of the small food producers. However, the cost of engagement with knowledge providers and trade associations was cited as a prohibiting factor. A Government economic development representative noted:

*“...They are very reluctant to engage with universities or consultants as it can be expensive. In a lot of cases the consultant’s day rates is more than what the Managing Director gets within the company”... (BS13F, Central Government)*

An industry body representative noted the reluctance among the producers to pay for a basic level of trade body membership:

*“I have artisan companies who would like to join...and they bark at our minimum fee. They are not prepared to pay it. And my general answer is you would not get that service for any less”. (BS22F, Food Association)*

There were clear economic and monetary objectives linked to involvement in business support. Respondents valued the opportunity to access food events to help promote and develop the business. These events were often scheduled within a programme at a reduced entrance rate: *“...without that £750 I probably could not have went to Balmoral Show or I would have had to sacrifice other shows for that one” (A14, Baked Goods)*. A producer of goats cheese explained that they wanted to learn about non-bank sources of finance:

*“We approached the programme knowing that finance would be an issue for us. We were made aware of opportunities that may have taken another six to nine months and I might not have known what I was looking for in terms of a best fit”. (A34, Dairy)*

The engagement by a select number of producers in these network programmes was noted by one business support actor, a consultant who delivered local council business development programmes for small food businesses. This actor observed

an over-dependency on business support networks in some cases:

*“There is an awful lot of serial programme goers. I see the same faces day in day out on programmes. Every time I advertise for a programme there is a set number of people that will apply for that programme. I know exactly who they are going to be in advance. I know they will apply and avail of whatever they can get in terms of money. They do no work whatsoever in terms of changing their business”. (BS31, Food Industry Consultant)*

This rather negative view of participants' motivations for involvement was supported to some degree by producer respondents themselves who noted that the subsidised access to events within Government support programmes was a clear motivation to join the network. The sharing of costs was a further benefit to be gained from networking within these programmes. For instance, some respondents noted how they had been able to share the costs of a stand presence at a trade show.

In summary, a wide range of factors impacted upon the micro enterprise engagement in business support programmes. Interaction with business support networks was also greatly moderated by the value placed on trust; trust in relation to other producers and trust in relation to the business support actor/network broker. This study's research objective three was concerned with trust. Therefore, the trust theme will be discussed in the following dedicated section.

### **8.3 Trust and Reciprocity**

This section will address research objective three by exploring the role that trust played in the interactions between support agencies, advisers and their clients. Research objective three considers the relational aspects around the nature and dynamics of trust, cooperation and reciprocity in these network forms in relation to the impact on actor behaviour and innovation network outcomes. The section begins by presenting the respondents' (business support actors and producers) views of the importance of trust and reciprocity, and will then proceed to consider how trust is built between support actors, and the factors that lead to loss of trust.

#### **8.3.1 Importance of Trust**

Trust issues impacted on engagement in formal network support programmes and, in turn, collaborative activity for innovation. The nature of trust is discussed in this section at various levels, including between the support programme organisers,

between the participants, and between the participants and the programme organisers. Furthermore, trust is identified as a contextual factor impacting upon engagement in business support programmes, and thus the extent of knowledge transfer, collaborative activity and innovation undertaken by these enterprises.

The interaction with business support networks was largely influenced by the value placed on trust by the producers; trust in relation to the business support actor: *“You have got to trust the people who are supposedly supporting you”* (A32, Alcohol) and trust in relation to other participants or peers: *“I think there has got to be trust...there has to be sharing. You can’t go and take everything, there has to be sharing. You have got to be willing to help.”* (A21, Baked Goods).

There were varying degrees of trust exhibited towards Government agencies in general terms and participants voiced more trust in agencies that were more focused on supporting the agri-food sector. As discussed in Section 8.1 respondents held agencies such as “CAFRE”, the food science college for Northern Ireland, in high esteem. The college helped to develop recipes and secure intellectual property rights and acted as a platform for producers moving onto the next phase of network support development. This was in contrast to agencies such as InvestNI that were viewed as being focused primarily on export to the detriment of expanding the food market in Northern Ireland. As discussed in Section 8.2.2.1, there is a conflicting set of goals and a disconnection between some of the main Government agencies and these artisan enterprises, and this in turn has restricted the development of trust.

The business support actors also recognised the need for trust and the role of trust at various levels. For instance, the delivery agents on support programmes spoke of a strong trust-based relationship with the programme manager at the council, as also demonstrated at meetings attended by the researcher (see Appendix Seven), also which allowed for some flexibility of delivery and to change aspects of the programme where deemed necessary:

*“If they don’t trust us, they’re not going to give us the freedom to run the programme. There were times when we were going back to the council and saying we need to change something. XXXX always said yes because he knew we always did it with the interests of the participants at heart and as long as they knew that we were focused on the businesses getting the best from the programme they were happy to trust us. ...We trusted him and he trusted us. The trust was there and very important”* (BS33, Food Industry Consultant).

In return, a programme manager viewed the delivery agents as specialists who understand small business and the sector:

*“You have got to have people there who understand the needs of small businesses and that doesn’t just mean about how your company runs, or it is having an empathy and understanding the stresses and strains if you like on any small/business owner-manager particularly”.* (BS1, Local Council)

The relations between the programme manager and the delivery agents here were therefore strongly trust-based. That is, although the delivery agents’ contracts contained objectives and targets, and although monitoring procedures were put in place (e.g. agents undertook regular one-to-one meetings with the programme manager, and quarterly meetings with the funding consortium to check progress), beyond these, the programme manager trusted the agents to get on with delivering what had been agreed: *“the programme is led and has been led by the advisers”*. This example highlights how strong trust-based relations between the business support actors (individuals who are already familiar and well-known to each other) result in a low control mechanism to monitor progress.

### 8.3.2 Factors Impacting on Trust Formation

The factors that led to trust formation between producers and the business support actors, and at a peer to peer level between participants, were explored with respondents and were found to be multi-layered and include factors at the business support actor-producer interface (empathy, knowledge capabilities, local embeddedness, conflicts of interest) and at the macro level (sectoral/cultural context). Each of these will now be discussed in turn.

#### 8.3.2.1 Empathy

Trust is built between the business support actor and the producer where there is a degree of empathy. Empathy, a behaviour-based phenomenon, refers to the degree to which the business support actors attempt to understand and fulfil participants’ needs, and build effective relationships. The degree of empathy demonstrated here was related to the type of business support in question. Actors with a food or rural focus, or who were more locally embedded, tended to demonstrate an empathetic approach. Local councils, providing specialist and tailored programmes, viewed their role as actively developing small business collaboration:

*“...you are talking about getting companies to collaborate together within a programme whereby an SME has to take on a lot of issues where the local authority might be better at dealing with. I think we can do a little bit of work in there...we as a local authority can help local businesses to collaborate together”.* (BS2F, Local Council)

In a highly empathetic approach, a degree of “handholding” is key, with a single point of contact, where a long- term relationship is formed with the actor who has an understanding of the business. The relationship building aspect was highlighted by this business support actor with a strong food and rural focus:

*“With smaller businesses it is much more of a relationship, you really become like part of a family, so that support is a lot more personal. We are there to support the businesses ....some businesses need a lot of handholding and just even to be on the end of the phone”.* (BS29, Education)

This actor continued by giving an example of her role in facilitating network building among producers by providing a physical space for interaction:

*“In our distribution centre there is a canteen area and that is where that happens (network development). They will chat over a cup of coffee. It is collectively that people know of the facility. They know of the clients that are in the facility, and it is really spin offs...”*

The facilitating role of business support networks was noted by another business support actor who believed that food network programmes allowed for: *“a space to be able to bring those companies together, and by creating an opportunity for them to make links with each other”* (BS1, Local Council). However, the network support from these more empathetic business support actors was not unconditional, nor provided for over an indefinite period. Actors expressed the view that the enterprises should only be using these networks for a limited time, either moving on to more advanced networks for innovation or concentrating on developing their business without further external support. For instance, this business support actor stated:

*“We should not be working with the same businesses for years and years. We should be working with them for a set period of time...It is not about sitting holding hands the whole time because I think that does them damage”.* (BS3, Local Council)

Several respondents referred to a lack of empathy or chemistry with a delivery agent on a local council business support programme and reflected on a differing approach and personal style between this delivery agent and the corresponding actor on an

earlier programme, which was less engaging and less focused on relationship building. This was also observed by the researcher at events attended (see observation notes, Appendix Eight). An example was in the initial baseline assessments or audits conducted by each actor. The delivery agent on the first programme used these more as an opportunity to delve more into the motivations and expectations of the participants rather than a simple data collecting exercise. The lack of empathy on the second programme was highlighted in the case of a cider producer who recounted a story about the delivery agent visiting him at home:

*“I asked him if he wanted tea or coffee and the first thing he said was, have you any green tea? And I thought to myself, not every house will have green tea!” (A31, Alcohol)*

There was however empathy apparent with some members of the delivery team on the second programme who were involved as mentors to the participants. One mentor in particular was described as “*absolutely superb*” and became a main point of contact for participants as the relationship with the delivery agent deteriorated (A24, Meats):

*“I am very fond of (mentor). (Mentor) listens (network broker of programme two) does not listen. (Delivery agent) does not care if events do or do not work. (Delivery agent) does not give a hoot. He has got the funding, delivered the programme..... (Delivery agent), never asks how your sales went”.*

The delivery agent on the first programme noted how she developed rapport and empathy with programme participants in order for them to demonstrate her capabilities and value. She placed a high degree of importance on one-to-one engagement with the participants, getting to know them in order to understand their motivations and expectations, following up on actions and developing “chemistry” with owner-managers in order to develop their confidence. Her approach was therefore intuitive and focused on relationship building:

*“The only way I can build trust with them is that they have confidence in me, that they believe that I know what I am talking about. That they believe that I can add value. They are all really busy. They are all very experienced at what they are doing and very good at what they are doing, so they have to believe it’s worth their while giving me time....You don’t need to know everything but you do need to be able to go and find it out for them and you have to do what you said you would do...you have to be as good as your word... There is also a chemistry and personality thing. You have to get on with them and you have to build a relationship and if they don’t like you and trust you, you are not going to get anywhere with them”. (BS33, Food Industry Consultant)*

This business support actor thus took a long-term approach which led to the development of strong, trustful ties fostered between herself and the participants. While this led to beneficial outcomes (new product development and collaborations), participants came to rely heavily on the actor for ongoing support and mentoring. Following the commencement of the second programme, the participants of this programme who had also taken part in the first programme became frustrated at the loss of the peer-to-peer social and knowledge exchange support which had been a key feature, for them, of the first programme. These participants were very keen to revive the interactions, and this led to the actor continuing her support and facilitation of the group, as well as continuing individual mentoring activities, on an informal and unpaid basis:

*“People on that programme still ring me and email me if they want contact, particularly ones I mentored. It’s the same with other programmes I ran in the past. When you mentor someone you develop a very strong relationship with them...I would see some of them regularly, some of them had me back to do more work for them outside of the programme. That peer support network still exists after all these years. 7/8 years later that role still exists”.* (BS33, Food Industry Consultant)

Although the actor did not voice any particular concerns with the consequences of this extended involvement, the findings do reveal the workload consequences for those who are identified as trustworthy advisers in business support programmes.

Actors with a broader economic development role took a more “hands off” approach, and viewed their role as supporting the development of networks but believed that the networks should become self-sustaining and that responsibility for long term sustainable networks would lie with the producers themselves: *“we will encourage it but they will have to come together”* (BS13F, Central Government). Another central Government business support actor questioned the level of support that should be provided for these size of companies, given a perceived lifestyle orientation:

*“...they have to agree to collaborate and work together...there is support to get a network up and running but the intention is not that Government should be handholding...the networks have to become self-sustaining”.* (BS16, Central Government)

There were numerous examples of how business support actors sought to develop greater empathy and build trust. Actors reflected on a change in stance that had seen them take a more inclusive approach towards building relations with producers: *“I*



would say there has been a shift...it is done much more on an inclusive basis" (BS14, Government Department). Likewise, another Central Government respondent (BS13F, Central Government) reflected on the development of his role as a business adviser, moving away from a reactive to a proactive stance through visiting the businesses more on a one to one basis ("*I am very aware of having to build a relationship with the companies*"). He explained the importance of visiting the business and listening to what they had to say:

*"You had to go out and see them. You sat and listened and gave them the first half an hour to talk and you just sat and listened to show you are there for them and then they start to talk".* (BS14, Central Government)

This actor further explained the importance of communicating with the producers:

*"I think I said to them that I understand their language...They knew I was doing it for them, so instead of thinking there is the man from the ministry...they knew I was doing it for their benefit".* (BS14, Central Government)

Thus, empathy between the adviser (business support actor) and client (programme participants) was a critical factor in trust formation and in the perceived trustworthiness of the business support actor.

#### *8.3.2.2 Knowledge Capabilities of the Business Actor*

The perceived capabilities of the business actors was a further factor in the development of trust in business support programmes and impacted on producers' involvement in networks, and in turn restricted or facilitated knowledge exchange. Knowledge capabilities included the extent to which clients felt advisers had the skills and competences necessary to carry out their job. This included not only the technical knowledge advisers possessed themselves, but also their leadership abilities, and capacity for connecting participants into productive and beneficial external networks.

The knowledge contained in Government departments was questioned by respondents with a range of examples provided of a lack of knowledge on the part of the adviser. As discussed in Section 8.2.2.5, respondents highlighted a need for more industry expertise within the agencies in growing areas of artisan produce and referred to the need for "champions" for specific food categories.

Respondents formed negative perceptions of actor knowledge from prior network involvement and this in turn shaped attitudes towards subsequent involvement (or lack of) in business support networks. For instance, this producer lost confidence in the knowledge and capabilities of the business support actor in relation to the practicalities involved in getting the product to market: *“I knew I had much more experience of it...they were in no position to run the programme”* (A32, Cider). Participants sought practical support to address day to day challenges. One producer explained:

*“I think they need (to give) more practical support. As in giving people better tools, educating the smaller producer to think bigger. I still think they are only telling people about the tools, they’re not actually giving them the tools...”*  
(A12, Oils/Preserves)

The participants’ trust was related to the value they placed on the actor’s ability to provide tangible outputs and to make things happen: *“They have to believe that it will add value for them”* (BS33, Food Industry Consultant). A producer recounted:

*“...to invite me to a one day session in a hotel where there are three speakers, I am not going to go, no matter who they get to speak, no-one is going to be that important to me you know. But doing an actual event like a Christmas market or something, actually organising a money-making venture”.* (A25, Meats)

Thus, trust was developed (or not) through the actions and commitment on the part of the business support actor and the achievement of outputs in relation to the participants’ expectations for the programme.

For producer respondents who had accessed support previously and who had progressed on to second phase, follow-up support programmes, the similarity of content was a concern and it was felt that the follow-up programme delivered more for new participants who had not participated in the previous programme. As one participant explained: *“I haven’t found the second programme worth it, which is very disappointing because there is no reason why the second programme was not as good”* (A1, Oils/Preserves). An example cited here was the “best practice” visits that were viewed as not adding value for experienced businesses and those who had participated in the first programme (due to the similarity of best practice companies involved):

*"I was gaining nothing from it. I was going over old ground. I had to move and try something different. The best trip visits were covering old ground....what was the point of that? We had already done that when they had already brought in buyers from supermarkets...I did not need to waste two days...."* (A31, Alcohol)

Although in this case there was an expansion of the second programme to include more food producers, the potential for further collaboration was not exploited:

*"I think XXXX (the second programme) has fallen short of what it agreed to deliver. I think the premise and the idea is great...and there has been a lot more new producers from when we started. It is a great idea but why aren't the actual producers meeting up? I think the biggest thing is that you need that group mentoring as such".* (P35, Dairy)

This particular producer also highlighted the need to expand the scope of the programme both in terms of content and geographical location, away from the confines of a local space to the region more widely: *"I think it is a bit of small mindedness that it is not across Northern Ireland. I think there are good producers in other parts of Northern Ireland"* (A35, Dairy).

Respondent producers sought to compensate for this knowledge deficit through learning accrued from exchanges between producers on network programmes, where practical knowledge and experiences were exchanged to solve problems and where assistance was gleaned for addressing day-to-day problems that were very much industry specific.

There were examples cited of positive experiences of business support that garnered respect from the producers and fostered trust and a resulting engagement in networks. A respondent who was a participant on a programme recounted how a mentor with extensive retail industry experience provided access to important networks during a best practice visit:

*"He was a revelation. From what I know of his background he certainly presses a lot of buttons in a lot of places that matter. That isn't easy to repeat when you go elsewhere. Some people would just name the names and they think well I have to do this for another 3/4 days and earn my consultancy fee. I felt he went that extra mile. He was intent on opening doors".* (A35, Dairy)

Moreover, the passion and drive of the adviser was highlighted and this drive was seen to act as a source of motivation. Respondents spoke of the proactive and

enthusiastic nature of business support actors that allowed access to networks which were either perceived to be not available to the respondents:

*“She was brilliant. She would ring me and say funding is opening, is there anything you need funding for, do you need any help? Is there something you would like to do? A very clever lady, really supportive very enthusiastic”. (A12, Oils/Preserves)*

*“XXXX was very proactive and interested in us and everyone on the course and her mentoring and things like that. I think you need someone really good as the driving force, which XXXX was and she organised a lot of interesting talks and things”. (A24, Meats)*

*“The business plan I got to help me with the application to put the application in place, they were fantastic...lovely fella...I went to the XXXX Business Centre and I met with (business consultant) and he was fantastic”. (A31, Alcohol)*

#### 8.3.2.3 Local Embeddedness

Local embeddedness refers to client identification with advisers, which leads to credibility and legitimacy, and trust. Here, trust and legitimacy is achieved through being known locally or having a good working knowledge of, or relationship with, the local agricultural community, where “champions” are embedded locally within the community. More trust was placed in the business support actor if the actor was based locally and thus deemed to be knowledgeable about the business as relationships developed over time:

*“I think there has been more trust (in the local programme) because there are more local people and because they know the local area – all of the meetings with (the export programme) have been in London. Everyone is on edge”. (A21, Baked Goods)*

The nature of local embeddedness may be demonstrated in one case where a business support actor with a food industry focus (BS14, Central Government) played a highly important role in bringing previously disconnected producers together to form a cooperative network with common goals around food quality and origin, leading to strong, locally embedded ties. The actor recounted how he had developed a food quality (PGI status) application and set about to bring producers together. The application was subsequently successful and led to the formation of a food producers’ group:

*“They didn’t really speak to each other, they had no combined marketing - they just heard about this particular food thing and thought it sounded like a good idea, to one of them primarily, the others were a bit dubious...”* (BS14, Central Government)

The network was facilitated by contact between this Government actor and the local council which led to contact with a producer. The producer could see the potential marketing benefits to be gained from the proposal and became a champion and influencer for the network. The process represented a long-term commitment from the business support actor to bring about the network in the face of initial opposition from the producers and a food culture in Northern Ireland that was not strongly developed:

*“They were not particularly interested....because Northern Ireland did not have any PGI products so there was no story that we could tell and the Northern Ireland consumer do not know anything about PGIs. When I first started looking into this...it was not in the consciousness of the food here anyway. It just was not there”.* (BS14, Central Government)

This was the first time that the producers had worked together and it was a direct result of the Government business support actor taking the initiative to them, effectively working as *“a catalyst which brought them together and they are now doing something themselves”*.

#### *8.3.2.4 Conflicts of Interest*

The producer respondents highlighted how perceived conflicts of interest diminished trust. An example of this could be seen in views towards Central Government departments where a group of sectoral producers shared the same client executive, therefore making some producers more guarded about what information they disclose: *“The client executive that comes to me is the same one for food. You have the one man going around them all so you have to be careful what you say”* (A32, Alcohol).

Another example of conflicts of interest was at local council level where several respondents who had taken part in a business support programme highlighted the issue of self-interest and opportunistic behaviour on the part of the delivery agent, using the social capital generated within the programme for individual gains. In the view of a number of respondents there was a clear regression as the programme

progressed. At the start of the programme there was optimism and goodwill towards the programme, based on experiences of a previous support programme as illustrated by quotes from several respondents around their aspirations for the programme:

*“...It’s great to go and see how other people do it, you learn so much by others, other people that have been successful. Because everybody is doing something that wee bit different, and you can tweak what they do to suit you and I think that’s important”. (A32F, Alcohol)*

However, there were also early signs that some participants were beginning to question the value of the programme and how the programme would benefit them and their businesses (see observation notes, Appendix Eight). In this programme, the delivery agent had organised supply arrangements with participants to a distribution company, using a generic brand, owned and managed by the delivery agent. This signalled changing power relations between the participants and the delivery agent where the support model moved towards a formal contract supply relationship and where the distribution arrangement involved supplying products under a uniform brand. Respondents’ views on this were framed in terms of a previously positive experience of a programme where there was an equitable relationship of mentoring and support and a strong trust-based relationship with the delivery agent based on the value of the agent’s knowledge to the business. While participation in the programme was not contingent on involvement in this particular supply arrangement, it led to a perceived conflict of interest and a negative response from participants: *“now everyone will be on guard to not to tell them any more information” (A21, Baked Goods)*. Linked to the breakdown in trust was a belief that the original goals of the network were not met and expectations for the programme were dashed when it was felt that promises were not kept by the delivery agent: *“He came up here and he promised us the earth, moon and stars, and nothing has materialised” (A24, Meats)*. The branding issue caused friction where there was a reluctance to sacrifice the company brand:

*“I was not prepared to give up my brand for them. I felt if I was spending every hour available under the sun to grow my business why would I produce under license for somebody else particularly when they want me to produce a product I have no knowledge of and spend a lot of money on trial and error”. (A34, Dairy)*

The new arrangement was perceived to have damaged trust, not only between the participants and the delivery agent but between the participants themselves:

*“When they started talking about this branding thing, whatever they call themselves... I think at this stage that started bringing in, is that not a conflict of interest? Instead of trying to keep everyone together, they have sort of tried to make us splinter off ... and they have pushed people over other people to get the best price for themselves. It might be better for some businesses than not, but they haven't helped themselves...”* (A1, Oils/Preserves)

Respondents explained that this breakdown in trust led to a disengagement from further stages of the programme. Some participants stopped engaging directly with the delivery agent, and instead only communicated with an events assistant employed by the agent. For those participants who had made the decision not to engage fully in further programme activities, there was scepticism of the benefits promised to other participants who had taken part in the formal supply arrangement: *“I thought some of them (producers) were under a bit of an illusion. They were told they would be able to do this and do that”* (A12, Oils/Preserves). The suspicion towards the delivery agent's motives led to participants questioning the veracity of the knowledge and advice received:

*“I didn't find the mentoring great because I feel (delivery agent) has his own agenda which is to develop his own food business and he was very much steering us in that direction and he might have been right in the things he was saying but one always wondered what the agenda was? Did he want to supply us with his own intermediary food business? We were always a bit not sure about the advice”.* (A25, Meats)

The delivery agent's views on how the programme had progressed in design and content were very much at odds with the participants' expectations and perceptions. The expectations of participants around the content of both programmes were entwined with wider views of the delivery agent's knowledge and capacity for delivering real benefits. In contrast to the participant's perceptions, the delivery agent saw himself as a network broker who was also a producer (*“products on licence”*), taking a very active role in the development of the network from the programme. This, he believed, helped to build trust with some, if not all, of the participants:

*“...we started developing our own products and we started being a small producer ourselves. The fact that we are an artisan producer of food products, the fact that we are working with these people under licence and we are buying from them is naturally developing that trust. Some of them, many of them are seeing us as one of them. We have developed a very strong relationship with many of them. There are others though on the programme who see us a threat”.* (BS31, Food Industry Consultant)

The delivery agent viewed the introduction of the new model as an innovative

approach to programme delivery, allowing for the distribution of the participants' products and providing a new type of business support model where the agent had a more involved role rather than purely a passive provider of knowledge. This was viewed as an investment and risk: "...we have actually wanted to make a difference with the work we have been doing and not just fill in the boxes" (BS31, Food Industry Consultant). This model was also viewed as a means of fostering a network culture against the backdrop of individualistic behaviour from the participants, through providing a "*practical vehicle to try and involve businesses...every individual in the programme only looks at themselves and that is the truth*".

The high trust relations between business support actors was referred to in Section 8.3.1. The trust-based approach of the programme manager in this case was problematic. Both the programme manager and the delivery agent commented that they had known each other a long time, so were very familiar with each other. As such, the programme manager believed that the delivery agent was adopting an empathic approach to participant relations. With such a trust-based belief, and only minimal control mechanisms to monitor progress (the programme manager met directly with participants only occasionally, and informally), it can be seen how the problems which arose were not picked up and addressed by the programme administration. This result highlights the risks of over-reliance on trust-based relations, particularly when individuals are already familiar and well-known to each other.

#### *8.3.2.5 The Sectoral/Cultural Context*

An analysis of the findings suggested that trust was related to sectoral-cultural issues, pertaining to the region and related to the small size of the Northern Ireland market, and a fear of competition. Producer respondents highlighted cultural tendencies within their own sectors that did not favour collaboration. For instance, a breads artisan recounted how "*the home bakeries are very parochial and local for themselves*" (A17F, Baked Goods) and a prevailing attitude among cider producers of a lack of appreciation of the benefits of working together was noted (A32, Alcohol). A cider producer (A32) bemoaned the situation where competing cider companies send their product to England to be bottled rather than use local producers' bottling facilities. This producer identified a prevailing attitude in this sector, one of a lack of appreciation of the benefits of working together: "*but you might learn something about*



*my product if I let you have it, or you might do something to it*". The failure to collaborate was linked to a reluctance to share knowledge: "*local businesses involved are not prepared to give, but they are prepared to take as much as they can get*" (A35, Dairy).

In Chapter Six (Section 6.2.1) a lack of collaboration among small food producers in availing of supports was noted. This issue was explored further with respondents. The 'sceptical' nature of many food producers (BS31, Food Industry Consultant) and a lack of recognition of the value of collaboration, were deemed to be part of 'the psyche' (BS28, Education) and characteristic of the food sector and farming more generally in Northern Ireland. Business support actors spoke of a "cultural" issue in the Northern Ireland market around a fear of competition which obstructed efforts to foster networks:

*"From my experience, I know if we had an open session with a number of competing businesses in a room no-one would speak to you, but if you spoke one – to one, they would share information and ask stuff, so there is a whole mind-set issue there. And in reality what impacts on one, impacts on all".* (BS28, Education)

*"It has been said that historically our famers, food producers have been a bit hesitant about sharing information with each other and they tend to hide away from fear rather than recognising the potential that has to be gained by collaboration".* (BS36F, Rural Agency)

On this theme, a business support actor respondent (BS13, Central Government) referred to the nature of family businesses in Northern Ireland that have been established over several generations and have an ingrained aversion to working with businesses that they have traditionally been in competition with: "*...only God and the accountant know their details; nobody else is allowed!*" This business actor also made an interesting comparison between Northern Ireland and the Republic of Ireland, where in the Republic of Ireland "*companies seem to collaborate and come together easier*". The respondent used the example of the comparative number of "Framework 7" funding applications in each jurisdiction to support this assertion.

The small size of the Northern Ireland region may be deemed a contributory factor to this "culture" of fear of competition: "*Because Northern Ireland is so small all the independents are talking to one another, watching each other, what they are doing*" (BS3, Local Council). The business actor respondents also believed that fear of disclosing company secrets prevented collaboration within sectors as they may be "a

*bit precious about what they tell everybody in case somebody sells their idea*" (BS7, Local Council) and "...a lot of people are reluctant to share business issues" (BS13, Central Government). A local Government business actor recounted how a few years previously there had been attempts to develop a cluster but it did not happen "*because they were all so similar they didn't want to talk*" (BS5, Local Council).

The sectoral cultural context was manifest in the producers' shared values around product authenticity, which represented a tacit values-based approach, and shaped individuals' priorities and perceptions of their own contribution to collaboration. The theme of product quality and authenticity as a contextual factor impacting upon innovation was highlighted in Section 7.2.1.1 and Section 7.2.2.5. As indicated in Section 7.2.2.5, there was a reluctance to do business with others who did not share the same values around the quality of the product. This set of values thus was applied in relation to possible collaborations with other producers in business support programmes. The meaning of trust in this context was the trust between the producers around product quality, and the trust from consumers in the quality, provenance and authenticity of the product, within the context of past food scares and a growing consumer interest in locally produced, artisan food.

The findings reveal contrasting narratives between business support actors and participants across the various forms of business support. As the above quotes illustrate, actors can use stereotypical narratives of trust to offer explanations for lack of engagement in business development programmes. Here, lack of engagement in support programmes is attributed to historical cultural issues surrounding the industry in that a wider culture of mistrust tends to pervade the sector, and that lack of engagement is only to be expected in business support programmes in this area. Conversely, where particularly trustful relations have been developed, there is no reference to wider societal cultural issues around trust, and there is a sense of greater engagement, which may suggest there are other factors at play rather than simply a systemic lack of trust among this group.

In summary, trust is identified from these findings as a key contextual factor impacting on engagement in business support programmes. Trust relations and trustworthiness are shaped by factors at the adviser and sectoral levels. The next section will proceed to present the findings on outputs from business support programmes.

## 8.4 Business Support Programme Outputs

This section will address research objective four, which focuses on the innovation and other non-innovation outputs from engagement in business support programmes. Business support programmes invariably set targets for innovation, however there are less tangible outcomes related to opportunities for network building, knowledge exchange and learning that would not necessarily lead to innovation. Thus research objective four also seeks to explore the wider network building and knowledge exchange impacts that follow on from network relations between micro enterprises and business support actors.

### 8.4.1 Innovation

As discussed in Section 8.1, the main form of involvement in business support for these enterprises has been through introductory support programmes, such as the Innovation Vouchers scheme. This has led to new product development and testing, that has in turn provided opportunities for new product launches and wider forms of innovation, around processes and ways of doing things. The scheme was widely praised by the respondents:

*“The innovation voucher was fantastic. Without it I would have struggled to get the project going. Some people criticise it and say it is not an innovation voucher, it is a subsidy for using a college. Well so that is knowledge that we can tap into. That is perfect. But it was a Godsend...it was very much valued”.*  
(A34, Dairy)

A Central Government business support actor highlighted the benefits for small food producers in using innovation vouchers:

*“...the voucher seems to sit very well with the very small companies. A lot of people who start food companies don't have a food background and they don't have technical expertise in food...and they don't know their way around the Environment Health Officers and the quality requirements. They know how to make a good product...”* (BS13, Central Government)

This actor noted the value of the scheme in providing the small food producer with access to knowledge around food production and quality control requirements. The extension of shelf life is one example of a food production aspect that required this form of external assistance. A desserts producer, who worked with CAFRE on extending the shelf life of her products, explained how this helped to develop her

business:

*“The innovation voucher...was brilliant...Now my company has moved on and I have people like Donnybrook Fayre, Avoca and Fortnum and Mason and so on, saying that we would love your product, we would stock it tomorrow, but we will not consider it as you have no shelf life....I need to know about shelf life, I need to know about freezing temperatures and how that affects the quality of the product, it has been brilliant”. (A20, Baked Goods)*

Another producer of desserts explained how her involvement with CAFRE in an innovation voucher enabled her to meet changing food regulations, ensuring that the proper information was displayed on the packaging (A23, Baked Goods): *“We are hoping to get all the nutritional information set up which will be compulsory in 2016... fat content, salt content”* (A12, Baked Goods). A producer of goats cheese commented how participation in an innovation voucher also through CAFRE helped them to develop their quality control procedures and production processes: *“I wanted to stream line the production process, get the recipe developed...And develop HASPITS and that side of things with them”* (A34, Dairy).

The scheme also offers the potential for small businesses to work collaboratively and “pool vouchers”, where up to ten companies can work together, however, as noted in Section 8.1, none of the food enterprises in this study availed of this option. This Government representative explained that this was due to a combination of small businesses not wanting to collaborate despite their limited resources:

*“...it is hard to bring people together.... It is difficult, or to be honest, they are just too busy or they have their own very specific focus on what their business needs and they don't have time to look at maybe a longer or wider range of programmes to solve a bigger holistic problem. They just want to fix (a problem)...or make money next week. That is a barrier to innovation in general”. (BS13, Central Government)*

Nonetheless, the Innovation Voucher scheme has provided opportunities for product innovation and collaboration that followed indirectly at a later point in time. An ice-cream producer explained the benefits of becoming involved in the scheme, how it led to product innovation (the introduction of new products to the Northern Ireland market) and how they fostered collaborative activity off the back of the innovation voucher:

*“At our level of innovation, innovation vouchers have been extremely valuable. Minimal bureaucracy in terms of receiving support... We have had a number*

*of requests from this new wave of local brewers who would like us to use their product in an ice-cream". (A35, Dairy)*

Beyond the Innovation Vouchers scheme, involvement in local council programmes has led to innovation and wider business collaboration and knowledge exchange outcomes. Participants on local council programmes have been assisted to develop and launch new products and prepare new products for existing markets. Examples of new products created and distributed through local council programmes cited by participants included: mango, mild and cider confit; beetroot and ginger chutney; hot ginger non-alcoholic port; non-alcoholic green apple beer. There was also evidence of new product development for the wholesale market and the hospitality sector.

There were only limited cases of collaboration between the participating businesses on programmes that led to product innovation and product development. Some selected examples of collaborative activity that led to product innovation and business relationships between the respondents in this study and cited by the participants occurred within sub-sectors (A16 and A23, Baked Goods; A2 and A3, Oils/Preserves) and across sub-sectors (A2, Oils/Preserves and A20, Baked Goods). The majority of collaborative activity involved new supply arrangements between participant businesses.

In addition to the recorded levels of innovation emanating directly from business support programmes, the serendipitous nature of external knowledge for innovation can mean ideas come to fruition at a later point, as illustrated in the case of this cider producer:

*"I have always been one that has been very keen...if there was a course on something or a meeting somewhere I would go and sit and listen, because I always believe that there is always a nugget of something there. And you hear it and it might not mean anything at the time, but you might be driving home, or you might be thinking about something and all of a sudden this all comes to fruition". (A32, Alcohol)*

More widely, business collaboration, networking and sharing of knowledge occurred in various forms through the programmes, including: the formal parts of the programme (through events, cluster meetings, collective sessions and best practice visits) and the informal interactions between participants; the business support actor bridging to other forms of support; and the organic development of networks following the formal end of business support programmes. These wider forms of networking

through business support programmes will be discussed in the following section.

#### 8.4.2 Knowledge Exchange in Business Support Programmes

Whilst involvement in business support networks brought direct innovation outputs, the knowledge transfer and learning from business support programmes was key. In particular, respondents referred to the importance of availing of tailored support from local council programmes and mentoring from expert business consultants. These programmes tended to represent a practical and flexible form of support, addressing day-to-day challenges facing micro size food producers. A desserts producer highlighted the benefits of mentoring, enabling them to better manage their time:

*“In terms of the different consultants coming to me as opposed to me having to go and meet with XXXX. That takes a lot of my time, I live in a rural part of Northern Ireland but it is about two/three hours out of my day for me to go into Belfast for a meeting. I find when people come out to me I have produced a website in my own home. I have taken one hour out of my day to do that, I think it is really crucial”. (A20, Baked Goods)*

This quote also illustrates the impact of the rural location context on the respondent's motivation and inclination to use more centralised forms of business support that required travel and time away from the day-to-day business of making the product. This owner-manager also highlighted how one particular programme, organised by a local Further and Higher Education College, helped the growth of the business to escalate in 18 months.

A local council respondent emphasised the importance of a flexible approach to business programme development:

*“There has to be flexibility built into them to allow different businesses who have very, very different needs, especially food businesses, so when you are designing the programme for funding and XXXX want you to tie the programme down so you know what you are doing for every minute of every day, and exactly what every business will get out of this, that is not realistic, it has to be flexible, it has to allow for change if you need to change things...When you put the application in, develop the programme, until you start delivering there is a bit of a time lap, and it has to be there”. (BS3, Local Council)*

This quote indicates the flexibility required not only in terms of adapting to meet the needs of clients but a willingness to divert from the original goals of the programme where necessary.

Knowledge exchange between fellow programme participants was considered a key output from the involvement in business support networks. The food producers participating in this study who had been part of a formal network, facilitated through funded business development projects, noted the success of the participant networking, which led to business opportunities.

Again, this was particularly the case for those programmes provided at local council level, that were provided in rural locations, close to the participants: *“You learn so much from others...other people that have been successful...and you can tweak what they do to suit you and I think that’s important”* (A32F, Alcohol). The knowledge gained from the experience of other programme participants was highly valued, relative to the formal knowledge imparted by the business support actor in the form of consultants or presenters at conferences and workshops: *“Basically through their experiences they can really pass it on to you. Everyone has been so helpful”* (A24, Meats). A baked goods producer, who had quite recently started the business, explained:

*“Because I am new to all of this I was just trying to gain as much knowledge as possible. There are a lot of people on it who have been foodies in business and different things for years. A lot of very clever, knowledgeable people. If you can get one bit of knowledge and they can point you in one direction, it is brilliant”.* (A15, Baked Goods)

There was value gleaned from the social capital that derived from the interactions and relationships with other participants involved in a support programme network. The trust between participants was evident through reciprocity: *“any help I get, I am straight on to someone else to say, do this or don’t do that”* (A20, Baked Goods). The networking facilitated knowledge transfer and learning from fellow programme participants and helped with the sharing of ideas and identifying solutions to problems from companies that had gone through the same difficulties: *“I made a lot of contacts and that was a great thing about the programme, you know, able to network and meet lots of people”* (A2F, Oils/Preserves).

The role of networking “events”, both specifically organised as part of the formal network or in other cases “signposted” by the business support actors, in providing a space for forging relationships was noted by both business support actors and producers. Access to events was a clear factor in participants’ decisions to join

programmes, and the access to events was rated particularly highly as effective programme content. The networking from attending food events and the friendships that were developed was evident:

*“It is an affiliation of friendships really. You can grumble to each other and they understand your grumbles. There is definitely an affiliation of artisans when you go to things like that”. (A12, Oils/Preserves)*

The value of peer support was highlighted by this respondent who enjoyed meeting up with another producer at network events:

*“...a very clever chap, he was friendly with my father....I like to hear his take on things. I would see the likes of him being very steady and not in it just for himself”. (A12, Oils/Preserves)*

A strong degree of empathy and trust was demonstrated here as both producers were from the same rural area originally, from a similar farming background (dairy farming), and had a connection through family members.

A number of respondents used the phrase ‘camaraderie’ to explain the nature of interactions from meeting other participants at supplier meetings, presentations, food markets, festivals and agricultural shows:

*“They are all very niche, very small, and quite scattered and it is hard to bring them together. The only way you can bring them together is through events. Through things like the food market, they are not going to come to conferences, they are not interested in that...they are too busy, and they need to be out there making money. So that type of thing, bonds, relationships, because there is a real camaraderie between them all when they are at those events”. (BS3, Local Council)*

This helped to develop a strong peer support network where social capital and trust were primarily built outside the more formal aspects of programmes, and in settings where participants could socialise and have more time to get to know each other, as illustrated by a selection of comments from producer respondents: *“...the residential was when people really let their hair down, had a bit of craic and it was much more laid back after that” (A21, Baked Goods); “A two day event like that you got to know more of the people in the group after talks and things like that. Having a few drinks and getting to know them” (A24, Meats); “...it is in a shared environment....a safe environment really I think...”. The socialisation and reciprocity that developed from these informal gatherings was also emphasised by business support actors:*



*“Collaboration stemmed from them spending time together. We had a couple of residential events and a trip to London...some people think they are junkets but my experience is that the amount of goodwill that comes out of those, the amount of collaboration and joint working, the amount of peer support...we don’t get that when people come to a one day workshop. When they go away together on a residential, that’s when that really happens. You sit in a bar and have a drink with someone and you really have a chance to get to know them...the trust has been built up because they got to know each other”.*  
(BS33, Food Industry Consultant)

The socialisation arising from the networking and the formation of friendships therefore facilitated the exchange of knowledge between participants and led to bonded social capital. Friendships and relationships were forged over time and trust developed towards the end of support programmes and from pre-existing embedded ties and relationships of trust from involvement in earlier network programmes:

*“...it was near the end of (the programme) before people had got to know one another. There was a bit of craic... the relationships were formed then, who they liked and who they didn’t like. Who got on and who was happy to help”.*  
(A21, Baked Goods)

The importance of taking time to develop working relationships was noted by a business support actor who has delivered numerous support programmes: *“That sort of collaboration that happens when businesses start to get to know one another. Work and trust one another”* (BS33, Food Industry Consultant).

The involvement in business support networks, and the knowledge gleaned through the formal and informal interactions, had a transformational impact on participants’ confidence levels. This was more evident that in the case of the broader informal networks discussed in Section 7.2.2.5. While the respondents exhibited extreme levels of confidence in their products and their quality, they were much less confident in their abilities as entrepreneurs and marketeers. The issue of confidence was highlighted repeatedly by producer respondents. Respondents spoke about the reassurance that involvement in food development programmes gave: *“it reassured us that what we are doing is good...it has given us that confidence...we didn’t necessarily learn a huge amount (from elements of the programme) but it reassured us that we were on the right track”* (A23, Baked Goods) and that the programme has given *“more confidence that my products will sell”* (A3F, Preserves). A Government representative from a local authority highlighted the importance of ensuring that within their role they helped owner-managers to develop their confidence through the

assistance and programmes they provide:

*"It is a confidence builder. If you can give them the confidence to let them know that there is support behind them, to invest some money and take it out of your kitchen, and go and rent a unit and pull all of that together, I think to do that without the help of your local council would be quite difficult".* (BS6, Local Council)

Business support actors played an important network bridging or connecting role for these enterprises. The main forms of network bridging will now be explained.

#### *8.4.2.1 Business Support Actor Bridging Role*

The generally strong role by business support actors in connecting producers to other forms of support and knowledge providers was evident. This network bridging occurred through personal/business contacts and word of mouth. For instance, a pie maker (A30, Meats) became involved in a mentoring scheme with a consultancy company through contact with InterTradeIreland, the all-Ireland cross border business development agency. This contact allowed the business to develop their production processes, using specialist expertise provided by the consultancy. Several respondents, for instance A20 (Baked Goods) and A34 (Dairy), availed themselves of contacts from the regional Government economic development agency for product testing support through Government subsidised consultancy from the food science college, CAFRE. The college helped to develop recipes and secure intellectual property rights and acted as a platform for producers moving onto the next phase of network support development *"if it wasn't for CAFRE I wouldn't have a product and I wouldn't have went to DARD which got me my business plan"* (A1, Oils/Preserves). Access to informal producer networks was gained through a study visit organised by the college: *"...had I phoned them I do not think I would have got the same reception. The fact that we were there, they were more open and ready to talk"* (A34, Dairy). An ice-cream producer (A35) invoked assistance from the Department of Trade and Investment in London, during a Nuffield scholarship which *"opened doors"* to the trade people in the embassy for the initial countries that the company was able to export to. A further link with the Irish embassy in Prague was particularly beneficial as: *"...he knew all the major players in Czech, he knew their wives, in some cases the family, because his family were embedded in Prague, he was part of the social circle"*.

The network building/bridging role of business support actors was also evident in how business networks for innovation grew from events that were communicated by the actor. For instance, a cider producer (A32) explained how she had developed a very good relationship with another producer and his wife who were very much “in the know”, commenting on how it led her to be involved in an exporting event with the local economic development agency. The couple advised her about the event, and it subsequently led to an opportunity to export to South America.

In local council business support programmes significant network bridging to other forms of support occurred. Participants received further support from InvestNI, including mentoring/consultancy support in the form of innovation vouchers. A small number of participants also received financial assistance through InvestNI grants. A strong example of network bridging was the case of a business support actor involved in delivering a local council support programme. The programme provided access to new market opportunities for the participating companies. The actor played a key intervention role, in providing support beyond a purely advisory role, and this subsequently helped to sustain peer support networks that emerged from the programme. The actor reflected on the network building role and the bridging capital from that:

*“There was lots of signposting. Signposting to Loughry for food development. They got signposted for shelf life testing, a lot of those technical things. They also got help to apply for Innovation Vouchers. They also got signposted to InterTradeIreland’s cross-border programme and if they were looking for help to develop that marketplace. They got signposted to InvestNI for marketing help. They got signposted to the Guild for Fine Food. They got signposted to NI Food. They got signposted to the Great Taste Awards through the Guild for Fine Food...”* (BS33, Food Industry Consultant)

Therefore, the extensive bridging to other forms of support outside the main programme led to opportunities for innovation. In this particular case the programme participants were able to introduce new processes:

*“Packaging was a big thing. XXXX (participant)...got an innovation voucher and did work with Loughry in terms of the bottling of the product. And also how to use fresh berries within the alcohol and to improve that process”.* (BS33, Food Industry Consultant)

Business support actors played an important role in connecting participants to other similar local authority programmes, where participants were given the opportunity to

access events from the “sister” programme:

*“So the 25 companies we took down to Dublin was a mix between XXXX and XXXX (named business development programmes). And all of those people developed some very good interactions between them and that is the network really alive and moving”. (BS31, Food Industry Consultant)*

However, not all participants saw any significant value in this relationship and there were no collaborative outcomes from this particular venture. Participants did not view the external group as part of their own cohort, from their own local area:

*“And then we are supposed to be doing XXXX (named business development programme) which is great, which is our local area and then they are adding XXXX (named business development programme) into everything, which again if you are trying to promote a certain area, then how does that work when you are bringing in another group?” (A1, Oils/Preserves)*

#### 8.4.2.2 Post Programme Network Development

Informal and formal networks grew out of business support programmes either organically as participants maintained contact and collaboration, or as a response to failings in earlier business support programmes. The value of on-going contact and peer support with participants displaying strong reciprocity after the formal programme ended for the purpose of knowledge exchange was noted: *“If I have a problem I can phone them up and say, what about this?” (A1, Oils/Preserves)* and *“if I needed to I could lift the phone and speak to them” (A15, Baked Goods)*. This was the case both in local council business development programmes and in trade association networks.

There was evidence of the formation of informal and formal groupings as a reaction to a breakdown in the formal support network and the perceived shortcomings of a local council business support network programme. A loose, informal network of producers emerged for the purpose of knowledge exchange, and was facilitated by a consultant with extensive experience in food programmes and who was known to the network members from a previous programme. The actor further explained:

*“I facilitated the meeting for (named producer), free, just to help her and because I have a real commitment to this...I am the only non-food producer on it, probably because I facilitated the meeting...They meet, they have a Facebook page and people are constantly putting stuff up on it all the time...It is really lively, really good, has been a fantastic support to them. The other*

*thing that they do is every three months they have a meeting, someone hosts it...,they organise a speaker or they do a tour and then they just talk to each other about what they want out of it. And that is one of the spin offs, all the food producers being in touch with each other...115 members". (BS13, Industry Food Consultant)*

Informal contact had been maintained between this actor and network participants, over a number of years (see Section 8.3.2.1). The social cohesiveness of the group and bonding capital helped to overcome the perceived negative consequences around the lack of external business support, and the perceived failings of the programme in relation to knowledge capabilities and trust issues (as discussed in Section 8.3). Here, the quotes also demonstrate the embeddedness of the ties and bonding capital wherein members continued to exchange after the completion of the formal programme and its associated benefits of events and financial incentives for involvement.

In addition to this informal network, a further business support programme was set up. This was co-ordinated by one of the councils that had been involved in the original programme. This participant referred to the benefits of the new programme:

*"Now xxxx have set up a food forum so we are meeting up every month or whatever before the end of the year. By doing that sort of idea that is getting people to talk and getting more ideas coming through from that area. You know what works really well". (A1, Oils/Preserves)*

More generally, the continuation of formal networking arrangements following the end date of the business support programme proved challenging and a source of regret for business support actor and producer respondents. Following the end date of a fixed term support programme the benefits of formal networks tended to quickly dissipate. For instance, several of the respondents had been on two linked formal local council business support programmes, and there was a gap in delivery between the programmes due to a lack of funding support. This gap restricted momentum that had been built up during the 18 months of the first programme and thus had implications for the development of trust. The timelag caused frustration among participants:

*"If you are trying to develop something you need to work at it for a long time. And that means the programme approach... We are all trying to innovate and then it is gone....it doesn't have to be the same staff but it needs to be like the same organisation that you deal with that stands between you and the programmes and as the programmes ebb and flow, they can deal with you,*

*they can continually steer you in the right direction... They don't know if they can create their programme a year and a half ahead which is not great from a client's point of view. It is as if you are dealing with an advertising agency and you are not sure if they are going to be there". (A25, Meats)*

*"I want to be able to come out at the end of the year or two years with a group that actually works in function, rather than abandon ship, whether that is just meeting once every couple of months, or every six months, but at least doing this afterwards, where its ongoing and from the outset....so they're not thinking at the end of the two years, oh yes we'll have to get a group together now, that the group is already in place...it can continuously go on". (A1F, Oils/Preserves)*

Equally, the lack of sustainability was an issue for business support actors, given the difficulties in maintaining relationships between participants when one formal network comes to an end. This was highlighted by the business support actor who was involved in delivering the programme:

*"...we spent 18 months initially working on the XXXX programme; we got companies involved and we started to initiate the process then the funding finished...Then it took another 18 months to follow on from that programme. We had to start from scratch. There was not a continuation process within the development of some of these food programmes...They start to apply themselves to something then it all stops". (BS31F, Food Industry Consultant)*

Despite some efforts on the part of the programme organisers to encourage the participants to organise themselves and maintain the network, this participant led approach did not work. An actor responsible for the management of the programme explained: *"there wasn't anyone there with the time or ability to do it for everybody"* (BS1, Local Council). For some participants, however, there was a feeling that the group had come to a natural end point. An ice-creams producer (A35, Dairy) reflected on their involvement in a particular cluster within the programme:

*"I am thinking of our own group/network, we have probably gone as far as we can go in terms of exchanging ideas, moving products from our place to their place and so on. I think that has come to an end".*

At a more general level, the issue of sustainability of local council programmes was highlighted as problematic by this support actor, who reflected on how this challenge could be addressed, through the involvement of larger food businesses more actively supporting the formulation of networks with smaller producers, for the betterment of the food supply chain:

*“...one of the things that we don't do is look at sustainability of the programmes, we look at them for a period of time, while there is EU funding in place, but maybe we need to look at them in a different way. Maybe we need to think about how we sustain them in the long term future, maybe one of the ways to do that is to try and call on some of the larger producers to add their weight behind the whole thing and create that synergy”. (BS2F, Local Council)*

While network groups that were set up within programmes may fail to be maintained, nonetheless, there is a degree of peer learning and development of trust that emerges following the termination of programmes. As discussed in Section 8.4.2, some of the participants and the actors responsible for programme delivery may maintain contact, albeit in an ad-hoc way through occasional phone calls, email, or the use of social media, for the purposes of dealing with practical problems.

## **8.5 Chapter Summary**

This chapter explored external knowledge capabilities in relation to business support networks. The chapter examined the factors impacting on involvement in business support programmes and the outcomes from involvement in business support. In summary, while there was involvement in business support programmes, this was mainly at an introductory rather than advanced (collaborative) level for innovation and knowledge exchange.

Trust was a broad contextual factor that had a strong impact upon external knowledge capabilities and engagement with business support programmes, and in turn facilitated and restricted innovation. At a sectoral level there appear to be cultural issues around trust that restrict outside-in and inside-out knowledge capability and the potential for collaboration from business support programmes that would lead to innovation. That said, the findings suggest evidence of fruitful collective action that had developed where members had developed positive, trusting relationships and had continued to work together following the completion of the support programme.

In relation to the innovation outcomes highlighted in Figure 4.2, the nature of innovation developed from involvement in business support programmes was mainly around the product, through the Innovation Vouchers scheme, and tailored (local council) business support programmes, and mainly incremental rather than radical in type. As demonstrated in Chapter Seven and the findings on innovation sources more broadly, the process form of innovation is less apparent here due to typical size,

resource and sectoral constraints. Whilst innovation outcomes from involvement in business support programmes were not marked, there were other knowledge exchange and bonding and bridging ties that were evident and that provided strong benefits for the participant respondents in this study.

These findings, along with the findings presented in Chapter Seven, will be considered further in relation to the pertinent literature in the Discussion Chapter (Chapter Nine) which follows. Chapter Nine will be structured around a revised conceptual framework.



# **CHAPTER 9**

## **Discussion**

## 9.0 Introduction

In this chapter further consideration will be given to the findings in relation to the pertinent literatures and theoretical perspectives. In addressing research objective five, the chapter begins by presenting and explaining a revised conceptual framework in light of the study's findings. The discussion proceeds by considering the contextual factors that moderate knowledge sources for innovation. The internal and external environments for knowledge sources are discussed in turn before considering the overall nature of innovation in this context and the types of innovation that these enterprises are involved in. The discussion then proceeds to examine in depth the role of business support actors in facilitating knowledge exchange and innovation within this context, the factors that impact on engagement in business support and the types of outputs that emerge from business support involvement. Open innovation and social network themes around strong/weak ties, social capital and trust relations are considered throughout this discussion. An outline of this chapter is provided in Figure 9.1.

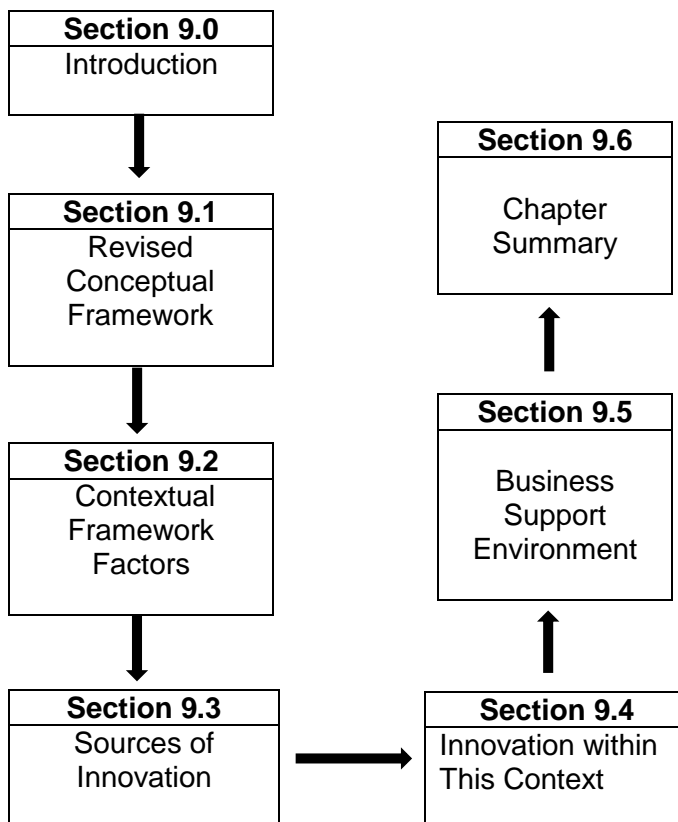


Figure 9.1: Outline of Chapter Nine

## 9.1 Revised Conceptual Framework

Following a review of the literature on innovation and small business support, and thereafter the adviser-client relationship, a conceptual framework was presented in Chapter Four (Section 4.2, Figure 4.2). The conceptual framework sought to illustrate the broad types of innovation that are characteristic of micro food enterprises, the knowledge capabilities that lead to innovation for these enterprises and the influence of social network relations and context specific factors. It was proposed that the open innovation knowledge capabilities impact upon innovation development in terms of both knowledge based inside-out capability and knowledge based outside-in capability, consistent with Chesbrough and Swartz (2007) and Chiaroni et al. (2011). Further, open innovation capabilities were expected to impact upon innovation through engagement in business support programmes. The framework also incorporated the tenets of social networks in explaining the relational aspects of network involvement and engagement in business support programmes, leading to innovation outcomes. Furthermore, as shown in Figure 4.2 it was proposed that a number of contextual factors will mediate this innovation path dependency.

This conceptual framework was used as the basis for the data collection and the findings that followed in Chapters Seven and Eight. The findings in relation to the components of the conceptual framework will be discussed in this chapter. A revised conceptual framework, following the findings from this study, is presented in Figure 9.2. The revised framework incorporates themes that emerged from these findings, around the sources of innovation, the nature of firm engagement in business support, and the contextual factors that influence the nature of innovation, and engagement in business support, for micro size businesses operating in the agri-food, rural setting. While some of the component factors are already recognized in the small firm and innovation literatures (for instance, a reliance on strong ties, the fragmentation of business support, lack of resources for R&D), the conceptual framework illustrates factors that are particularly important within the contextual setting of micro size agri-food enterprises (for instance, product quality and authenticity, the nature of trust relations, and the unintended outcomes from business support programmes such as the emergence of informal and formal networks). The revised framework builds upon the initial conceptual framework in a number of ways.

Firstly, the contextual factors are categorized into enterprise and network level factors. At the enterprise level these are specifically highlighted as product quality/authenticity, traditional methods and family influences/traditions. At the network level trust issues around collaboration for innovation have been identified.

Secondly, the internal and external environments refer to open innovation themes around inside-out and outside-in capabilities. The revised framework highlights the weak inside-out capability of these enterprises, in terms of their ability to collaborate and exploit innovation potential. The enterprises demonstrate limited absorptive capacity and growth ambitions, which impacts on inside-out capabilities and on abilities to turn knowledge from business support programmes into innovative outcomes. However, they are strong in terms of outside-in capability through their involvement in a wide range of knowledge sources and types of informal and formal network involvement. These open innovation characteristics are emphasised in the revised framework.

Thirdly, the business support and policy environment within this context has a number of particular features that are incorporated into the revised conceptual framework. Here, the nature of engagement in business support is characterized by the micro firms' involvement in introductory rather than advanced forms of support. The business support environment is also characterised by fragmentation of business support offerings and communication issues. Engagement in support is dependent on the degree to which support is tailored to the needs of the businesses, their expectations from prior experiences, and the contextual factors. Support programmes are largely associated with knowledge exchange rather than innovation outcomes and there can be unintended outcomes from business support programmes such as the emergence of informal and formal networks.

Fourthly, the particular contextual nature of social networks and trust are incorporated. These themes pervade the other components of the framework. Trust is developed through the knowledge and empathy of business support actors and through actors being locally embedded, and there is a narrative of sectoral mistrust (contextual factors). The problematic nature of trust is noted.

Fifthly, innovation outputs are largely product related, and driven by informal knowledge sources, strong ties and internal characteristics that are mediated by

contextual factors. Radical innovation forms emanate from informal sources and strong ties rather than formal, business supports.

Figure 9.2 illustrates the nature of the inter-relationships between business support programmes, network relations, innovation outputs and the contextual setting of these enterprises. Specifically, contextual factors impact upon innovation outputs directly, and also indirectly, as they mediate engagement in business support programmes. Social networks are linked to the contextual factors, through the identification of trust relations as a strong contextual factor. The impact of social networks is also evident in the framework within the business support and policy environment component, through the bonding and bridging capital aspects of business support, and through the use of strong tie and weak tie knowledge sources as illustrated in the external environment component of the model.

The revised framework in Figure 9.2 therefore is substantially developed from the initial conceptual framework presented in Section 4.2 (Figure 4.2).

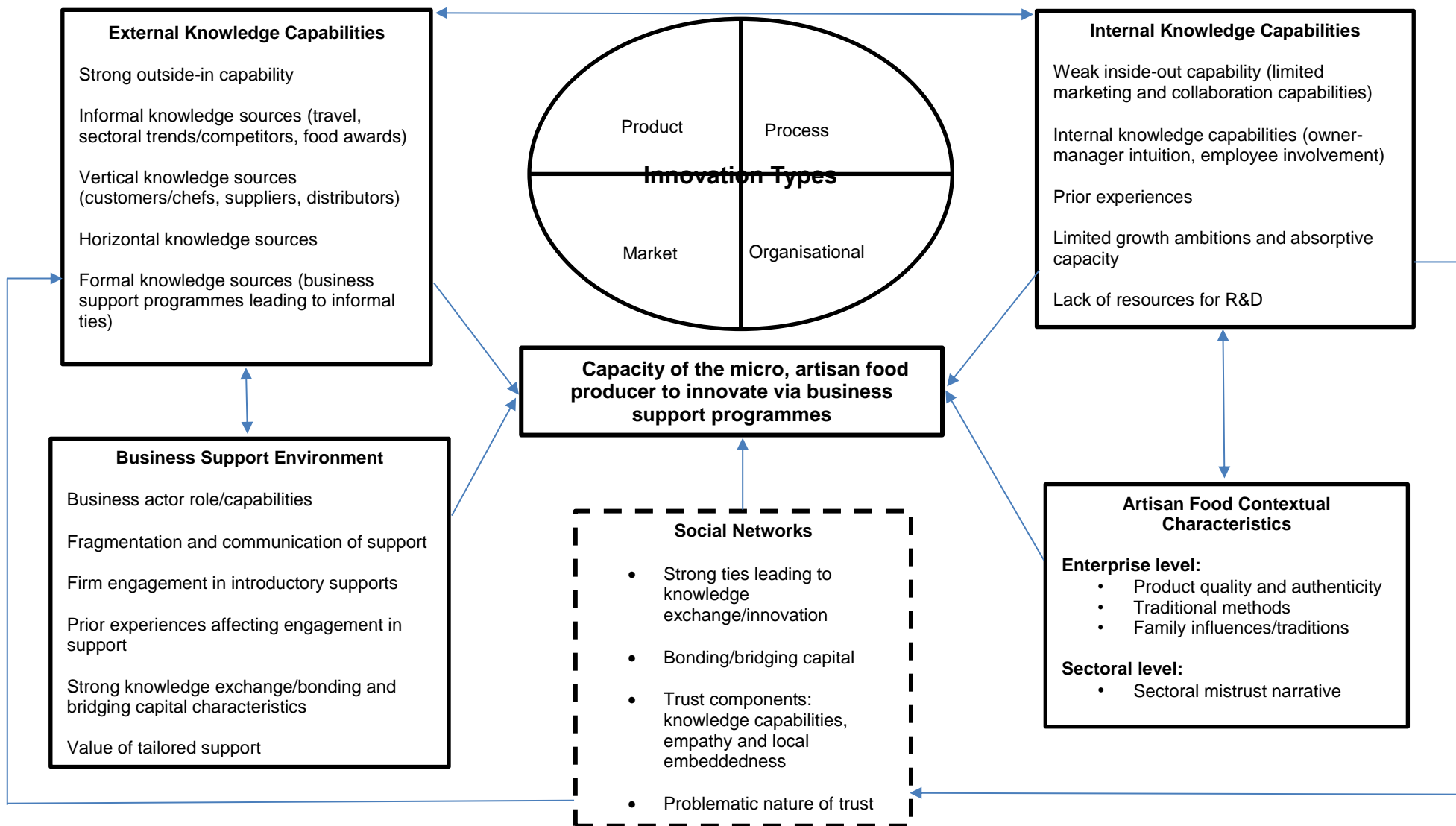


Figure 9.2: Revised Conceptual Framework

## 9.2 Contextual Factors

Contextual influences within the small business context have been significantly under researched to date (Ferradas et al., 2017; Autio et al., 2013). Of the studies that have been carried out within the context of food SMEs, they broadly include the various market types that they engage with, the level of social cohesiveness between the members of a network, and the degree of support offered by Government support agencies (Lefebvre et al., 2015). These factors are indicative of internal and external characteristics that help to formulate knowledge capabilities, and are dependent upon the firm's context and strategic position (Edvardsson and Durst, 2013). Some examples of contextual factors include product portfolio and marketing, the supply chain relationship (Muller et al., 2009), trust, authority, culture, technology (Minarelli et al., 2015; Lin, 2014) and institutional factors (Ottenbacher and Harrington, 2009) including the facilitation role of regional institutions (McAdam et al., 2016; Bertolini and Giovannetti, 2006). To a large degree these depend on the lifecycle stage of the firm (van Hemert et al., 2013) and the environment, including the types of products manufactured within a firm and the strategic priorities of the owner-manager (Kevill et al., 2017; Bayo-Moriones et al., 2010).

Within the context of this study, the findings suggest the existence of a number of sector-specific contextual factors that moderate knowledge capabilities for innovation in these enterprises and which influence innovation outcomes. These factors interact with internal and external knowledge sources and impact upon the enterprises' innovation activity and on their involvement in business support (see Table 9.1). The contextual factors include a variety of social-economic and cultural, social, network and institutional factors (Amoako and Matlay, 2015; Autio et al., 2014; McAdam et al., 2014) that are evident at the firm and sectoral, network levels.

**Table 9.1: Knowledge Exchange and Contextual Factor Interaction**

<b>Levels</b>	<b>Contextual Innovation Antecedents</b>	<b>Interaction with Internal Knowledge Elements</b>	<b>Interaction with External Knowledge Elements</b>
Firm level	Product quality and authenticity  Family influences/traditions  Traditional methods	Emphasis on product quality at expense of marketing aspects and exploitation of innovation  Passion around product quality has given producers the confidence to “try things”  Product quality linked to owner-manager sensory capabilities  Family influences as source of product innovation but traditional methods restraining scope for process innovation	Business collaboration  Involvement in business support programmes and sources of knowledge
Sectoral/ network level	Trust	Lack of collaboration for exploitation of innovation  Confidence/transformational aspects  Reflections on business support programmes	Business collaboration  Involvement in business support programmes and sources of knowledge  Exchange of knowledge on programmes  Development of new networks

Firstly, at the level of the enterprise these include a focus on product quality/authenticity, family influences/traditions and the use of traditional methods. Artisan owner-managers’ passion regarding the quality of the product, and depth of conviction and feelings on the authenticity of the core product, were central to their activities. The respondents exhibited extreme levels of confidence in their products and a strong belief in their superiority over mass market products. Artisan owner-managers took great pride in “telling their story”, (Kammerlander et al., 2015), whether it be on a one-to-one basis to consumers at local food events or during food tours they were involved in, either independently, or through a Government support initiative. This inherent belief in the value of the product has provided owner-managers with the confidence to “try things” that would lead to product innovation outcomes and a differentiated offering. In addition, the contextual factor of family



influences/traditions moderates knowledge capabilities and leads to subsequent innovation, which is counter intuitive to the idea of micro firm dependence on external knowledge sources (Doran et al., 2012; Vega et al., 2012; Van de Vrande et al., 2009) due to insufficient resources for inside-out knowledge flows generating innovation (Kirkels and Duysters, 2010). Family influences/traditions have been instrumental in supporting the development of these businesses (Seaman et al., 2017; Bakkour et al., 2015; Classen et al., 2012). The involvement of family members (including siblings working together, wider family members, and husband and wife teams) provided a “support network” which sustained the business, and without the involvement of family members the business would not survive. The contextual factor of traditional methods restricted process innovation within this context. The method of operations, mostly by hand and tacit in nature, had not changed significantly and in some cases had been passed down through generations. These firm level, inherent characteristics of the micro food enterprise lead to a degree of self sufficiency whereby the enterprises do not rely on business support as sources of knowledge and innovation.

Secondly, at a sectoral level cultural issues around trust restrict outside-in and inside-out knowledge capability and the potential for collaboration that would lead to innovation. Trust has been identified elsewhere as a strong innovation antecedent (McAdam et al., 2016; 2014), and linked to levels of competition (Manning and Smith, 2015), and as a deterrent to positive collection action (Lamprinopoulou and Tregear, 2011). That said, the findings suggest evidence of fruitful collective action that had developed where members had developed positive, trusting relationships and had continued to work together (Lamprinopoulou and Tregear, 2006) on future initiatives (Huggins, 2000), further enhancing collaboration. The issue of trust will be discussed in more detail in Section 9.5.2.

The findings from this study indicate that the enterprise level contextual factors largely tend to moderate innovation outcomes directly whilst sectoral level factors impact on knowledge capabilities that in turn influence innovation outcomes. The impact of these contextual factors are summarised in Table 9.1 and will be discussed in relation to knowledge capabilities and innovation outcomes throughout the remainder of this chapter.

### 9.3 Sources of Innovation

As alluded to in Table 9.1, there are a wide range of sources of innovation employed by these enterprises, both internal to the firm, utilising owner-manager know-how and employee ideas, and external sources including customers, secondary sources and networks involving supply chain actors such as suppliers, distributors, chefs (Hoholm and Stronen, 2011), and other producers. Further non-supply chain sources include universities, industry associations and formal business support programmes. This indicates a strong willingness on the part of these businesses to search widely for new ideas that would lead to product innovation (Santoro et al., 2017; Lefebvre et al., 2015; van Hemert et al., 2013) whilst expanding their knowledge and absorptive capacity. The following sections will consider the findings on sources of innovation and will develop the discussion around the contextual factors that moderate these businesses' knowledge capabilities for innovation.

#### 9.3.1 Internal Environment

A prominent internal knowledge capability was fostered through the role of the owner-manager's intuition and know-how (Al Mamun et al., 2017; Fitjar and Rodriguez-Pose, 2013) and sensory capabilities. The owner-manager's intuition and natural sensory capability was viewed a critical resource and has led to an innovation process in these enterprises that is typically unstructured and characterised by the owner-manager's "gut" feeling (Beckeman et al., 2013). In this way, innovation in the micro firm is linked to the cognitive perceptions of the owner-manager (O'Toole et al., 2017; Anderson and Ullah, 2014) and the owner manager's experiential knowledge in a traditional industry context (Abel and Bressan, 2014; Della Corte et al., 2013), helping to foster innovation through their "reactive and fire-fighting mentality" (Marzo and Scarpino, 2016; Higgins et al., 2013; Romero and Martinez, 2012; Cope et al., 2011). Cider producers in particular in the study relied greatly on their own palate in terms of taste for product development.

These businesses demonstrated a cautious approach to growth, which to a degree challenges the open innovation narrative on the benefits of external knowledge for small firm growth. Further, this would suggest that, in support of Vahter et al. (2012), Lee et al. (2010), from the owner-manager's perspective at least, there is a trade-off point, in terms of breadth of external linkages with innovation sources and ability to

absorb such knowledge, at which the external knowledge can have a negative impact through detracting the business from its core focus and in overstretching the very limited available resource base. While none of the enterprises here are purely lifestyle orientated (Rosenfeld, 2013), their growth ambitions are relatively modest (Bouette and Magee, 2015; Duh et al., 2009), with many of these businesses starting out as hobbies. As suggested by Tregear (2005) they seek out commercial opportunities, yet want to grow their business in a measured way where there is a certain altruistic motivation in producing a quality product that will be valued, and that demonstrates strong authenticity. They had an emotional involvement and are clearly passionate about their business and proud of the provenance and authenticity of the core product and offering. Central to this was the originality of their products (Brecic et al., 2017). Another reason for this was that these producers are also keen to maintain control of their businesses, developing high quality products (McAdam et al., 2016), serving a niche market (Bouette and Magee, 2015; Sidali et al., 2014; Tamaginin and Tregear, 1998). Maintaining quality of the products was the main reason why they did not want to supply large multiple retailers (Fonte, 2006; Ilbery and Kneafsey, 1999) as well as very little bargaining power. These findings thus shed some light on the obstacles to growth within small/micro food artisans (Kvam et al., 2014).

In summary, the findings suggest that whilst there is a strong willingness on the part of these businesses to search widely for new ideas that would lead to product innovation, they demonstrate a cautious approach to growth with innovation very much being linked to the cognitive perceptions of the owner-manager. In addition, the findings provide further insights into the internal barriers to growth that small/micro food artisans face and the implications for transforming knowledge into innovation outputs (inside-out capabilities). The following section discusses the broad sources of external knowledge for innovation used by these enterprises. Engagement in more formal, business support programmes will be examined in depth later in this chapter (see Section 9.5).

### 9.3.2 External Environment

In relation to the external environment, the findings provide a number of insights into artisan producer networking activity in broader terms and the outputs (innovation or otherwise) from those networks. There was evidence of extensive use of outside-in knowledge for innovation through informal and formal networks - these enterprises

are extensively involved in a range of networks, both informal and more formal, business support network types. As may be expected for enterprises that are small, rural and locally embedded, the ties were mostly strong, local and vertical in nature, where a high degree of bonding social capital is evident (Sorensen, 2016; Tregear and Cooper, 2016; Peredo and Chrisman 2006; Westlund and Bolton, 2003). It is the relationships with informal network actors (strong ties) rather than with formal or business support actors (weak ties) that primarily lead to knowledge exchange and innovation within this context.

Open innovation and outside-in knowledge has been facilitated largely through informal business networks and collaboration, including customers, suppliers, distributors, competitors, other producers, travel and secondary sources. Of these networks, information from customers was cited as a particularly important source of knowledge for product innovation, reflecting some support for the importance of user innovation (Lefebvre et al., 2015; Grunert et al., 2008; Von Hippel, 2005) within this context. Producers particularly highlighted the value of direct, honest feedback from customers, especially for product development and generally improving understanding of their motivations and buying habits (Santoro et al., 2017; Ciliberti et al., 2016). These findings provide further support for previous studies that have indicated that businesses predominately engage with customers for innovation (Bogers et al., 2018; Presenza et al., 2017; Kaufman and Todtling, 2001).

To a lesser degree suppliers and distributors have been influential, providing support for previous research that found that relationships with suppliers create an environment that facilitates innovation (Lefebvre et al., 2015) particularly within the micro enterprise context (Tu et al., 2014). Recent literature has highlighted the benefits of gaining feedback from suppliers on various aspects of product development (Chen et al., 2016; Minarelli et al., 2015; Doloreux and Lord-Tarte, 2013). There were examples of reciprocity and the sharing of resources. While the notion of exchanging knowledge, learning, experiences, and indeed just providing help, is clearly not exclusive to the AFN and artisan contexts, these examples highlight collaboration and trust developed from underlying shared values around product authenticity which shapes the individuals' priorities and perceptions of their own contribution to collaboration (Tregear and Cooper, 2016).

Producers were also able to learn from best practices, including from competitors (McAdam et al., 2016). This was particularly prominent amongst the cider producers with one pursuing the route of contract bottling, whereby they bottled for their “competitors”. This resulted in a greater knowledge and a better understanding of how competitors do things. These small artisan food producers look for inspiration from larger firms, both local and multinationals, in order to adapt and develop their ideas, helping them to overcome their limited resources (Sidali et al., 2014). They also benchmarked other well-established artisan businesses, including those who had started off as micros, growing to much larger SMEs (Colurcio et al., 2012). This was primarily through secondary sources such as the Internet and social media. Producers found these sources particularly useful for generating ideas about presenting and developing products in a resourceful way, involving customers in product and service development (Antikainen and Niemelae, 2017). They were not in the position to invest too much time or expense and these resources could be accessed at a time best suited to them.

In the case of the cider producers another source of innovation was referenced numerous times. The book on craft cider making enabled the cider producers to develop different methods of cider production. This tacit knowledge was supplemented by explicit knowledge sources where producers interacted with other external sources (McAdam et al., 2016), such as local councils and trade associations. Other producers found further secondary sources from cookery books and online research to be useful in developing their knowledge on changing consumer trends. This enabled them to develop their recipes to meet changing customer needs (McAdam et al., 2016). These findings support previous studies that have found that small food businesses are not in a position to invest significantly in internal research and development activities (Santoro et al., 2017).

The findings on external knowledge source highlight that travel is increasingly becoming a source of information for developing innovation capacity (Palacios-Marqués et al., 2015). Travel was identified as a key factor behind not only the formation of some of the enterprises but also for developing new products, services and ways of doing things, whereby the producers visit well established, quality focused venues both locally and internationally. Travel allows for the identification of something that is “different” and “unique” in the local market. In some cases this led to the introduction of new products and novel services into the businesses, particularly

in the initial stages of set-up. For instance, this was very important for developing twists on local well-known dishes. However, the literature does not adequately acknowledge the importance of travel as a knowledge source for innovation. This is thus an important finding from this study, as these social experiences widened the knowledge base, providing an opportunity to develop product offerings in the local context, in order to achieve product differentiation and improve competitiveness (Sarkar and Costa, 2008), whilst responding to the increasing competition from emerging countries due to business and technological innovation (Santoro et al., 2017).

Some of the more established producers who entered food awards explained the numerous benefits of doing so. In addition to the endorsement and promotion of their award-winning products, the insight gained and the knowledge developed was invaluable (Fuetsch, 2017). Furthermore, they also received impartial advice on how to further develop their product portfolio. These events also provided opportunities for producers to develop networks with a range of bodies, including other producers.

In summary, the knowledge accumulated by these producers is derived from both internal and external sources. The attitudes of individual managers play an important part in the innovative capacity of their firms in recognising the importance of combining a range of external knowledge sources, and more significantly adapting these to their individual innovation processes (Ciliberti et al., 2016; Fernandez-Esquinas et al., 2010). The findings would therefore appear to contradict previous studies indicating that small businesses in the food industry are overly dependent on the attainment of external technology in developing product innovation (Ciliberti et al., 2016).

#### **9.4 Innovation within this Context**

The findings provided evidence to suggest that many of these enterprises are inherently innovative, contradicting recent research indicating that there is a reluctance for agricultural small business to innovate (Suess-Reyes et al., 2017). Despite being recent start-ups, either through farm diversification, or as a new business, they play a key role in building resilience in their local, rural communities (Sidalı et al., 2015; Steiner and Atterton, 2014; McElwee, 2006a) and are increasingly

committed to the development of food production (Hjalager and Johansen, 2013). The findings in relation to the various types of innovation will be discussed next.

#### 9.4.1 Product Innovation

While there is some evidence of adoption of various forms of innovation, as suggested by authors such as De Martino and Magnotti (2017); Baregheh et al. (2016); Lefebvre et al. (2015); Baregheh et al. (2014) and Menrad (2004), the focus for these enterprises was very much on product quality and product innovation, underpinned by context specific factors (Tregear, 2005). The owner-manager's passion for product quality and authenticity, and an emotional involvement in production processes, has fostered an environment within which product innovation has prevailed. Product innovation in these enterprises can be characterised as incremental rather than radical, typical of small businesses operating in the manufacturing sector (Laforet, 2016; Baregheh et al., 2014). These businesses are able to maintain a balance between tradition and innovation whilst focusing on preserving lifestyle choices and stability (Kammerlander et al., 2015). Cost and time are mitigating factors here, but the owners' protectiveness of the authenticity of the product means that they will not consider any activities that they perceive would serve to undermine the quality of the product, exhibiting extreme levels of confidence in their products, significant factors that are increasingly highlighted in the literature (Manning and Smith, 2015; Sidali et al., 2014; Simms, 2009). Some of these examples include choosing not to supply large retailers as producers wanted to maintain control of the production process as well as the interaction with customers, producing products which demonstrate strong authenticity and niche product offerings. This confirms findings from previous studies that highlight that businesses perceive innovation as a high-risk activity and manage their activities accordingly (Shiri et al., 2014).

The owner-manager's limited growth ambitions, linked to the approach to product quality/authenticity which has fostered product innovation, and the use of traditional production methods, has enabled owner-managers to develop niche products in response to changing market conditions and to meet local market demand (Tonner and Wilson, 2015; Uddin, 2006). Incremental innovation was evident through new ingredients and the introduction of related products. Producers adapted a 'trial and error' approach (Oksanen and Rilla, 2009) to product innovation, basing much of their experience on their individual "roots", including their rural/farming backgrounds where

they initially began developing their interest in food production whilst also developing their palate. Therefore, producers placed strong emphasis on their own judgement and experience when experimenting with ingredients to develop new products, and therefore developed products based on their personal interest (Barbieri and Mahoney, 2009). In so doing they also took into account the influence of market leaders in shaping consumer preferences (Zacca et al., 2017; Millward and Lewis, 2005).

Nevertheless, there were examples of radical product innovation. This study's finding in relation to radical innovation is quite significant, not least as the literature points to the incremental nature of innovation in the food sector (Bayona-Saez, 2017; Woschke et al., 2017; Lefebvre et al., 2015; Baregheh et al., 2014; 2012; Capitanio et al., 2010; Capitanio et al., 2009; Bhaskaran, 2006; Costa and Jongen 2006; Menrad 2004; Avermaete et al., 2003) and the SME context more generally (Baregheh et al., 2016; Forsman and Annala, 2011; Oke et al., 2007). This finding may be partly explained in the age profile of the enterprises in that younger firms are more likely to develop radical innovation (Bierly and Daly, 2007) as they might find it easier to acknowledge a "knowledge gap", leading them to take more advice (Mole et al., 2017; 2009).

The cases of radical innovation were derived both from internal and external sources, moderated by contextual influencing factors (McAdam et al., 2014; Doran et al., 2012; Gallende, 2006), rather than through a reliance on science based or business support knowledge sources, as suggested in the literature (Santoro et al., 2017; Wynarczyk, 2013; Lasagni, 2012; Parida et al., 2012; Todtling et al., 2009). This therefore illustrates the determination and proactiveness of these producers in addressing a challenge to satisfy personal interests (von Hippel, 2005). The cross fertilisation of ingredients from other food sectors in leading to radical product innovation was evident. The implementation of radical innovation was much more time consuming, nevertheless networking helped to drive market information, enabling the commercialisation of new products (Bucktowar et al., 2015). However, these enterprises mainly lack the capability to exploit this innovation through market knowledge and collaboration activity that would lead to opportunities derived from product innovation, and there is a distinct lack of inside-out knowledge capability.



Table 9.2 illustrates the interplay between the contextual innovation antecedents, the knowledge sources and product innovation.

**Table 9.2: Product Innovation Types and Sources**

<b>Product Innovation</b>	<b>Knowledge Sources</b>	<b>Contextual Innovation Antecedents</b>
Radical and incremental forms of product innovation: <ul style="list-style-type: none"> <li>• Radical innovation where the product represents a product new to the regional market</li> <li>• Incremental innovation involving new ingredients and flavours</li> </ul>	Internal: <ul style="list-style-type: none"> <li>• Owner-manager intuition</li> <li>• Employees</li> </ul> External: <ul style="list-style-type: none"> <li>• Horizontal networks (other producers)</li> <li>• Vertical networks (customers, chefs, suppliers, distributors)</li> <li>• Benchmarking (from travel and sectoral trends/competitors)</li> <li>• Business support programmes</li> </ul>	Product quality/authenticity  Family influences/Traditions
Collaborative product innovation	Collaborative product innovation derived from horizontal, business networks (other producers within sector and cross-sectoral) and business support programmes	Product quality/authenticity  Trust

#### 9.4.2 Process Innovation

The enterprises in this study sought to add value through the embeddedness of the product in their local area, and through the use of traditional production methods (Antikainen and Niemelae, 2017). The method of operations, mostly by hand and tacit in nature, had not changed significantly and in some cases had been passed down through generations (Kammerlander et al., 2015). Perhaps not surprisingly for the majority of the cases the artisanal nature of these businesses means that the focus is more on the product as the processes had significant tacit knowledge-based elements (Aquilanti et al., 2013; Enzing et al., 2011; Capitanio et al., 2010; Kuhne et al., 2010). These findings are in alignment with the literature. For instance, Capitanio et al.'s (2010) study on product and process innovation within small Italian food

businesses previously found that small food businesses are more likely to engage in product innovation than with process and service innovation.

Traditional methods, and the way of doing things, was a contextual influencing factor that played a role in restricting process innovation within this context. However, hand produced goods provide producers with a unique selling point and thus a source of competitive advantage over larger competitors. Previous studies have highlighted that small business owner-managers often lack the ability to see the “bigger picture” and a capacity to plan strategically (Marzo and Scarpino, 2016; Tell et al., 2016). However, these findings demonstrate that there were producers who were able to undertake process innovations and develop their innovative capabilities (Shiri et al., 2015), whilst staying true to their traditional, artisan credentials. Some of these processes differed radically from the activities owner-managers had been involved in previously. These included acquiring new machinery to produce cider more efficiently, whilst still involving traditional methods. These findings therefore provide insights into the nuances of process innovation (Shiri et al., 2015; Rowley et al., 2012) within the artisan context.

#### 9.4.3 Market Innovation

The strong focus on product quality and product innovation (Giacosa et al., 2017) has to a degree been at the expense of the development of marketing capabilities and market innovation (Fernandez-Esquinas et al., 2010; Lamprinopoulou et al., 2006). Where market innovation occurred this mainly involved the expertise of family members, including sons and daughters of owner-managers, and friends, where they were heavily involved in new label design and branding, reflecting the originality and traditional background of the product (Giacosa et al., 2017). This finding contradicts the literature which suggests that family businesses with at least one generation can have restricted innovation capability (Kammerlander et al., 2015).

Story telling helped to communicate the authenticity of products and the history of how businesses developed, whilst helping to develop a common identity with consumers (Fuetsch, 2017). This was conveyed predominately through attending food related events and demonstrations, enabling producers to promote their brands whilst undertaking further market research (McAdam et al., 2016). Again, this finding challenges previous studies proposing that stories developed around the owner-

manager have negative implications for innovation (Kammerlander et al., 2015). Indeed this was quite the opposite. The attitude and actions of the owner-managers were the driving force in terms of market innovation (Fuetsch, 2017), as well as their capacity to develop meaningful relationships inside and outside the business (Lambrecht et al., 2014).

Maintaining close contact with network partners such as customers and competitors (Fuetsch, 2017; Lambrecht et al., 2014) was also critical, as it assisted with the development of mutually beneficial relationships, based on knowledge generation, exchange and implementation, taking into account market intelligence from customers and competitors (Beck et al., 2011). This highlights an ability to make use of external strategic resources coupled with the use of internal resources and capabilities (Santoro et al., 2017; Eisenhardt and Martin, 2000). Innovative thinking and entrepreneurial spirit were considered the “norm”, which significantly contributed to growth and development of innovative capabilities.

Barriers to fully exploiting market innovation included, primarily, lack of time to adequately market product ranges, and limited capacity including resources and budget to do so (Baregheh et al., 2016; 2014; 2012; Colurcio et al., 2012). As the evidence suggests, external knowledge sources, as discussed earlier in this chapter, offer small firms a means of gaining access to market intelligence (van Hemert et al., 2013). For the majority of these producers the scope of activities were at the local and regional levels (Karipidis and Tselempis, 2014) within Northern Ireland. A small number of producers were able to access markets outside of Northern Ireland, predominately the Republic of Ireland, through assistance from business support agencies. Consequently, this led to increased sales and expansion of their businesses through exporting their products (Lehtinen et al., 2016), where they aligned their products to the market (O’Reilly and Haines, 2004). Nevertheless, the large regional focus of these enterprises suggests a significant knowledge and capability gap, in that accessing new markets, in order to enhance product demand, leads to new product development (McAdam et al., 2016).

#### 9.4.4 Organisational Innovation

There was a degree of organisational innovation evident, though management of key business functions was very time consuming and thus was a barrier in developing

further organisational practices (Baregheh et al., 2016). There was a level of innovation around organisational practices such as on-the-job learning. Here, the knowledge exchange was tacit in nature, as is typical within these businesses (McAdam et al., 2016). However, owner-manager investment in staff development was only evident in a small number of cases. Small businesses depend upon the ability of the owner-manager to balance the acquisition of knowledge from external sources including the exploration of knowledge combined with internal, operational activities, and to share this information with their staff (Barrett, 2015; Hutchinson and Quintas, 2008). In this, the owner-manager plays a critical role in the process of growth and innovation combined with their willingness to undertake high risk, underpinned by their entrepreneurial orientation (Kocak et al., 2017; Kammerlander et al., 2015), motivation to work hard (Glover and Reay, 2015) and motivation to generate additional income (Barbieri and Salvatore, 2010).

The small size of these businesses in terms of employee numbers may suggest a need for a greater degree of organisational innovation in order to assist producers in developing their marketing skills, and to increase awareness of their product and brand (Marotta et al., 2014; Lamprinopoulou et al., 2006). For instance, some producers established their brand around using local, high quality ingredients and traditional practices, and the link between produce and origin, further enhancing the regional identity.

In summary, the findings revealed insights into innovation activity across the four main types. Product and process innovation have attracted much of the attention within the SME context (Baregheh et al., 2016; 2012; Capitanio et al. 2009; Ma and McSweeney, 2008), particularly within the food industry (Lefebvre et al., 2015; Baregheh et al., 2014). While the current findings indicate that the product/process focus is justifiable, nonetheless it does not fully capture the broad range of innovation activities that these enterprises engage in.

The following section will now move on to examine the findings around business support, in relation to the literature on business support networks, the adviser-client relationship and social networks.

## 9.5 Business Support Environment

### 9.5.1 Engagement in Business Support

As discussed in Chapter Six, there are a comprehensive range of generic support programmes for innovation and growth in Northern Ireland and there is some evidence that artisan food enterprises are engaging at the introductory levels of this support. Innovation vouchers were found to be a particularly attractive form of engagement in business support. The study supports recent, emerging research that suggests that innovation vouchers are a useful instrument in enhancing the innovativeness of micro and smaller firms (Chapman and Hewitt-Dundas, 2018; Sala et al., 2016). However, there is less engagement in collaborative network programmes. More advanced forms of innovation support may be less relevant to their needs or they may lack the capability or resources to engage in these innovation programmes that require collaborative approaches. It has been argued in the literature that medium to large businesses have greater capacity to innovate and collaborate (Lefebvre et al., 2015; Radas et al., 2015; Akman and Yilmaz, 2008). There are a combination of factors at play here that restrict engagement with business support actors and the potential for greater market reach, including the artisan producers' understanding of the value of business support networks, and other perceived barriers in terms of cost, regulations and bureaucracy. These themes will now be considered further.

The findings indicate a lack of clarity and an uncertainty about the value of business support knowledge sources (Wapshott and Mallet, 2017; Mole et al., 2016; Soh and Subramanian, 2014; Yusoff et al., 2012; Audet and Richard 2008; Smallbone et al., 2008; Lewis et al., 2007; Audet and Etienne, 2007). Thus the findings lend weight to previous research that indicates that science-based innovations are not particularly prevalent in small firms and food enterprises (Lefebvre et al., 2015). The enterprises in this study did not see sufficient value in participating in public support and regional Government knowledge sources. This lack of engagement in business support can be explained in terms of a) the perceptions of the generic nature of regional Government support; b) a strong focus of regional Government business and trade association support actors on larger firms and export market development; and c) confusion around the fragmentation of business support offerings. Each of these areas will be discussed further now.

The findings highlight an articulated need for more specialist support and industry expertise within the agencies in growing areas of artisan produce and specialist categories and the relative success of tailored, specialist support for innovation that takes account of the individual needs of the participating enterprises. This lends weight to the earlier work that discusses the need for tailored programmes to address local contexts (Hogberg et al., 2016; Martin et al, 2013; Edwards et al., 2010; Lambrecht and Pirnay, 2005; De Faoite et al, 2004; Curran, 2000). Previous studies have shown that the use of business advice is dependent on the nature of specific business problems that are unique to each firm's trading environment and management structure, rather than being generic to particular types of firms (Mole et al., 2017; Bratton et al., 2003; Curran, 2000). There is an argument that support programmes, to be successful in terms of take-up, should clearly identify existing market provision, address gaps, and be marketed at the local level (Robson and Bennett, 2003), with private sector advice in particular being influenced by locality (Mole and Capelleras, 2018).

Furthermore, research indicates the restrictions of central Government support directed solely from national policies, and highlights a requirement for "solid economic policies" at the local level (Mawson, 2009). The findings would suggest that there is a need to consider carefully the distinctions that exist between particular business support sources of knowledge. The business support sources take varying forms, consisting of public or private providers, or a combination of both, and not least individual actors with varying priorities and capabilities (Mole et al., 2017). The business support actors themselves view their contribution to network development in different ways, which is largely shaped by the nature of the actor's role in food sector network development and the actor's constructions of business support interaction with producers. As Table 6.1 (Chapter Six) illustrates, there are a wide range of institutions with roles to play in artisan food network development. The findings suggest that Government department actors with a broader, regional, economic development role take a more removed view of their involvement, and view their role as supporting the development of networks rather than actively engaging in the networks. Such actors do not view themselves in a proactive role for knowledge exchange and creation (Knuth and Knierim, 2013). This philosophy is in many ways reflected in the type of knowledge imparted to the producers, which tends to be generic in type and thus not highly valued by the producers, with a subsequent lack

of engagement. As previous studies have shown (Bouette and Magee, 2015; Cumming et al., 2014; Faure et al., 2013; Wellbrock et al., 2013; Chiffolleau, 2009), this form of business support can hinder collaboration in that the support measures do not give sufficient recognition to the diversity of needs and competences. In contrast, there was more engagement with local authority network programmes which led to knowledge exchange and network development outcomes that were not planned for, nor envisaged.

The findings illustrated the role of private consultants in delivering programmes, and their key knowledge broker role (Batterink et al., 2010). In the cases of effective business support cited in Chapter Eight, the business support advisers took into account the needs of the business using a 'common-sense' approach (Mole, 2004). The use of business advice in these programmes was dependent on the nature of specific business problems (Mole et al., 2014), that were unique to each firm's trading environment and management structure, rather than being generic to particular types of firms (Bratton et al., 2003; Curran, 2000) and was of a low intensity nature, typical of public sector support involving the use of consultants (Mole et al., 2017; Bennett and Smith, 2004). This approach gave primacy to the owner-manager and his/her business needs where solutions are adapted to meet the individual needs of the business (Lambrecht and Pirnay, 2005; De Faoite et al., 2004). This participatory approach (Landini et al., 2017; Landini, 2016; Nettle et al., 2013; Faure et al., 2013) provided a sounding board for the business (Hjalmarsson and Johansson, 2003), helping owner-managers to develop their knowledge.

The findings also indicated that while there is some involvement in more localised, funded business support programme networks, the sustainability of these structured networks is a barrier to further development. Therefore, these structured networks, which are short-term in nature and subject to limited financial investment, were not fully utilised for the exploitation of innovation (inside-out knowledge capability) through marketing and business development initiatives. Klerkx and Leeuwis (2009) refer to this as a funding paradox where intermediaries for innovation suffer from systems and market failures in that public funding is provided for too short a period. The difficulty in maintaining networks, allowing them to transform and flourish as a forum for interaction, has been noted in the literature (Newbury et al., 2016; Sokjer-Petersen, 2010).

A second theme in relation to the value of business support was the commonly cited perception of the regional Government economic development agency focusing primarily on export to the detriment of support for local market development. This reflects a longer-term position among business development agencies in Northern Ireland towards a “growth pyramid” model as described by Massey (2006), whereby support has been focused on those companies with the potential to grow in a very traditional sense through exporting. This has brought about a disconnect and conflicting goals between some of the main business support actors, including Government and trade bodies, and artisan producers with their primary focus on local market development, and a cautious approach to their development. Here there is a wider theme of disconnection and feelings of isolation linked to relational aspects (Rousseau et al., 1998) and how clients interpret adviser roles and interpret support provision. However, the findings reveal that if facilitation is empathetic and content is well tailored, there is evidence that institutional barriers can be overcome. This would imply that it is possible, through appropriate actions, such as improving the expertise of advisers and by taking a more empathetic approach, to regain trust in institutional performance (see section 9.5.2.1).

A third theme on the value of business support cited by the producers in this study was the lack of an integrated approach taken by Government agencies towards delivery of support. This has caused confusion among micro producers in relation to how to obtain support and where to obtain it. The plethora of organisations offering support and advice to the local food sector in the UK has been criticised in the 2002 “Curry” report on the future of farming and food (Curry, 2002). The findings indicate a largely reactive approach to supporting micro food enterprises, alongside duplication in offerings within Government and the fragmentation of support offerings. The findings therefore support recent studies that indicate a degree of competition rather than collaboration and coordination between business support agencies in agricultural systems (Cerf et al., 2017; Faure et al., 2017; Rijswijk and Brazendale, 2017). The findings in this study suggest that the level of fragmentation and duplication may not be straightforward to eradicate due a silo mentality and a level of protectionism on the part of support providers. A reactive approach by agencies prevents proactive agenda setting on agricultural topics (Knuth and Knierim, 2013).

Other perceived barriers to engagement included bureaucracy, excessive regulations and costs. There are commonly cited issues with small business in relation to the cost



of engaging with consultants, universities and other institutions for the purpose of knowledge transfer (Lefebvre et al., 2015; Rangus and Drnovsek, 2013; Van de Vrande et al., 2009) and the literature has identified low cost as a way to overcome the reluctance of an SME owner to take advice (Pergelova and Angulo-Ruiz, 2014; Mole et al., 2013; Ramsden and Bennett, 2005). Furthermore, it has been found that the take-up of subsidised or free support from public sector providers, especially when financial resources are limited, is more likely (Mole et al., 2013).

The perceptions of the producers were shaped by a number of underlying factors, including their understanding of what constitutes innovation, their experiences from previous involvement in business support, and a cautious approach to growth. Various programmes at central and local Government levels had clear goals for innovation outputs, yet for these enterprises innovation was not something they were focused on, when considering joining a programme, and did not view innovation as being applicable to them (Saunders et al., 2014; Vega et al., 2012; Edwards et al., 2010; Romero-Martínez et al., 2010). The lack of understanding of innovation prevents fuller engagement in support programmes that could lead to greater innovation opportunities. However, reflection on the value of business support networks, on the part of these enterprises, does lead to new informal and formal networks, and thus further opportunities for knowledge exchange, emerging from network programmes that are perceived to have shortcomings. The perceived value of the regional Government support was largely formed by previous experiences from involvement with science base actors and public sector support and which in many instances were negative in nature. This corresponds to previous studies such as Sutherland et al. (2013) and Lucassen and Schraagen (2011) that posit that users of information tend to rely on previous experiences with the information source rather than assessing the new information on its own merits.

As noted in Section 7.1.2, in relation to a cautious approach displayed by these businesses, there was also caution cited regarding the role of more formalised business support in that over-reliance on external advice can detract from the core focus of the business. There is an issue of how much innovation the business can pursue given the size of its resource base and its limited capacity to process excessive knowledge from external sources that can be viewed as unmanageable. This would suggest limited absorptive capacity in terms of the ability to locate, value and acquire external knowledge and thereafter to absorb, manage and exploit the

knowledge for innovation (Zahra and George 2002; Cohen and Levinthal, 1990). Certainly, the sheer range of information, offerings and sources of knowledge was somewhat overpowering in the majority of cases. In support of Vahter et al. (2014) and Lee et al. (2010), for these businesses there is a trade-off point, in terms of breadth of external linkages with innovation sources and ability to absorb such knowledge and this to a degree challenges the open innovation narrative on the benefits of external knowledge for small firm growth. There was a strong sense that the owner manager ultimately knows the business best (Dean and Ford, 2017). In the case of several of the enterprises, the owner manager's natural sensory capability was viewed a critical advantage, which mitigated against the need for much involvement in business support programmes, and indeed networks more generally. This is reflective of how in small food enterprises the innovation process is unstructured and is characterised by the owner-manager's "gut" feeling (Adomako et al., 2018; Beckeman et al., 2013), wherein the products represent the owner-manager's personality (Sidali et al., 2014).

The following section will proceed to consider in some detail the findings from this study in relation to trust. Trust has played a significant role in business support engagement for these enterprises and as a contextual factor has moderated innovation outputs.

### 9.5.2 Trust

The findings from this study on the value of business support networks indicates a lack of institutional trust (Mole, 2002). In network-based models of business support trust is recognised as a vital component of success (Newbery et al., 2013; Besser and Miller, 2011; Murphy, 2006; Sherer, 2003), as is the role of support officers or advisers (Mole and Capelleras, 2018; Hewes and Lyons, 2012; Sökjer-Petersen, 2010). The findings here revealed that while there were positive outcomes of trust that developed in business support programmes, nonetheless a number of issues around trust constrained the development of business support and other network forms. The following sections consider both the positive and problematic nature of trust within the business support programmes identified here, and discuss how trust is built and lost.

### *9.5.2.1 A Culture of Mistrust*

The “sceptical” nature of many food producers and a lack of recognition of the value of collaboration, were deemed to be part of “the psyche” and characteristic of the food sector and farming more generally in Northern Ireland. Business support actors spoke of a “cultural” issue in the Northern Ireland market around a fear of competition which obstructed business support actors’ efforts to foster networks. Significantly trust was defined by the sectoral context or “sectoral culture” (Tregear and Cooper, 2016), and specifically related to shared values on product authenticity and fear of competition. Therefore, a lack of trust around collaboration appears to characterise the sector and leads to a defensive stance that restricts open innovation capacities (Chesbrough et al., 2014; Coras et al., 2013). This finding provides support for cultural issues as a key barrier to implementation of open innovation (Van de Vrande et al., 2009). This finding supports previous research that has identified trust as a central mechanism for facilitating knowledge exchange and reducing perceived risks with collaborative ventures (McAdam et al., 2016; Bessant et al., 2012; Darabi and Clarke, 2012; Wincent, 2005; Human and Provan, 2000). A lack of trust among the agriculture community towards Government and scientific knowledge sources has been previously identified (Fisher, 2013; Oreszczyn et al., 2010).

Nonetheless, the notion of wider sectoral-cultural issues can be used by business support actors to explain the deficiencies in programmes wherein there is a narrative of a wider culture of mistrust tending to pervade the sector. This was the case in both central and local council programmes where the difficulties experienced in engaging participants were attributed to instrumental or systemic mistrust. In the findings presented in Section 8.3.2.5, it is particularly interesting that the business support actors used underlying cultural norms as a specific reason why firms failed to engage in programmes. Testimony from firms suggests there were multiple reasons for lack of engagement.

Thus, distrust may be endogenous rather than exogenous or cultural in nature (Sutherland et al., 2013) and not reflective of a general, sectoral distrust of institutional sources as suggested in the literature (see for instance Fisher, 2013) or the impact of the macro, structural context (Murphy, 2006), in restricting collaboration. This would imply that it is possible, through appropriate actions, such as improving the expertise of advisers and by taking a benevolent approach, to regain trust in institutional

performance. If facilitation is empathetic and content is well tailored, there is evidence that cultural barriers can be overcome. Therefore, the findings reveal an interplay between the interpersonal and instrumental categories of trust identified by Curry (2010) and illustrate how interpersonal trust can impact on instrumental trust (lack of engagement in business support programmes), and how instrumental or systemic trust is one factor, but not the only explanation for lack of progress and development in a business support context.

#### *9.5.2.2 Trust Components*

Trustworthiness between adviser and client were found to consist of three components: the knowledge capabilities of the advisers, local embeddedness, and empathy. The results suggest these three components are strongly interlinked, and necessary, for the development of trust in rural business support networks. Knowledge capabilities included the extent to which clients felt advisers had the skills and competences necessary to carry out their job. This included not only the technical knowledge advisers possessed themselves, but also their leadership abilities, and capacity for connecting participants into productive and beneficial external networks. Local embeddedness refers to client identification with advisers, which leads to credibility and legitimacy. Here, trust and legitimacy is achieved through being known locally, or having a good working knowledge of, or relationship with, the local agricultural community, where “champions” are embedded locally within the community. Thirdly, empathy referred to the degree to which the business support actors attempt to understand and fulfil participants’ needs. Each of these components were significant factors in the development of trust, which in turn restricted or facilitated knowledge exchange (Fisher, 2013).

First, the knowledge capabilities component was evident in both the central Government, generic forms of support and also the intermediary, local council model of business support. The adviser’s knowledge and capacity for delivering real benefits impacted upon personal trust in the adviser (Mole and Capelleras, 2018). Where it is perceived that there is a knowledge deficiency and lack of personal trust between participants and adviser, participants seek to compensate through learning accrued from exchanges with their peers. The value placed on reciprocity between participants is evident, relative to the formal knowledge imparted by the adviser.

The findings support the argument that the form of interaction between advisers and clients may vary between different types of supplier, depending on the client's perception of the provider's level of expertise (Mole et al., 2017; Hjalmarsson and Johansson, 2003; Curran and Blackburn, 2000). In terms of the local council programmes where respondents were in close engagement with advisers, perceptions of programmes varied according to the capabilities of the adviser. Respondents spoke of the proactive and enthusiastic nature of business support actors that allowed access to networks. The findings thus support Huggins' (2000) assertion that the energy, enthusiasm and experience of intermediaries or brokers is key in generating effective interaction and exchange between participants. In such cases, the programme adviser is effectively a "grassroots leader", i.e. someone who can trigger collaboration in local settings, and is driven by passion and not by monetary incentives (Sokjer-Petersen, 2010). In other instances, the technical knowledge and bridging capabilities of the adviser were questioned and cited as a reason for non-engagement in a specific programme.

Second, local embeddedness and empathy are intangible phenomena that are co-created during processes of interaction between the adviser and client. In terms of local embeddedness, the findings support the belief that clients tend to trust advisers more when they can identify with them; this gives advisers legitimacy (Laschewski et al., 2002). According to Phillipson et al. (2004), under the 'intermediary model', trust and legitimacy is achieved through being known locally or having a good working knowledge of, or relationship with, the local farming community. Hewes and Lyons (2012) noted the need for "champions" to be embedded locally within the community. In this, social capital facilitates the development of tacit knowledge, and where it is well developed, can facilitate collaboration between firms and business support actors (Morgan, 1997). The concept of embeddedness has been employed widely within rural research, given the values of community, and informal and friendship patterns in the rural setting (see for instance Tregear and Cooper, 2016; Bosworth and Atterton, 2012; Jack and Anderson, 2002).

The findings indicate that a loss of local embeddedness leads to credibility and legitimacy being damaged, and trust lost. This can occur for instance where new or seemingly "innovative" models of programme delivery are introduced. This can occur when the focus moves away from the local market territory and locally embedded ties and "soft" network type towards the traditional retail supply chain in new export

markets, and a “hard” network type (Rosenfeld, 1996) with the introduction of a formal contractual commitment for the sharing of resources and profits. In the case of the local council support programme discussed in Section 8.3.2.6, the formal, contracted distribution arrangement was not appealing to the majority of the participants as they did not perceive sufficient value in this for them. This led to “disembeddedness”, or the decoupling of ties through rules (White, 1992). Thus, as indicated by Phillipson et al. (2006) established local norms and networks can become destabilised due to external intervention. Klerkx and Leeuwis (2009) refer to continuous adaptation where intermediaries can shift from being facilitators of innovation to also being a source and/or carrier of innovation. However, a more involved role has implications for perceived neutrality.

Third, in terms of empathy, the findings strongly support Mole et al. (2017), Klerkx and Proctor (2012), Proctor et al. (2012) and Ingram (2008), who argue that business support advisers need good interpersonal skills, and Huggins (2000), that the most effective network brokers are able to successfully mix the economic goals with softer social interests of participants. It suggests that the interpersonal aspects of adviser skill-sets are critical in gaining access to knowledge and networks. In several business support settings identified in Chapter Eight, the programme adviser was effectively a “grassroots leader”, i.e. someone who can trigger collaboration in local settings, and is driven by passion and not by monetary incentives (Sokjer-Petersen, 2010). In such environments where clients trust the adviser, they tend to trust each other within the network, resulting in a strong culture of trust. Therefore, resistance or support for the programmes is a function of the degree to which the institutional actor creates a sentiment of trustworthiness in the mind of others (Murphy, 2006). Technical competence and relevant experience are important for relationship building with clients, but are not enough for advisers to perform their roles effectively (Landini et al., 2017; Landini, 2016; Nettle et al., 2013). A failure by the adviser to stimulate such an environment reduces the likelihood of embedded relationships developing, and thus of establishing sustained collaboration and co-operation. Reflexivity skills are needed on the part of advisers in order to recognise where trust is building or at risk, and have the capacity to make adjustments to their approach if necessary. The findings demonstrate that effective advisers or brokers of networks play a key role in maintaining an equal distribution of power and dependency in order to alleviate the potential for conflict but a deterioration in relations can occur where there are perceived personal interests on the part of the agent. This infers the importance of

strong personal relations and networks of relations in generating trust (McAdam et al., 2016; Alder and Kwon, 2002; Nahapiet and Ghoshal, 1998; Burt, 1997; Granovetter, 1973).

#### *9.5.2.3 Moderators of Trust*

The main components of trustworthiness (knowledge, local embeddedness and empathy) are built on a number of elements that foster trust relations and these go some way to understanding the difference in trust relations across the various support programmes. These elements include personal adviser skills and capabilities (Mole and Capelleras, 2018), consistency/longevity, communication and integrity. Greater trust was evident in programmes provided by actors such as local authorities and public agencies with strong interests in agriculture and rural affairs, where there was a greater degree of empathy and through flexibility and building a network collective, where the adviser was based locally and respected by the participants for their knowledge and network building capabilities. This indicates the power of affective and relational aspects of trust in explaining differences (Rousseau et al., 1998). In contrast to the aforementioned examples of trustful relations, there were consistency and integrity issues associated with economic development agency support. In addition, there was a less than effective communicative approach both here and from food associations. The economic development agency lacked consistency in advisers, where a regular change of advisers restricted relationship building with clients. This led to some mistrust, where clients sought to maintain control over the focus and direction of the business. Here, a failure to effectively communicate offerings leads to a lack of understanding of the support provision offered by the agency (Loader, 2018). The case of the food association illustrates the difficulties that can arise when clients are unclear as to the trade associations's *raison d'être*, and the scope of its activities (Newbury et al., 2016).

#### *9.5.2.4 Problematic Issues around Trust*

The findings provided some insights into the problematic nature of trust within a rural business support context. In this study, several problematic issues around trust in business support programmes were identified. Firstly, an example was provided of trust that developed between the adviser and participants in a local council support programme which led to the adviser providing continued support of participants after

the programme finished. Here, the adviser sought to maintain the good relations that had developed but this possibly leads to a situation where the adviser becomes exploited.

Secondly, strong trustful relations between programme organisers can present issues for successful programme delivery. It was shown in Section 8.3.1 how the high trust levels between the advisers and the programme manager on a local council food programme allowed for a flexible approach, when it became clear to the advisers that original aspects of the programmes needed to be changed. Whilst there was evidence of trustful relations between advisers and programme managers within the local council model of business support, this did not necessarily lead to successful programme outputs. A principal-agent problem arose linked to problems of information asymmetry/information gaps (Mole et al., 2017), and a lack of control mechanisms. This suggests that greater engagement by programme managers may be required to address the principal-agent problem in such support networks. The findings thus shed some light on the nature of trust between advisers and programme managers, or systems trust as discussed by Curry (2010).

In summary, the findings revealed how trust is built, and lost, in business support programmes that micro, artisan food producers participant in. The components of trust have been identified, underpinned by a number of moderators of trust. While there were positive outcomes of trust that developed in business support programmes, nonetheless a number of issues around trust constrained the development of business support and other network forms. As such, trust is proposed as a key contextual factor that moderates micro enterprise engagement in business support, and moderates innovation, within the artisan food setting.

The chapter will next consider the findings on business support programme outputs, in relation to the pertinent literature.

### 9.5.3 Business Support Programme Outputs

As discussed in Section 9.4.1, the findings on the forms of innovation are somewhat counterintuitive in that radical forms were developed from the strong local ties, rather than the weak ties of business support sources. Within this context, weak ties led to some radical innovation activities but this was evident through learning from



international sources, through travel and research, rather than through business support sources (Doran et al., 2012; Vega et al., 2012; Fitjar and Rodriguez-Pose, 2011; Van de Vrande et al., 2009; Von Hippel, 2005). The involvement in business support networks should not be confused with active collaboration leading to innovation. The findings indicate that, in the main, there was a lack of collaboration leading to innovation and any collaborations have tended to be inter-sector (for example between food and drinks) rather than intra-sector in nature, which supports the observations of earlier work by Tregear (2005). While Tregear (2005) explained this type of cooperation in terms of the “socio-economic history of artisan food production in the UK” (in that the enterprises in question are the only one of their sector type left in the locality), here it would seem more the case that lack of trust and fear of competition restricted the potential for collaboration which would possibly result in innovation. These findings raise questions about the effectiveness of the business support actor role for regional innovation and rural development, and the value placed on business support sources in the open innovation literature.

Nonetheless, business support provides these owner-managers with the specialist knowledge that enables them to develop their product offering (McAdam et al., 2016). Furthermore, there was evidence that knowledge transfer and learning from fellow programme participants and business actors does lead to product innovation (Vego et al., 2012) and therefore positively impacts on producers’ businesses, enabling them to further develop their innovative activity. Business support programmes have enabled members to increase their innovation capabilities as they are exposed to an increased flow of knowledge transfer integration (Knoben and Oerlemans, 2012). Through these experiences some of the producers were better informed on how to undertake market research, therefore they were able to develop products according to market needs, an example of classic open innovation comprising of “the use of purposive inflows and outflows of knowledge to accelerate internal innovation and to expand the markets for external use of innovation, respectively” (Chesbrough et al., 2006, p. 1). Indeed, the knowledge they acquired may not always have been new, but it helped provide instant innovation for the producers via open innovation, by taking new knowledge back to their individual businesses and applying it to meet their business needs. Moreover, producers realised the benefits of developing their absorptive capacity through exchanging knowledge, undertaking market research trips to generate knowledge and gaining access to consultants who offered “simple, practical business advice” (Vega et al., 2012) which they could simulate and apply in

order to drive commercialisation. The consultants were able to share their experiences, knowledge and networks to inform the support they provided (Minshal et al., 2008).

While programme objectives for both regional Government and local authority networks did include targets for innovation, the majority of the producers did not value the networks in terms of innovation, nor seek innovation opportunities. The initial motivations for signing up to business support programmes centred on the exchange of producer knowledge, and a desire to discuss, share and learn from likeminded owner-managers primarily by using tacit knowledge. The findings indicated that business support networks were used mainly to exchange information and tacit knowledge. For these respondents there was sufficient value to be gleaned from the social capital or “info-social” benefits (Martin-Rios and Erhardt, 2017; Newbery et al., 2016) that do not lead directly to commercial outcomes (Newbery et al., 2016). Involvement in business support networks allowed access not only to actor resources, but also to emotional and business support from fellow participants, which in turn helped to reduce feelings of rural isolation, and gave otherwise disconnected producers a collective voice, which they valued. The businesses’ peer support networks involved further bridging to other businesses for supply arrangements and for help with issues such as packaging and labelling. Thus, the social cohesiveness of the group helped to overcome the perceived negative consequences around a lack of business support actor knowledge and capability. In the case of programmes that were less successful, the embeddedness of ties (Uzzi, 1996) was evident in that members continued to exchange after the completion of the formal programme and its associated benefits of financially subsidised events.

Involvement in business support programmes allows these enterprises to develop relationships and build networks with Government bodies that they otherwise would not have had the opportunity to do (Masiello et al., 2015; Mole et al., 2009). The knowledge transfer, tacit and explicit, enabled producers to build on existing, and develop new, competencies where otherwise they would not have had time, the ability or the foresight to do so, enabling them to develop their products and processes using a “learning by doing” approach (McAdam et al., 2014). Value was obtained from the network bridging role (bridging capital) played by business support networks towards

more informal networks that fostered embeddedness and the development of strong ties. This would lend support for Bowen's (2011) assertion that formal institutions can reinforce social embeddedness and social ties between actors. This also provides additional insight into how and why ties shift from weak to strong (Jack et al., 2004). The findings on network bridging support previous studies that stress the importance of extralocal ties that connect network members to external resources, in stimulating new business opportunities (Newberry et al., 2013; Uzzi, 1996; Granovetter, 1973).

The findings also illustrate how informal and formal networks emerge as a result of problematic issues around trust and how such issues can be resolved to present more favourable outcomes for these enterprises. There may be unintended beneficial outcomes from a breakdown in trust relations in business support programmes, including the formation of informal, personal trust-based and formal, system trust-based networks as a reaction to a breakdown in personal trust within the original support network. Moreover, while a lack of trust can act as a barrier to producer engagement with business support networks, nonetheless participants can overcome such obstacles through the development of peer-to-peer trust and through the social ties between actors that have built upon pre-existing ties and social cohesiveness from earlier network programmes. The shared values around product authenticity can serve to generate bonding social capital and trust, which is typically embedded in strong-tie networks (Ring et al., 2010) and which can elicit reciprocal commitments to the mutual success of entrepreneurs in a community (Westlund and Bolton, 2003; Portes, 1998).

## **9.6 Chapter Summary**

This chapter utilised concepts from open innovation and social networks to interpret the nature of network development, the business actor-producer relationship and the impact on knowledge exchange and innovation within the micro firm, artisan food context. A revised conceptual framework, following the empirical stage of this study, was presented. The revised framework incorporated themes that emerged from these findings, including weak inside-out knowledge capabilities, cautious approach to growth (internal environment), strong outside-in capabilities (external environment), generic nature of support, actor capabilities and bridging capital (business support) and trust issues (contextual factors). The findings were evaluated in relation to the pertinent literatures on innovation and business support, and

consideration was given to the explanatory power of the open innovation and social networks theoretical perspectives. The Conclusions chapter will next seek to draw out the main themes from the study, specifically stating the main contributions to knowledge.

# **CHAPTER 10**

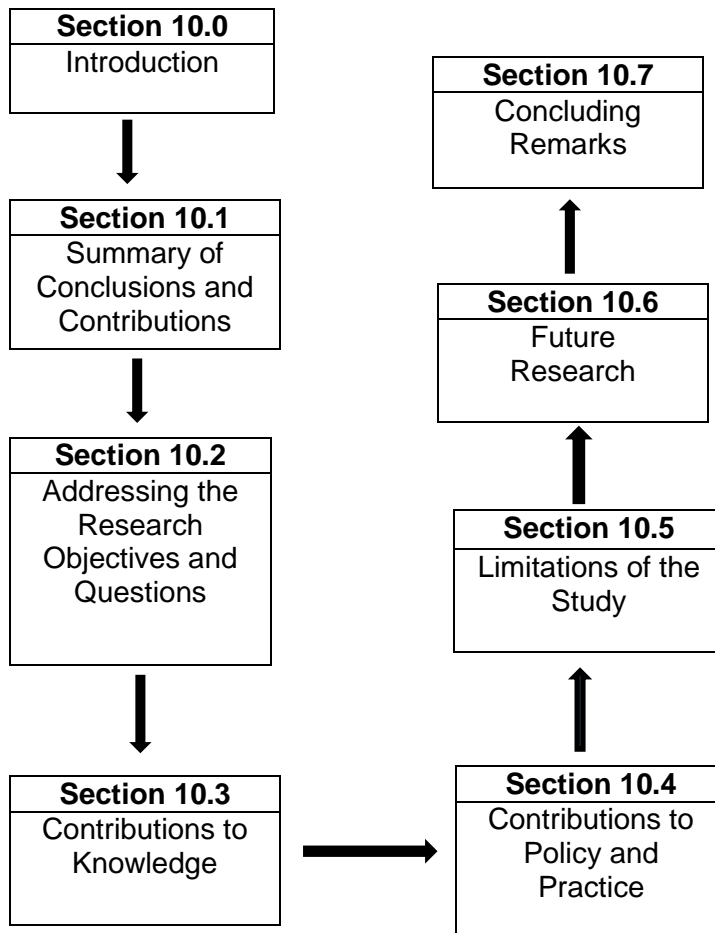
## **Conclusions**

## 10.0 Introduction

This thesis began by identifying a gap in knowledge on network development in the context of micro firm, artisan food production, and specifically the role of business support network actors in facilitating knowledge generation, network development and innovation within this context. In addressing this gap, the thesis sought to explore how locally embedded artisan food enterprises engage in business support networks for innovation. It was argued that by focusing on the content of the business actor-producer relationship, and the social attributes of trust and reciprocity that influence the formation and development of business support and linked networks, as well as the opportunities for innovation, the thesis would contribute to knowledge on micro firm innovation, and agri-food networks in rural areas. Subsequently, the thesis utilised concepts from open innovation and social networks to interpret the nature of network development, the business actor-producer relationship and the impact on knowledge exchange and innovation within the micro firm, artisan food context. A qualitative methodology, incorporating the views of micro enterprises and business support actors in relation to a broad range of business support types, was adopted in order to address the research objectives.

This chapter will now present the main conclusions from the research. The chapter will begin by providing a summary of the main conclusions and contributions of the study. It will then explicitly state how the study objectives have been addressed, through the empirical work that was documented in Chapters Seven and Eight, and discussed in Chapter Nine. It will proceed to state several contributions of the study to the pertinent literatures on small firm innovation, small business support and social networks. Thereafter the policy implications, limitations and areas for future research will be considered.

Figure 10.1 presents an outline of the chapter.



**Figure 10.1: Outline of Chapter Ten**

### **10.1 Summary of Conclusions and Contributions**

The main conclusions from the study and the contributions to knowledge are summarised against the study objectives and knowledge gaps in Table 10.1. These will be further discussed throughout the chapter.

**Table 10.1: Summary of Conclusions and Contributions**

Research Objectives/Questions	Gaps in Knowledge	Conclusions	Contributions to Knowledge
<p>RO1: To explore the knowledge sources for innovation in micro enterprises, within the artisan food sector context.</p> <ul style="list-style-type: none"> <li>• RQ1: How innovative are micro food producers?</li> <li>• RQ2: What are the sources of innovation?</li> <li>• RQ3: What are the contextual factors that influence innovation?</li> </ul>	<p>Innovation practices of small and micro food enterprises and the types of innovation and innovativeness within small food enterprises.</p> <p>The diverse sources of knowledge used by smaller firms in traditional and low-tech sectors such as food.</p> <p>Innovation knowledge in artisanal craft-based enterprises.</p> <p>Sector specific studies to provide greater understanding of innovation.</p> <p>Research that considers the particular context of micro enterprise innovation.</p> <p>Contextually grounded studies of open innovation in smaller firms where key influencing factors are analysed.</p> <p>Open innovation in small firms.</p> <p>Open innovation strategies in the food industry.</p>	<p>A focus on product quality and product innovation at the expense of the development of marketing capabilities and market innovation.</p> <p>These enterprises demonstrate both incremental and radical forms of product innovation.</p> <p>The relationships with informal network actors (strong ties) rather than with formal or business support actors (weak ties) lead to knowledge exchange and innovation within this context.</p> <p>A number of sector-specific contextual factors moderate knowledge capabilities for innovation in these enterprises and influence innovation outcomes (product quality/ authenticity, family influences/traditions, traditional methods and trust).</p>	<p>Holistic view of innovation in micro food enterprises.</p> <p>Radical innovation is from informal knowledge sources rather than business support knowledge sources.</p> <p>Travel identified as a highly important external source of knowledge.</p> <p>The conceptualisation of weak ties consisting of knowledge obtained from “unconventional” sources such as travel.</p> <p>Insights into how contextual factors interact with internal and external knowledge for innovation outcomes and engagement in business support programmes.</p> <p>Open innovation has only limited explanatory power in this context in that these enterprises do not demonstrate strong inside–out knowledge capability for product development.</p>
<p>RO2: To explore the factors impacting upon micro enterprise engagement in business support programmes, within the artisan food context.</p>	<p>Little is known about how micro, artisan food enterprises engage in business support networks for innovation.</p> <p>There is conflicting evidence on the value of Government assistance provided to small businesses.</p>	<p>Micro enterprises have been engaging primarily in “introductory” forms of support and there is less engagement in collaborative network programmes.</p> <p>Micro enterprise engagement in business support is influenced by: their perceptions of</p>	<p>Underlying contextual factors at enterprise and network levels that shape innovation practices and restrict engagement in business support.</p> <p>Business support actors view their contribution to network development in</p>



Research Objectives/Questions	Gaps in Knowledge	Conclusions	Contributions to Knowledge
<ul style="list-style-type: none"> <li>RQ4: What are the factors that facilitate engagement in business support programmes?</li> <li>RQ5: What are the factors that constrain engagement in business support programmes?</li> </ul>		<p>the lack of an integrated approach taken by agencies; the generic nature of support; a large, export-oriented business focus; high levels of bureaucracy, regulation and cost.</p> <p>Lack of understanding of innovation, a cautious approach, limited absorptive capacity and negative prior experiences are further underlying factors that restrict engagement in business support programmes.</p> <p>Business support programmes must address the local context and be sufficiently adaptable and tailored to meet client needs.</p> <p>Central Government agencies and food associations are not strong at communicating their offerings.</p> <p>The source of business support influences the micro enterprise's view of the value of the support.</p>	<p>different ways, which is largely shaped by the nature of the actor's role in food sector network development and the actor's constructions of business support interaction with producers.</p> <p>Fragmentation and duplication of business support may not be straightforward to eradicate due to a level of protectionism on the part of support providers.</p>
<p>RO3: To explore the nature of relational aspects such as trust and reciprocity, in micro enterprise engagement in business support programmes, within an artisan food context.</p> <ul style="list-style-type: none"> <li>RQ6: How can trust and reciprocity impact micro enterprise engagement with business support actors and by extension knowledge transfer and innovation?</li> </ul>	<p>The role of trust relations between intermediaries and farmers in supporting the translation of available information into useable knowledge.</p> <p>The range of intermediaries, the types of roles they offer and how these evolve over time.</p> <p>The role of third parties in networks. A better understanding of brokers in SME networks and what brokers actually do.</p>	<p>Knowledge capabilities, local embeddedness and empathy are strongly interlinked, and necessary, for the development of trust in business support networks for micro artisan food producers.</p> <p>Trustworthiness is built on a number of elements that include personal adviser skills and capabilities, consistency, communication and integrity.</p> <p>Wider sectoral-cultural issues can be used by business support actors to explain the deficiencies in programmes wherein there is</p>	<p>A need to revisit existing conceptualisations of trustworthiness.</p> <p>Insights into how swift trust develops - the role of the adviser is more pronounced after initial engagement.</p> <p>Insights into the problematic nature of trust.</p> <p>Sectoral-cultural issues can be used by business support actors to explain the deficiencies in programmes.</p>

Research Objectives/Questions	Gaps in Knowledge	Conclusions	Contributions to Knowledge
<ul style="list-style-type: none"> <li>• RQ7: How is trust developed in various forms of support?</li> <li>• RQ8: Are there negative as well as positive consequences of trust in actor relations in business support networks?</li> <li>• RQ9: How do trust relations compare across the various forms of support and how are these interpreted by both advisers and clients?</li> </ul>	<p>The discourses that construct the relationships between the business support actors and the micro business.</p> <p>The role of business support as a method to aid network development in food.</p>	<p>a narrative of a wider culture of mistrust tending to pervade the sector.</p> <p>Several problematic issues exist around trust in business support programmes. High engagement by programme managers is required to address the principal-agent problem in such support networks.</p>	
<p>RO4: To explore the innovation (and other) outputs from such engagement, within the artisan food sector context</p> <ul style="list-style-type: none"> <li>• RQ10: What are the outputs from engagement in business support programmes?</li> <li>• RQ11: How does business support help to develop innovation in micro enterprises?</li> <li>• RQ12: How is knowledge exchanged across various forms of business support?</li> </ul>	<p>SME owner-managers and successful business assistance interactions from their perspective.</p> <p>Knowledge transfer dynamics and collaboration in the food industry.</p> <p>Knowledge practices of advisers or experts who mediate between institutional sources and land managers.</p> <p>Innovation intermediaries and the impact of their support tools on agricultural entrepreneurs.</p> <p>The ways in which farmers may acquire information within their social networks in ways that enhance their learning.</p>	<p>Business support networks are used mainly to exchange information and tacit knowledge, against a backdrop of a lack of understanding of the concept of innovation on the part of the micro food enterprises.</p> <p>There are network building and reciprocal producer relations, which compensate for perceived knowledge gaps from business support sources.</p> <p>There may be unintended outcomes from business support programmes, including the formation of informal and formal, networks as a reaction to a breakdown in personal trust within the original support network.</p>	<p>Provides insights into how business support networks can lead to new informal and formal networks, and thus further opportunities for knowledge exchange and innovation outside of the original programme.</p> <p>Questions the effectiveness of the business support actor role for innovation support and rural development and the value placed on business support sources in the open innovation literature.</p>

## 10.2 Addressing the Objectives and Research Questions

### 10.2.1 RO1: To Explore the Knowledge Sources for Innovation in Micro Enterprises, within the Artisan Food Sector Context

These enterprises are extensively involved in a range of networks, both informal and more formal, business support network types. Innovation for these enterprises is derived from a combination of local experience and expert knowledge (Esparcia, 2014). As may be expected for enterprises that are small, rural and locally embedded, the ties were mostly strong, local and vertical in nature, where a high degree of bonding social capital is evident (Sorensen, 2016; Tregear and Cooper, 2016; Alder and Kwon, 2002; Burt, 1997; Granovetter, 1973). Travel was identified as a highly important external source of knowledge and a key factor behind not only the formation of some of the enterprises but also for developing new products, services and ways of doing things. The findings thus indicate some support for previous studies that have advocated the applicability of the open innovation model in the small business context (Vahter et al., 2015; Iakovleva, 2013; Teirlinck and Spithoven, 2013; Spithoven et al., 2011; Van de Vrande et al., 2009). It is concluded that it is the relationships with informal network actors (strong ties) rather than with formal or business support actors (weak ties) that primarily lead to knowledge exchange and innovation within this context.

The findings illustrated the broad range of innovation activities that these enterprises engage in. While there is some evidence of adoption of various forms of innovation, as suggested by authors such as De Martino and Magnotti (2017), Baregheh et al. (2016), Lefebvre et al. (2015), Baregheh et al. (2014) and Menrad (2004), the focus for these enterprises was very much on product quality and product innovation, underpinned by context specific factors (Tregear, 2005).

Product innovation in these enterprises can be characterised as incremental rather than radical, typical of small businesses operating in the manufacturing sector (Laforet, 2016; Baregheh et al., 2014). Nevertheless, there were examples of radical product innovation. Radical innovations were derived both from internal and external sources, moderated by contextual influencing factors (McAdam et al., 2014; Doran et al., 2012; Gallende, 2006), rather than through a reliance on business support knowledge sources, as suggested in the literature (Santoro et al., 2017; Wynarczyk,

2013; Lasagni, 2012; Parida et al., 2012; Todtling et al., 2009). It is concluded that these enterprises demonstrate both incremental and radical forms of product innovation.

The findings suggest a number of sector-specific contextual factors that moderate knowledge capabilities for innovation in these enterprises and which influence innovation outcomes. At the level of the enterprise these include a focus on product quality and authenticity, family influences and traditions, and the use of traditional methods. These firm level, inherent characteristics of the micro food enterprise lead to a degree of self sufficiency whereby the enterprises do not rely on business support as sources of knowledge and innovation. Firm level antecedents of product quality/authenticity and family influences/traditions are significant in the development of radical product innovation and innovation outcomes more generally. At a network level, issues around trust restrict outside-in and inside-out knowledge capability and the potential for collaboration that would lead to innovation. From the findings on innovation types within this context, it is concluded that the owner-manager's passion for product quality and authenticity, and an emotional involvement in production processes, fosters an environment within which product innovation has prevailed.

The strong focus on product quality and product innovation has to a degree been at the expense of the development of marketing capabilities and market innovation (Fernandez-Esquinas et al., 2010; Lamprinopoulou and Tregear, 2006). The largely regional focus of these enterprises suggests a significant knowledge and capability gap, in that accessing new markets, in order to enhance product demand, may lead to opportunities for new product development (McAdam et al., 2016).

#### 10.2.2 RO2: To Explore the Factors Impacting upon Micro Enterprise Engagement in Business Support Programmes, within the Artisan Food Context

Within Northern Ireland there are a wide range of programmes to support the specific needs of the agri-food sector and there is evidence that supports provided have been designed to meet the needs of micro food enterprises. Responsibility for this support has been spread across a number of Government Departments and at local authority level. However, the results indicate that micro enterprises have been engaging primarily in "introductory" forms of support and there is less engagement in collaborative network programmes. The findings indicate that these enterprises do

not see sufficient value in participating in regional Government knowledge sources. This lends weight to earlier work in the business support and rural studies literatures that implicitly pinpoints the need for an empathic approach in its calls for tailored programmes to address local contexts (Martin et al, 2016; Lambrecht and Pirnay, 2005; De Faoite et al, 2004; Curran, 2000). It is concluded that business support programmes must address the local context and be sufficiently adaptable and tailored to meet client needs.

The findings lend weight to earlier studies that indicate a lack of understanding of what support is currently available and an uncertainty about the value of support (Yusoff et al., 2012; Richard, 2008; Smallbone et al., 2008; Audet et al., 2007; Lewis et al., 2007). Furthermore, the micro producer's perception of support does not reflect exactly the support that is available, and suggests a lack of communication or "signposting" of the relevant supports by support providers. It is concluded that central Government agencies and food associations are not strong at communicating their offerings, which leads to a lack of understanding of the support provision, the agency's *raison d'être*, and the scope of activities. It is also concluded that the micro enterprise client engagement in business support is influenced by a number of factors including perceptions of the lack of an integrated approach taken by agencies, that support tends to be generic, and aimed at larger, export-oriented businesses and that support comes with high levels of bureaucracy, regulation and cost.

The findings reinforce the argument that the form of interaction between agencies, their advisers and clients may vary between different types of supplier, depending on the client's perception of the provider's level of expertise (Hjalmarsson and Johansson, 2003; Curran and Blackburn, 2000) and how participants define and interpret the role of the various support agencies and their advisers, based on prior experiences and reputation of the support agencies, and thus the "perceived qualities of trustworthiness" (Sligo and Massey, 2007). There is therefore a need to consider carefully the distinctions that exist between particular business support sources of knowledge. The business support sources take varying forms, consisting of public or private providers, or a combination of both, and not least individual actors with varying priorities and capabilities. The business support actors themselves view their contribution to network development in different ways, which is largely shaped by the nature of the actor's role in food sector network development and the actor's constructions of business support interaction with producers. The findings revealed

a wider theme of disconnection and feelings of isolation on the part of the micro enterprises, linked to relational aspects (Rousseau et al., 1998) and how they, as clients, interpret adviser roles and interpret support provision. This is manifest through views on the regional Government support being primarily for export, and by association, larger firms. It is concluded that the source of business support influences the micro enterprise's view of the value of the support.

The findings indicate a largely reactive approach to supporting micro food enterprises, alongside duplication in offerings within Government and the fragmentation of support offerings. The findings therefore support recent studies that indicate a degree of competition rather than collaboration and coordination between business support agencies in agricultural systems (Cerf et al., 2017; Faure et al., 2017; Rijswijk and Brazendale, 2017). It is concluded that the level of fragmentation and duplication may not be straightforward to eradicate due to a level of protectionism on the part of support providers.

The attitudes of the micro enterprises towards business support are influenced by a number of factors, including their understanding of what constitutes innovation, their experiences from previous involvement in business support, and a cautious approach to growth. While objectives for both regional Government and local authority networks may include targets for innovation, these enterprises do not tend to seek innovation opportunities from such networks. It is concluded that a lack of understanding of innovation prevents fuller engagement in support programmes that could lead to greater innovation opportunities.

These businesses exercise caution regarding the role of more formalised business support. This would suggest limited absorptive capacity in terms of the ability to locate, value and acquire external knowledge and thereafter to absorb, manage and exploit the knowledge for innovation (Zahra and George 2002; Cohen and Levinthal, 1990). The findings support previous research that indicates that for such businesses there is a trade-off point, in terms of breadth of external linkages with innovation sources and ability to absorb such knowledge (Vahter et al., 2014; Lee et al., 2010). It is concluded that a cautious outlook and limited absorptive capacity restrict engagement in business support programmes.

The findings revealed a number of underlying contextual factors that restrict engagement in business support programmes and an appreciation of the value of business support programmes for innovation. These are at the firm level (product quality and authenticity) and at the network level (trust). These contextual factors not only mitigate against the need for involvement in business support programmes, but indeed more informal network types. This is reflective of how in small food enterprises the innovation process is unstructured and is characterised by the owner-manager's "gut" feeling (Beckeman et al., 2013), wherein the products represent the owner-manager's personality (Sidali et al., 2015). It is concluded that enterprise and network level contextual factors (product quality and authenticity and trust) serve to restrict involvement in business support programmes.

#### 10.2.3 RO3: To Explore the Nature of Relational Aspects, such as Trust and Reciprocity, in Micro Enterprise Engagement with Business Support Actors, within the Artisan Food Sector Context

This study has explored the nature of relational aspects in business support networks and the formation of trust in adviser-client relations of rural business support programmes. It has sought to explain how varying levels of trust bring different outcomes for support networks. In the current study, trustworthiness was found to consist of three components: knowledge capabilities, local embeddedness and empathy. Knowledge capabilities include the extent to which clients felt advisers had the skills and competences necessary to carry out their job. Local embeddedness refers to client identification with advisers, which leads to credibility and legitimacy. Empathy, a behaviour-based phenomenon, refers to the degree to which the business support actors attempt to understand and fulfil participants' needs.

The adviser's knowledge impacted upon personal trust in the adviser. Where it is perceived that there is a knowledge deficiency and lack of personal trust between participants and adviser, participants seek to compensate through learning accrued from exchanges between participants. In terms of local embeddedness, the findings support the belief that clients tend to trust advisers more when they can identify with them; this gives advisers legitimacy (Laschewski et al., 2002). The findings indicate that a loss of local embeddedness leads to credibility and legitimacy being damaged, and trust lost. This can occur for instance where new or seemingly "innovative" models of programme delivery are introduced, where changes to the programme

goals, delivery mechanism, and the adviser-client relations can lead to the disturbance of those established local norms and networks. In terms of empathy, the conceptualisation of trustworthiness revealed in this study strongly supports previous studies (Landini et al., 2017; Nettle et al., 2013; Klerkx and Proctor; 2012) that argue that business support advisers need good people skills. It suggests that the interpersonal aspects of adviser skill-sets are critical to access knowledge and networks. In several business support settings, the programme adviser is effectively a “grassroots leader”, i.e. someone who can trigger collaboration in local settings, and is driven by passion and not by monetary incentives (Sokjer-Petersen, 2010). Where clients trust the adviser, they tend to trust each other within the network, resulting in a strong culture of trust. It is concluded that the components of knowledge capabilities, local embeddedness and empathy are strongly interlinked, and necessary, for the development of trust in business support networks for these micro artisans, which in turn restricts or facilitates knowledge exchange. It is also concluded that resistance or support for the programmes is related strongly to the interpersonal skills of the business support actor, and to which the business support actor creates a sentiment of trustworthiness in the mind of others (Murphy, 2006).

The main components of trustworthiness (knowledge, local embeddedness and empathy) are built on a number of elements that foster trust relations and these go some way to understanding the difference in trust relations across the various support programmes identified here. These elements include personal adviser skills and capabilities, consistency/longevity, communication and integrity. In instances where trust relations were good, personal adviser skills, consistency, longevity, and integrity were evident. On the contrary, where there was a lack of consistency and a less than effective communicative approach, and where a regular change of advisers restricted relationship building with clients this led to some mistrust, where self-identity issues were evident, around control over the focus and direction of the business.

The findings also indicate the power of affective and relational aspects of trust in explaining differences across programmes (Rousseau et al., 1998) and the role of swift trust (Harrison et al., 1997) where the coordinator or adviser is critical to the development of trust in time-bound projects, and where there is insufficient time for the development of strong ties. The development (or not) of swift trust in these timebound, time restricted business supports is affected by trust in two sets of actors:



trust in the promoters of the investment, the institutions or business support agency themselves providing the support and trust in advisers delivering the organisation's programmes. It is concluded that institutional level trust is a pre-eminent factor in the decision whether or not to engage in business support and this is dependent on the client's prior experiences and knowledge of the business support agency.

A lack of trust may be attributed to the sectoral context or "sectoral culture" (Tregear and Cooper, 2016), in terms of shared values on product authenticity and fear of competition. This implies that there are characteristics associated with the regional Northern Ireland context more generally that influence these enterprises' approaches to knowledge exchange for innovation. However, the experiences in some cases would contradict this narrative, and suggest that distrust may be endogenous rather than exogenous or cultural in nature (Sutherland et al., 2013) and not reflective of a general, sectoral distrust of institutional sources as suggested in the literature (see for instance Fisher, 2013) or the impact of the macro, structural context (Murphy, 2006), in restricting collaboration. Therefore, it is concluded that the notion of wider sectoral-cultural issues can be used by business support actors to explain the deficiencies in programmes wherein there is a narrative of a wider culture of mistrust tending to pervade the sector.

The findings provided some insights into the problematic nature of trust within a rural business support context. The literature highlights that trust is most often presented as a positive force for social relations, although the less desirable aspect has been considered in a rural context, for instance in the discussion on over-embeddedness and loss of external knowledge flows (Eklinder-Frick, 2011; Hoang and Antonic, 2003; Uzzi, 1997). In this study, several problematic issues around trust in business support programmes were identified which can lead to a situation where the adviser becomes exploited and where strong trustful relations between programme organisers can present issues for successful programme delivery. It is concluded that high engagement by programme managers is required to address the principal-agent problem in such support networks.

10.2.4 RO4: To Explore the Innovation (and other) Outputs from such Engagement, within the Artisan Food Sector Context

The findings provided some evidence that knowledge transfer and learning from fellow programme participants and the business actors does lead to product innovation for these enterprises and therefore positively impacts on producers' businesses, enabling them to further develop their innovative capabilities and activity. Nonetheless, the findings raise questions about the effectiveness of the business actor role for regional innovation and rural development, and the value placed on science-based sources in the open innovation literature (Wynarczyk, 2013; Lasagni, 2012; Parida et al., 2012; Todtling et al., 2009). The findings indicate that business support programmes are used mainly to exchange information and tacit knowledge, against a backdrop of a lack of understanding of the concept of innovation on the part of the micro food enterprises.

There was development of peer-to-peer trust through the social ties between actors that have built upon pre-existing ties and social cohesiveness from earlier network programmes. While the value of on-going contact and peer support for knowledge exchange after the formal programme ended was noted, this largely did not lead to collaborative innovation outputs. The knowledge gleaned through the formal and informal interactions resulting from business support programmes had a transformational impact on participants' confidence levels. Furthermore, the shared values around product quality/authenticity helped to generate bonding social capital and trust. Thus, it is concluded that business support programmes primarily provide these enterprises with opportunities for knowledge exchange and learning from peers, rather than direct innovation outputs.

The producer and support actors' notions of the value of knowledge from business support sources revealed network building and reciprocal producer relations, which compensated for perceived knowledge gaps from business support sources, and in some cases were instigated by the producers (bonding capital) and in other cases were facilitated by business support actors through a network bridging role (bridging capital). Informal and formal networks grew out of business support programmes either organically as participants maintained contact and collaboration or as a response to failings in earlier business support programmes. In the case of the business support actor network bridging role, the issue is not whether the actor directly assists the producer to innovate but rather whether the actor can strengthen the innovation process by facilitating the interaction between actors, including the producers themselves (Faure et al., 2012). Therefore, it is concluded that there may

be unintended outcomes from business support programmes, including the formation of informal and formal networks as a reaction to a breakdown in personal trust within the original support network.

#### 10.2.5 RO5: To Develop a Conceptual Framework to Illustrate the Role of Business Support Programmes in Innovation within the Artisan Food Context

A conceptual framework illustrating the nature of micro artisan producer engagement in business support, within the context of the firm's wider innovation and knowledge exchange activities, was presented in Chapter Nine. The framework contributes to understanding of the nature of innovation in micro size firms, based on open innovation and social networks components. Some of the component factors are already recognized in the small firm and innovation literatures (for instance, a reliance on strong ties, the fragmentation of business support, lack of resources for R&D), however the conceptual framework illustrates factors that are particular to the contextual setting of micro size artisan food enterprises (for instance, product quality and authenticity, traditional methods, the nature of trust relations, and the emergence of informal and formal networks). However, perhaps most significantly, the conceptual framework allows consideration of the interlinkages between open innovation and social networks within the contextual setting of artisan food micro enterprises, to provide a deep understanding of how these types of enterprises actually innovate. In addressing calls for research to consider the micro firm context (Duarte et al., 2017; Baumann and Kritikos, 2016; Reinl et al., 2015; Alonso and Bressan, 2015; Della Corte et al., 2013; Verbano et al., 2013), it illustrates the nature of the inter-relationships between business support programmes, network relations, innovation outputs and the contextual setting of these enterprises. Specifically, contextual factors impact upon innovation outputs directly, and also indirectly as they mediate engagement in business support programmes. Social networks are linked to the contextual factors, through the identification of trust relations as a strong contextual factor. The impact of social networks are also evident in the framework within the business support and policy environment component, through the bonding and bridging capital aspects of business support, and through the use of strong tie and weak tie knowledge sources, as illustrated in the external environment component of the model.

The main conclusions relating to the components of the framework have been discussed thus far in this chapter. The resulting contributions to knowledge will be discussed in the following section.

### **10.3 Contribution to Knowledge**

The study has made a number of key contributions to knowledge, which address the gaps in the literature as discussed in Chapter One (Section 1.3). The study's contributions will now be discussed in relation to contribution to three literature strands that are linked to the study focus and objectives: the innovation literature, the small business support literature and the social networks literature. Moreover, in this section consideration will be given to the explanatory power of the two theoretical perspectives adopted for this study (open innovation and social networks).

#### **10.3.1 Contribution to the Innovation Literature**

This thesis has made several contributions to knowledge on innovation within the regional, small food enterprise context. In broad terms there is a general lack of understanding and empirical knowledge on micro, artisanal enterprises and of innovation practices in micro firms (Alonso and Bressan, 2016; Danson et al., 2015). More specifically, there has been limited empirical research exploring innovation practices of small and micro food enterprises and the types of innovation and innovativeness within small food enterprises (Alonso et al., 2016; Danson et al., 2015; Lefebvre et al., 2015). Therefore, this study has contributed to the limited understanding of micro enterprise innovation by providing an exploration of how artisanal food enterprises innovate. The study has provided a holistic view of innovation in micro enterprises and the interplay of innovation types. This is an important contribution to knowledge given that innovation studies have largely focused on particular aspects of innovation in the food industry, taking a narrow, restricted focus, for example, around process and product innovation (Levebvre et al., 2015; Baregheh et al., 2014).

It has been demonstrated here that an extensive range of formal and informal, internal and external, knowledge sources are utilised by these enterprises for innovation purposes. The findings contradict previous studies indicating that small businesses in the food industry are highly dependent on the attainment of external technology in

developing product innovation (Ciliberti et al., 2016) and external knowledge sources (Doran et al., 2012; Vega et al., 2012; Van de Vrande et al., 2009). The findings on breadth of knowledge sources indicates some support for previous studies that have advocated the applicability of the open innovation model in the small business context (Vahter et al., 2015; Iakovleva, 2013; Teirlinck and Spithoven, 2013; Spithoven et al., 2011; Van de Vrande et al., 2009). However, open innovation has only limited explanatory power in this context in that these enterprises do not demonstrate strong inside-out knowledge capability for product development. The protection of intellectual property and controls around shared knowledge is not particularly feasible for these food-based enterprises, and typically limits open innovation potential in micro firms (Ostrom and Fernandez-Esquinas, 2017).

The findings in relation to benchmarking from travel as a knowledge source are of some interest. While travel was identified as a highly important external source of knowledge and a key factor behind not only the formation of some of the enterprises but also for developing new products and ways of doing things, the literature does not acknowledge the importance of travel as a knowledge source for innovation. This is thus an important finding from the study.

The findings raise questions about the nature of innovation within this particular sectoral context and challenge assumptions around the incremental nature of innovation in agri-food more widely, based on its low-tech characteristics (Bayona-Saez et al., 2017; Baregheh et al., 2012; Capitano et al., 2010; Bhaskaran, 2006). While the extent of radical innovation outputs from artisan food producers should not be overstated, radical innovation is displayed here, and arguably to a greater degree than previously envisaged in the literature and interestingly from informal knowledge sources rather than science or business support knowledge sources.

In responding to calls for research to undertake sector specific studies to provide greater understanding of innovation (Presenza et al., 2017; Wischnevsky et al., 2011; Damanpour, 2010; De Jong and Vermeulen, 2006) and for research that considers the particular context of micro enterprise innovation (Duarte et al., 2017; Baumann and Kritikos, 2016; Reinl et al., 2015; Alonso and Bressan, 2015; Della Corte et al., 2013; Tu et al., 2014; Verbano et al., 2013), this study identifies the key contextual factors and, significantly, provides insights into how these contextual factors interact with internal and external knowledge sources for innovation outcomes and

engagement in business support programmes. This helps to address the “ambiguity” that exists around the antecedents that make firms innovative (Carado et al., 2018).

### 10.3.2 Contribution to the Small Business Support Literature

The findings on the micro enterprises’ engagement in business support help to address a lack of knowledge on the ability of agricultural knowledge systems to facilitate interaction among participant actors, for the purposes of innovation (Bourne et al., 2017; Klerkx et al., 2013; Wellbrock, 2013; Faure et al., 2012). The role of business support institutions in aiding network development in rural agri-food networks is not clear (Nettle et al., 2018; Phillipson, et al., 2016; Klerkx et al., 2013; Nettle et al., 2013) and there is a significant gap in knowledge on how micro enterprises, and in particular locally embedded artisan food enterprises, engage with business support institutions for innovation. Several specific contributions are made.

The findings shed further light on the factors that impact on engagement in business support and contribute to this literature by considering the underlying contextual factors at enterprise and network levels that may simultaneously shape innovation practices and restrict engagement in business support. In addition, a lack of understanding of innovation on the part of these enterprises prevents fuller engagement in support programmes that could lead to greater innovation opportunities. Thus, the findings help to move the discussion on barriers to engagement in business support beyond a rather simplistic listing of generic factors.

The findings in relation to the distinctions that exist between particular business support sources of knowledge are noteworthy and help address the need for more understanding of the different ways advisers perform their role and operate in networks (Nettle et al., 2018; Phillipson, et al., 2016), the interactions between different actors within agricultural advisory systems (Bourne et al., 2017; Faure et al., 2012), and the evolving role of private sector organisations in providing advisory services (Nettle et al., 2018). The findings provide a nuanced understanding of engagement in various forms of business support by revealing how the business support actors themselves view their contribution to network development in different ways, which is largely shaped by the nature of the actor’s role in food sector network development and the actor’s constructions of business support interaction with producers. The findings support recent studies that indicate a degree of

fragmentation and duplication of support (for instance McElwee et al., 2018), but this study suggests that the level of fragmentation and duplication may not be straightforward to eradicate due to a level of protectionism on the part of support providers. Moreover, a reactive approach by the agencies in this study prevents proactive agenda setting on agricultural topics (Knuth and Knierim, 2013).

A further contribution is made in relation to understanding around the types of outputs generated from business support programmes for micro enterprises. For these types of enterprise, business support networks are used mainly to exchange information and tacit knowledge. In relation to direct innovation outputs, this finding raises questions about the effectiveness of the business support actor role for innovation support and rural development as suggested in the literature (Nettle et al., 2013; Virkkala, 2007; Terluin, 2003) and the value placed on business support sources in the open innovation literature (Santoro et al., 2017; Wyncarczyk, 2013; Lasagni, 2012; Parida et al., 2012; Todtling et al., 2009). However, while networks are not valued in terms of innovation, the findings provide insights into how business support networks can lead to new informal and formal networks, and thus further opportunities for knowledge exchange and innovation outside of the original programme.

### 10.3.3 Contribution to the Social Networks Literature

In this section consideration is given to the contribution of the findings to conceptualizations of social capital, trust, and network ties. As discussed in the previous section, the findings provide insights into network formation and how informal and formal networks emerge from business support programmes and how these can be a response to perceived shortcomings in previous programmes. The findings contribute to understanding on how bonding social capital and trust is generated, and lost, in the micro food enterprise engagement with business support, which addresses calls in the literature for a greater understanding around how social capital is formed (Malecki, 2012) and the need for more knowledge around the challenge of building bridging social capital in group situations characterised by dense networks and high levels of bonding social capital (O'Brien et al., 2005). The contextual factor of shared values around product quality/authenticity is an important feature in the formation of social capital and trust. The emergence of bonding social capital in response to perceived limitations in adviser knowledge and programme content is noteworthy also. The business support actor plays a key role in facilitating

the interaction between the participants and introducing the participants to other business support actors through network bridging activities. Insights are therefore provided into how bonding and bridging social capital are built in rural areas, where bonding social capital is typically strong.

The findings on innovation outputs indicate that strong ties are mainly used for innovation purposes within this context. Weak ties lead to some radical innovation activities but this is evident through learning from international sources, through travel and research, rather than through business support sources. This conceptualisation of weak ties consisting of knowledge obtained from “unconventional” sources such as travel suggests a need to rethink how weak ties for innovation in this context should be conceptualised. The study contributes to understanding here by indicating that weak ties as constructing mainly institutional (business support) networks within the local territory is too narrow in scope to convey the full extent of interactions, social relations and learning processes leading to knowledge exchange and innovation for these enterprises. In support of Tregear and Cooper (2016), this suggests the need to interpret embeddedness more widely and to consider forms of embeddedness in other non-local territories.

The findings provide further insights into the role of business support agencies in developing trust in rural communities, through network development. This addresses the need for research on the nature of trust, and how it is manifest, in rural communities (Richter, 2017), in relation to the forms of trust that emerge from business support programmes, their delineation and the connections between the forms of trust. The main components of trustworthiness (knowledge, local embeddedness and empathy) presented in this study are subtly different to that proposed previously. This categorisation captures aspects of previous categorisations but contains some elements that are not readily observable in the literature. Hence, the results here signal a need to revisit existing conceptualisations of trustworthiness in the literature. A marked difference in the current study's conceptualisation of trustworthiness is “local embeddedness” - the belief of trustors that they can relate to a trustee who is immersed in the local setting, and who is well known to the trustors, thereby conferring credibility and legitimacy on him/her. The concept of embeddedness has been employed widely within rural research (see for instance Tregear and Cooper, 2016; Bosworth and Atterton, 2012; Jack and Anderson, 2002). However, the component of local embeddedness has not featured



strongly in the various categorisations of trust, and particularly categorisations that have emerged in the organisational and management literatures. There has been some debate in the economic literature surrounding whether trust is driven by “relational proximity”, which is a function of the degree to which individuals or firms are embedded within a common socio-economic context, as opposed to the importance of physical distance and geographical proximity (Murphy, 2006). The results here suggest local embeddedness is in part related to geographical proximity, however the issues leading to mistrust were more relational in nature. The feeling of disconnection and isolation from support providers was largely related to the type of support provided, rather than as a result of spatial or physical proximity (Neergaard and Ulhoi, 2006).

The findings contribute insights into how a loss of local embeddedness can occur where new or seemingly “innovative” models of programme delivery are introduced. This occurs when the focus moves away from the local market territory and locally embedded ties towards the traditional retail supply chain model and export markets. A further contribution to knowledge on the components of trustworthiness is the importance of adviser empathy and strong interpersonal skills over technical competence and relevant experience. A failure by the adviser to stimulate such an environment of trust reduces the likelihood of embedded relationships developing, and thus of establishing sustained collaboration and co-operation.

Conceptualising trust in terms of distinct, delineated categories may not capture the complexity of trust and the extent of the connections between the categories. The findings reveal an interplay between interpersonal and institutional level trust and illustrate how weak or strong interpersonal trust can impact on institutional trust through levels of engagement in business support programmes. The findings contribute insights into how swift trust develops, or not, based on trust in actors at the institutional level (the reputation of the organisation) and at the adviser, programme delivery level where personal relations are developed. Where previous research (Meyerson et al., 1996) has placed importance on trustworthiness in the adviser, these results would suggest that the role of the adviser is more pronounced after initial engagement.

A further contribution is the finding on how wider sectoral-cultural issues can be used by business support actors to explain the deficiencies in programmes wherein there

is a narrative of a wider culture of mistrust tending to pervade the sector. This was the case in both central and local council programmes where the difficulties experienced in engaging participants were attributed to systemic mistrust. However, this study questions that narrative, in that it is possible through appropriate actions, such as improving the expertise of advisers and by taking a benevolent approach, to foster trust in institutional performance.

The findings contribute knowledge on the elements that underpin the main components of trustworthiness and how the elements of personal adviser skills and capabilities, consistency/longevity, communication and integrity play out across various forms of business support and account for differences in trust relations across support programmes.

Finally, the findings provide insights into the problematic nature of trust within a rural business support context, which is an under-researched area. Somewhat counterintuitively, strong trust relations between advisers and clients can be exploited to a degree. Furthermore, strong trustful relations between programme organisers can present issues for successful programme delivery through a principal-agent problem. Thus, the findings counter the notion that trust has purely positive connotations.

#### **10.4 Contribution to Policy and Practice**

The findings and conclusions from this study indicate greater potential for business support programmes to address the innovation capacity of micro food enterprises. There is some scope for developing more direct innovation outputs from micro firm engagement with formal knowledge sources. The findings highlight several specific implications for policy makers and business support actors, which will now be discussed in turn.

The findings suggest that business support agencies must consider how to foster higher levels of innovation among these enterprises and in particular radical or new to market innovation. Regional policies could seek to address latent internal capabilities and resources available to micro enterprises, such as family influences, that if exploited could lead to innovation outputs. Agencies have a role to play in educating these enterprises on what is meant by innovation, to help demystify the

term and therefore convey to the owner-managers that innovation is a much broader activity than R&D, and is a realistic and achievable activity for them.

There is a need for more effective design and management of business support networks to foster micro enterprise engagement, particularly at regional Government level. This would require a participatory approach and close cooperation between the support actor and the micro enterprise that takes account of the individual firm needs (Faure et al., 2013). Here, advisers would assume the role of facilitators rather than technical experts, requiring the development of strong interpersonal skills and training in dealing with complex social and group processes (Landini et al., 2017).

In order to address the issue of lack of clarity and fragmentation of existing support provision, agencies should devise a targeted, coordinated and proactive communication plan for micro food enterprises, with clear articulation of current supports and contact points. There is a need to strongly communicate the objectives of the particular support programme and manage participants' expectations, in that knowledge networks are limited in what they may achieve and are not a panacea for all ills. Providing advice through multiple agencies requires coordination of diverse organisations and services which form the business advisory system (Faure et al., 2012). As such there would appear to be a need for relevant stakeholders to work together and outside their "silos" to maximise opportunities for the exploitation and commercialisation of innovation within micro enterprises from traditional industries, such as agri-food. The purpose of collaboration between support agencies should relate not only to the alignment of services but to the development of practice and the sharing of resources, for instance for the purpose of matching clients with the right form of support and the right adviser (Nettle et al., 2018). This would require new models of funding and/or incentive arrangements to support coordination among public sector agencies and between public sector and private sector advisory systems. The recent industry proposals for the establishment of a dedicated agri-food marketing body for Northern Ireland may, if implemented, help in this respect.

Business support actors have an important role to play in the development of informal networks for innovation through their network bridging activities. Thus, consideration should be given to how they can best leverage relational assets such as social capital, trust relations, and reciprocity to foster engagement and improve network outcomes (Tregear and Cooper, 2016; Esparcia, 2014; Besser and Miller, 2011; Eklinder-Frick

et al., 2011). A solution for policy makers and support providers may be to focus on owner managers' existing personal networks and peer recommendations and to meaningfully include owner-managers in both the support programme consultation and design phases. Owner-managers that have well developed networks are more likely to participate due to the referrals/word-of-mouth recommendations they receive as a result of a personal network (Hjalmarsson and Johansson, 2003).

The findings on trust lead to several policy recommendations. In public/private initiatives, such as local authority business programmes, they indicate that greater engagement by programme managers may be required to address the principal-agent problem in such support networks. Indeed, high engagement from the sponsoring institutions may lead to a better fit between the programme goals, delivery, and the majority of client needs. The lack of institutional trust in public sector bodies may be addressed to some degree by a greater degree of public and private body collaboration, or through the intermediary model (Phillipson et al., 2004). This model would appear to work well at local authority level when delivery is provided by skilled private sector partners.

The findings on the contribution of food body associations and a lack of engagement with these associations among micro food enterprises would suggest the need for further strengthening of food producer associations to represent the needs, and defend the interests, of micro food enterprises to a greater extent. Engagement in producer associations may be further incentivised by the public sector subsidising the cost of services. This could bring about more effective relationships between producers and support agencies. As suggested in recent work (Faure et al., 2017), such a development would facilitate interaction and dialogue between producer organisations with the private and public sectors for the support methods necessary for their members.

### **10.5 Limitations of the Study**

This thesis explored the nature of innovation in micro, artisan food enterprises in one region of the UK, Northern Ireland. Thus, the findings are very much bound to the location. However, the research has identified various themes that may inform future studies into innovation in micro size firms in other peripheral regions with different policy and business or sectoral contexts.

Given the lack of prior knowledge on the relationship between innovation and involvement in business support programmes, within a micro firm context, the study aim and objectives were quite broad ranging and considered support programmes broadly rather than a more in-depth focus on particular forms of business support (for instance the Innovation Vouchers Scheme or the Rural Development Programme). Essentially, the study sought to provide the reader with an understanding of the nature of innovation in this context and how business support programmes do (or do not) lead to innovation outcomes. However, this approach has allowed for the identification of characteristics associated with a range of business supports.

In methodological terms, a common criticism of qualitative research is its lack of generalisability and the subjective stance of the researcher that can lead to bias. While this study does not claim to provide generalisable results, several steps were taken to ensure rigour in the data collection and analysis, as outlined in Chapter Five. Further, the research incorporated regional business support actor and participant (micro food producer) perspectives to provide the scope for a relatively richer and deeper understanding of the nature of innovation in micro, artisan food enterprises, which will in turn contribute to knowledge on small firm innovation more generally.

A number of the core areas addressed in this study, such as innovation and trust, are complex and challenging both conceptually and methodologically to investigate. For instance, in terms of innovation, an element of self-reporting bias may affect respondents' responses, in that the micro enterprises may exaggerate the extent of innovation activity they have been involved in. Likewise, in terms of trust, respondents' perceptions of trustworthiness may be incomplete and perceptually biased. These limitations are common to other studies and, as stated, methodological steps were taken to minimize respondent bias.

## **10.6 Future Research**

In broad terms, future research may examine the themes identified here in other food and rural settings and in other regions. Broad areas for exploration with micro enterprises and business support actors in other settings and regions include innovation, business support engagement, network formation, and trust. Future research should consider context and how antecedent factors and sectoral norms

and behaviours shape interactions between actors, and in turn the nature of knowledge exchange and innovation.

Whilst the sector contextual factors merit investigation, attention should also be given to micro owner-manager entrepreneurial characteristics, motivations and attitudes towards growth. At the micro enterprise owner-manager level more research is needed to explore constructions of the value of the business support actor role and how this relates to levels of engagement. The key question here is how do those who are heavily engaged in business support networks compare in terms of attitudes and behaviours with those who have not engaged?

There is much scope for further research to explore a range of areas around the innovation practices of micro enterprises. In relation to knowledge sources for innovation, the extent to which theoretical perspectives such as open innovation have explanatory power, merits further investigation. There is also a need to reflect on how social ties for innovation and embeddedness in this context, and indeed others, should be conceptualised. In support of Tregear and Cooper (2016), this suggests the need to interpret embeddedness more widely and to consider forms of embeddedness in other non-local territories.

Future research should aim to explore particular forms of business support (for instance the Innovation Vouchers Scheme or the Rural Development Programme). Access to networks with a collaborative focus, such as local authority business programmes, over a longitudinal timeframe would allow for insightful analyses of the impact on business growth, and how owner-manager attitudes towards innovation may develop. In this case, the research design would incorporate the network as the unit of analysis. Comparative studies could be undertaken of business support programmes at various stages of development (both new and established) and in doing so compare the results of constructed and emergent networks (Elverkrok et al., 2017).

The network bridging and embedding role of business support actors, and its impact for micro size enterprises in food or other forms business activity in a rural setting, is worthy of consideration. The findings provide some insights into the formation of both formal and informal networking and knowledge exchange that takes place following the completion of a business support programme and after the public funds terminate.

It would be interesting to more systematically examine this theme with advisers and participants across a number of business support programmes to explore how and why these networks emerge.

Trust relations were found to be a strong feature of this artisan food sectoral context. Further exploration of the nature of trust in micro enterprise engagement with business support actors, in both food and non-food contexts, is needed. The results here signal a need to revisit existing conceptualisations of trustworthiness of business support actors or advisers. It would be interesting to explore the relationship between interpersonal and institutional trust. Some questions here would include whether adviser empathy can overcome a mismatch between institutional level programme goals and client needs, and in turn whether strong institutional level trust can overcome poor interpersonal relations between adviser and client. The problematic or “dark” side of trust also needs much more investigation, and research on the role of trust in rural business networks and business support for small firms more generally should start from a critical perspective rather than assuming that trust has inherently positive impacts on business development.

## **10.7 Concluding Remarks**

This chapter discussed the main conclusions from the research in relation to the research objectives and then highlighted the contribution of the study to gaps in knowledge around how micro size enterprises, within the artisan food context, engage with business support networks for knowledge exchange and innovation. The thesis utilised concepts from open innovation and social networks to interpret the nature of network development, the business actor-producer relationship and the impact on knowledge exchange and innovation within the micro firm, artisan food context. The geographical context for the study was Northern Ireland. A qualitative methodology, incorporating the views of micro enterprises and business support actors in relation to a broad range of business support types, was adopted in order to address the research objectives.

The thesis has highlighted that these enterprises are typically innovative, particularly in terms of product development, and are creative in how they source knowledge for innovation purposes. They generally do not engage heavily with business support actors for innovation, but they appreciate the benefits of knowledge exchange and peer learning. The barriers to engagement in business support programmes are quite

complex and are largely related to the enterprises' constructions of the value of such engagement, which is linked to their previous experiences and their attitudes towards growth. Trust has been shown to be a major theme in business support engagement and the success of business support programmes.

The study's limitations include the broad focus and scope of the business support programmes under investigation, however the study provides a conceptual framework that can serve as the basis for future research into this largely exploratory area. Specific suggestions for future research are made. There are several key policy implications emerging from the findings.

To conclude, micro, artisan food enterprises play a critical role in the development of strong, vibrant rural and regional communities. While their small size raises questions from policy makers on their potential for contributing to economic development, nonetheless this study has demonstrated that these enterprises do have a capacity for innovation that could only be nourished further through business support interventions focused on unlocking this potential for further innovation and growth.



# APPENDICES

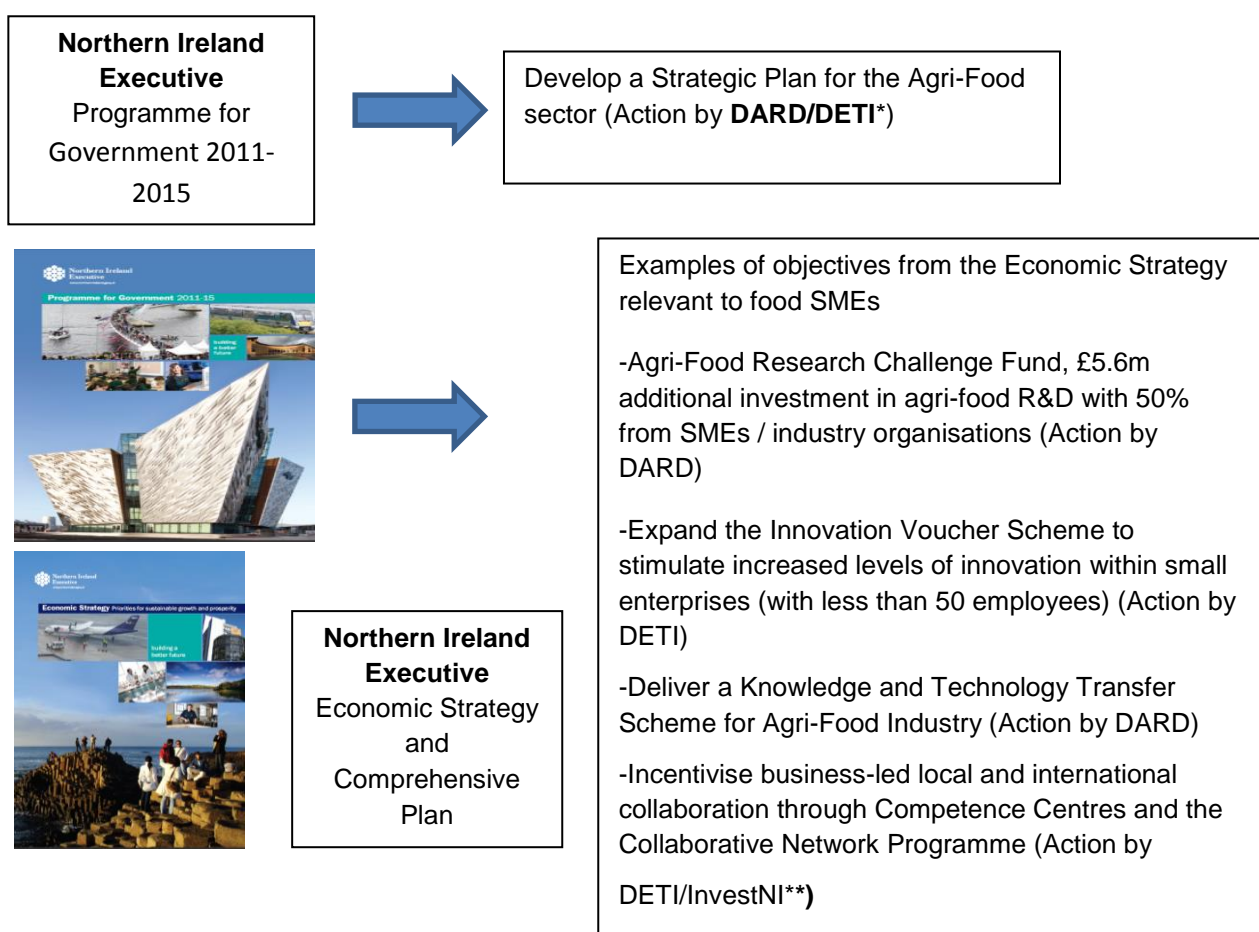
## APPENDIX ONE: Sample Stakeholder Analysis

*An excerpt from the more detailed documentary-based stakeholder analysis:*

### Northern Ireland Executive Programme for Government

Regional policies consistently identify growth ambitions for the agri-food sector in Northern Ireland. The development of a regional agri-food strategy is identified in the Northern Ireland Executive Programme for Government and the subsequent Economic Strategy identifies the sector as one of five areas of the economy with the greatest growth potential (see Figure 1).

**Figure 1: A Summary of Northern Ireland Executive Policies and Programme**



\* DARD –Department of Agriculture and Rural Development

DETI – Department of Enterprise Trade and Investment

\*\* InvestNI – Invest Northern Ireland

Figure 1 illustrates examples of the programmes identified within the Economic Strategy to support growth in the agri-food sector and more widely in SMEs and small enterprises. In general, the programmes are designed to encourage knowledge generation, exchange and exploitation and there is evidence also of supports that requires collaborative approaches. For example, the “Agri-Food Research Challenge Fund” supports knowledge generation through collaborative research and development between a group of SMEs and a research institution. More generally, the “Innovation Vouchers” programme supports collaboration and knowledge exchange between small enterprises and further and higher education institutions. A further collaborative approach is provided by the “Collaborative Network Programme” which supports networks of SMEs and larger businesses to exploit new areas of market opportunity. These examples also illustrate that programmes range from those specific to the sector to those available on a cross sector basis.

## **APPENDIX TWO: Business Support Actor Focus Group Topics**

1. What are the main challenges facing the agri-food sector and small food producers in particular?
2. What is the role of government and agencies in supporting innovation and growth in the sector?
3. What are the main strengths of existing policy support and the main gaps in support?
4. How can business support for the sector could be best managed and coordinated?
5. What are the opportunities/barriers to growth facing micro level food producers?

### **APPENDIX THREE: Food Producer Focus Group Topics**

1. Tell me about a new idea introduced into your business in the past 3 years (e.g. new product, new labelling, new marketing activity, new production process etc.)  
How did this idea come about? What help from outside the business did you have? How successful has it been? What problems, if any, did you come up against?
2. How aware are you of any assistance that is available to support new ideas/innovation and growth in the sector? (Probe into the motivations in joining a particular programme, the impact of the programme in terms of new products, ways of doing things, new market opportunities, new networks and examples of things done differently as a result of the programme).
3. How can government and agencies support innovation and growth in the sector? (Probe into the key factors for a successful business development programme).
4. What are the main strengths of existing policy support and the main gaps in support? (Probe into the characteristics of generic business support and specific sectoral support).
5. How can support for the sector be best managed and co-ordinated?

## APPENDIX FOUR: Innovation in Small Business Survey



### What is LOCFOOD?

LOCFOOD is an INTERREG IVC project with 13 European Partners across 9 regions in Europe. The aim of the project is to improve regional policies and strategies regarding food-related SMEs in rural areas, to enhance entrepreneurship, business development, competitiveness and economic growth. There are two project partners in Northern Ireland, the Ulster Business School at the University of Ulster and Down District Council.

### What is the purpose of this survey?

The purpose of this survey is to collect information on innovation in small food businesses in the region and support for the local food sector.

### How will the information gathered be used?

There is currently a lack of information about innovation in food SMEs and the data collected from this survey will be used to inform future programmes and policy. Responses to the questionnaire will be kept in **confidence**. The information sought for this study may be published. Respondent's names and business names will be recorded but will not be published.

### Definition of Innovation

Innovation, for the purpose of this survey, is defined as:

- **New or significantly improved products or services** and/or
- **Processes** used to produce or supply all goods or services that the business has introduced, regardless of their origin
- These may be new to the business or new to the market
- Investments for future innovation and changes that the business has introduced at a **strategic** level (in organisation and practices) are also covered.

### Basis for Completion

The information required is in 4 sections:

- **Section A – General business Information**
- **Section B – Innovation activities**
- **Section C – Context for Innovation**
- **Section D – General Economic Information**

Please complete the questions based on the business activities over the **last 3 years**.

Where precise figures cannot be provided please give your **best estimates**.

To be able to compare businesses with and without innovation activities, we request all businesses to respond to **all** questions, unless otherwise instructed.

A copy of the results will be made available to all those that participate.

Thank you for completing the survey.

<b>Section A - General Business Information</b>
---

**During the last 3 years:**

**1. In which geographic markets does your business sell products and/or services?**

	Please indicate approximate % sales in each of the following geographic markets
a. Within a 30 mile radius of your business and within your region	%
b. Beyond 30 mile radius of your business and within your region e.g. Northern Ireland	%
c. Beyond your region and within your country e.g. United Kingdom	%
d. Within bordering countries e.g. Republic of Ireland. <b>Please specify:</b>	%
e. Within other European countries. <b>Please specify:</b>	%
f. All other countries. <b>Please specify:</b>	%

**2. What type of activities did your business engage with?**

	Please X all that apply
a. Crop and animal production, hunting and related service activities. <b>Please specify type:</b>	
b. Fishing and aquaculture	
c. Manufacture of food products. <b>Please specify type:</b>	
d. Manufacture of beverages. <b>Please specify type:</b>	
e. Wholesale Trade	
f. Retail Trade	
g. Accommodation	
h. Food and Beverage Service Activities e.g. restaurants	
i. Creative Arts and Entertainment Activities e.g. tourism related. <b>Please specify type:</b>	

**3. Where do you sell your products?**

	Please X all that apply
a. Farmers' Markets / Food Fairs	
b. Farmer's Shops	
c. Own Store	
d. Wholesale	
e. Local Retail Stores	
f. Supermarket	
g. Supply to restaurants / hotels	
h. Others. <b>Please give details:</b>	

**4. How important are each of the following factors in the marketing of your products?**

	Please X one box for each category				
	Very import – ant	Import – ant	Moder - ately import - ant	Of little import - ance	Not import - ant
a. Price					
b. Convenience					
c. High quality					
d. Origin, locality, provenance					
e. Freshness					
f. Health benefits					
g. Others. <b>Please give details:</b>					

**5. What does the term 'local food' mean to you?**

	Please X all that apply
a. Local food is primarily concerned with distance	
b. Local food is produced within 30 miles of purchase	
c. Local food involves the connection between the food product and origin and place	
d. Local food is linked with freshness and seasonality	
e. Others. <b>Please give details:</b>	

**6. What do you consider are the MAIN STRENGTHS of your business?**

	Please X all that apply
a. Quality of products	
b. Local provenance of raw material	
c. Reputation for innovation	
d. Good relationship with customers	
e. High level of customer service	
f. Regional identity of products	
g. Other Strengths. <b>Please specify:</b>	



**7. What do you consider are the MAIN WEAKNESSES of your business?**

	Please X all that apply
a. Access to finance	
b. Distribution costs	
c. Marketing skills	
d. Currently struggling to meet deadlines, too much work	
e. Cash flow problems	
f. Business Administration	
g. Other Weaknesses. <b>Please specify:</b>	

**8. What do you consider are the MAIN EXTERNAL OPPORTUNITIES for your business?**

	Please X all that apply
a. Market development within region/country	
b. Exporting	
c. Funding opportunities	
d.. Working collaboratively with others to develop new products and markets	
e. Other Opportunities. <b>Please specify:</b>	

**9. What do you consider are the MAIN EXTERNAL THREATS to your business?**

	Please X all that apply
a. Cost of compliance with regulations/legislation	
b. Economic climate	
c. Costs of raw materials	
d. Cost of finance	
e. Competition	
f. Other Threats. <b>Please specify:</b>	

**Section B - Innovation Activities**

This section covers the introduction of new and improved goods, services or processes; changes in business strategy and practices and investments in current and future innovation

**Product or Services Innovation**

Include all new or significantly improved products or services e.g. improvement in quality or distinct user benefits. The innovation, although new to this business, does not need to be new to the market. Include all product innovations, regardless of their origin.

**10. During the last 3 years, did your business introduce:**

	Please <b>X</b> all that apply	
<b>a. new or significantly improved products?</b> Exclude the simple resale of products purchased from other businesses and minor changes to packaging or labelling.	<b>Yes</b>	
	<b>No</b>	
<b>b. new or significantly improved services?</b>	<b>Yes</b>	
	<b>No</b>	

**If No to both options please go to Question 12.**

**11. During the last 3 years, please indicate the number of product or service innovations that were:**

	Please give <b>number of innovations</b> in each category below:	Please give examples:
<b>a. new to your market?</b> This business introduced a new product or service to the market before competitors		
<b>b. only new to your business</b> This product or service was essentially the same as one already available from competitors		

**Process Innovation**

Process innovations are all new or significantly improved methods for the production or supply of goods or services (i.e. the process for producing sausages). The innovation, although new to the business, does not need to be new to your industry. Include all process innovations, regardless of their origin.

**12. Did your business introduce any new or significantly improved processes for producing or supplying products or services?**

	Please <b>X</b> correct response
<b>Yes</b>	
<b>No</b>	

**If No please go to Question 14.**

13. Did your business introduce any new or significantly improved processes for producing or supplying products or services which were new to your industry?

	Please X correct response
*Yes	
No	

*\*If you answered Yes to question 13 please give details:*

### Business Strategy and Practices

Include all **new** and **significantly improved** forms of organisation, business structures, management or practices aimed at raising internal efficiency or the effectiveness of approaching markets and customers.

14. During the last 3 years, did your business make major changes in the following areas?

	Please X all that apply	Please give examples:
a. New <b>business practices</b> for organising procedures (i.e. supply chain management, quality management etc.)		
b. New methods of <b>organising work responsibilities and decision making</b> (i.e. team work, education/training systems etc.)		
c. New methods of <b>organising external relationships</b> with other firms or public institutions (i.e. first use of alliances, partnerships, outsourcing or sub-contracting etc.)		
d. Implementation of changes to <b>marketing concepts or strategies</b> (i.e. new forms of promotion, changes to packaging etc.)		

**15. During the last 3 years did your business invest in any of the following, for the purposes of current or future innovation?**

	Please X all that apply	Please give examples
<b>a. Internal Research and Development</b> Work undertaken within your business that increases knowledge for developing new and improved goods or services and processes		
<b>b. Acquisition of external Research and Development</b> Same activities as above, performed by others outside your company		
<b>c. Acquisition of machinery, equipment and software for innovation</b> Processing equipment, software		
<b>d. Acquisition of external knowledge</b> Purchase or licensing of patents and non-patented inventions, know-how and other types of knowledge from other businesses or organisations		
<b>e. Training for innovative activities</b> Internal or external training for your personnel specifically for the development and/or introduction of innovations		
<b>f. All forms of design</b> Engagement in all design activities, including strategic, for the development or implementation of new or improved goods, services and processes		
<b>g. Market introduction of innovations</b> Changes to packaging/labelling design, web design, market research, changes to marketing methods, launch advertising		

**16. During the last 3 years, did your business have any innovation activities that were:**

	Please X all that apply
a. abandoned?	
b. incomplete?	

**If you did NOT engage in any innovation activities in Section B, please go to question 20.**

**Section C – Context for Innovation**

**17. During the last 3 years, how important to your business’s innovation activities was information from:**

	Please <b>X</b> one box for each category				
	Very Important	Important	Moderately Important	Of little importance	Not Important
a. within your business					
b. suppliers of equipment, materials, services or software?					
c. clients, customers or end users?					
d. competitors or other businesses in your industry?					
e. consultants, commercial labs, or private research and development institutes?					
f. universities or other higher education institutes?					
g. government or public research institutes?					
h. conferences, trade fairs, exhibitions?					
i. professional and industry associations?					
j. technical, industry or service standards?					
k. scientific journals and trade/technical publications?					
l. Other Sources: <b>Please give details:</b>					

**18. Did your business co-operate on any innovation activities with any of the following:**

	Please <b>X</b> all that apply				
	In your region	In your country	In bordering countries	In other Euro - pean countries	In other non Euro - pean countries
a. suppliers of equipment, materials, services or software?					
b. clients, customers or end users?					
c. competitors or other businesses in your industry?					
d. consultants, commercial labs, or private R&D institutes?					
e. universities or other higher education institutions?					
f. involvement in innovation clusters and networks					

g. government or public research institutes					
h. Others. <b>Please give details:</b>					

**19. How important were the following factors in driving your innovation activities:**

	Please <b>X</b> one box for each category				
	Very Important	Important	Moderately Important	Of little importance	Not Important
a. owner-manager characteristics (e.g. education, experience, motivation)					
b. business planning and strategy					
c. demand for innovative products identified from market gap					
d. internal capabilities already existed to develop innovative product or services (e.g. staff, know-how etc.)					
e. regional support available to assist innovation activities					
f. finance available to support innovation activities					
g. collaborative networks					
h. Others. <b>Please give details:</b>					

**Please go to question 21**

**20. During the last 3 years, if this business had NO innovation activity, please indicate why it has not been necessary or possible to innovate**

	Please <b>X</b> all that apply
a. no need due to previous innovations	
b. no need due to market conditions	
c. factors constraining innovation	

**21. How important were the following factors in constraining your innovation activities:**

	Please <b>X</b> one box for each category				
	Very Important	Important	Moderately Important	Of little importance	Not Important
a. excessive perceived economic risks					
b. direct innovation costs too high					
c. cost / availability of finance					
d. lack of qualified personnel					
e. lack of information on technology					
f. lack of information on markets					
g. market dominated by established businesses					
h. uncertain demand for innovative goods or services					
i. UK government and EU regulations(including standards)					
j. Others. <b>Please give details:</b>					

**22. Did your business receive any public financial support for innovation activities from the following levels of government:**

	Please <b>X</b> all that apply
a. UK local or regional authorities?	
b. UK Central Government?	
c. European Union institutions or programmes?	
d. Other support. <b>Please give details:</b>	

**23. Please rate the importance of the following types of support for your innovation activities:**

	Please <b>X</b> one box for each category				
	Very Important	Important	Moderately Important	Of little importance	Not Important
a. Training/Workshops					
b. Advisory (e.g. legal compliance)					
c. Research and development					
d. Market related					
e. Mentoring					
f. Networking					
g. Other support. <b>Please give details:</b>					

24. Please give examples of the most /least beneficial support for innovation activities you have received from government:

Example of **MOST** beneficial support:

Example of **LEAST** beneficial support:

25. How could support for innovation activities be improved?

**Section D – General Economic Information**

26. Which of the following best describe your business:

	Please X the category that best describes your business
a. First Generation Family Ownership	
b. Second Generation or more Family Ownership	
c. Non Family Ownership. Please give details	

27. Please describe any external recognition your business has achieved in the last three years? (e.g. accreditation, awards)

28. Please complete the following financial and employment details for your business:

Financial Year ending (please round to the nearest thousand)	2011	2010	2009
Turnover			
Gross Profit Margin			
Net Profit Margin			
Number of full-time employees			
Number of part-time employees			





## **APPENDIX FIVE: Sample Interview Guide (Micro food Owner-Managers)**

The following questions were used for the interviews conducted with artisan owner-managers. They were used as a guide and therefore the interviewer adopted a flexible approach to the wording and order depending on answers provided by the interviewee.

1. Could you tell me about your background i.e. work / education etc.?
2. How did you get into this business? How many people do you employ?
3. Tell me about your goals for your business. For instance, is it a growth orientated or lifestyle business, or a mixture i.e. what do you want from the business?
4. Can you tell me about your customers?
5. Who are your main competitors? How do you learn from your competitors?
6. What leads to innovation / what brings it about? Where do you get your ideas from?
7. What do you consider as the main drivers that help you innovate in your business?
8. What do you see as the main barriers to innovation in your business?
9. What does the term 'innovation' mean to you? For instance examples of how you introduce new / different ways of doing things / products / changes to existing products/services
10. Tell me about new products you have introduced? Where did the ideas come from? How does this differ from what other firms are offering?
11. Are there any issues that have prevented you from introducing new products, making product changes? Doing things differently?
12. Have you introduced any new processes into the company or any new ways of doing things (to make products)? How have you changed the way the product is made / traditionally handmade?
13. Did you get help from anyone outside your business – tell me about any help you received and what was it for – (i.e. local / central Government / Higher / Further education / InvestNI etc.)
14. How aware are you of Government support programmes you can avail of?
15. What links do you have with support agencies and groups (i.e. DAERA, InvestNI, NIFDA, FoodNI, GoodFoodIreland, other sector associations)? How beneficial have these agencies been to the business?
16. What about the private sector (i.e. accountants / management consultants?)
17. What support programmes have you participated in that have helped you introduce new products/services, new ways of doing things? How did you get involved (i.e. existing networks / contacts / word-of-mouth / client adviser?)
18. Did your involvement in the programmes lead you to being more innovative, introducing new products / flavours (probing for examples in relation to the different types of innovation)?
19. How do you view support levels from these various agencies and groups?
20. Are there any gaps in support in your opinion?
21. How could public support for innovation activities be improved?

**The interviewer then focuses the remainder of the interview on specific programmes interviewees were involved in.**

22. How did you become involved in this network / hear about it?
23. What have been the advantages of doing so? (i.e. benefits of participating / working in a network with other small companies? Disadvantages?

24. Who do you view as your main networks (i.e. Who are your main stakeholders - those groups that are very important to the development/growth of your business). Why? What about private sector i.e. accountants etc.?
25. Any stakeholders you feel could be more proactive to help you develop your business?
26. What are the most effective ways to stay in touch/catch up with them (phone / email / meeting up at events / meeting over coffee?) How often, where?
27. What do you aim to get from the network? What do other members want from the network in your opinion? How has this changed over time? If so, how (probe for examples).
28. How do you use the information you have gained from being in the network (development of business / overcoming everyday business obstacles etc.)?
29. Are there are the 'rules' within the network? (i.e. for instance around the informal aspect of things ...)
30. How important is trust in these networks? (Probe for examples where trust has been well developed and the result of this, e.g. business to business selling, and where trust has been broken and the result, e.g. withdrawal from programme and not attending events etc.)
31. How have these relationships developed / changed over time?
32. Is there one leader / key individuals who drive the network? Do they have a vision for the network? Tell me about that person/people. Does this include yourself?
33. How has the network helped you to develop knowledge and exchange information?
34. How have you used the information gained to develop products to become more innovative?
35. How have you developed relationships with other small companies and Government agencies, any other important stakeholders from being in the network?
36. What are the main qualities/characteristics participating companies need for a network to be successful?
37. How do members of the network co-operate to overcome obstacles/problems and address key issues? Are there ever times when you / other members were not happy with a particular issue? What did you / they do about this? How was it managed? What was the result?
38. What advice would you give to other food producers who are thinking about taking part in a business support programme?
39. What feedback would you give to Government representatives about the programme you participated in? What worked well? Less well? How could this type of programme be developed in the future?
40. Is there anything else you would like to add?
41. Is there anyone else you recommend I should meet?

## APPENDIX SIX: Sample Interview Guide (Business Support Actors)

The following questions were used for the interviews conducted with business support actors. They were used as a guide and therefore the interviewer adopted a flexible approach to the wording and order depending on answers provided by the interviewee.

1. Could you tell me about yourself. When did you start working in food industry / public sector?
2. To what extent do you collaborate with small / micro food producers? How do you interact / develop relationships with small/micro food producers? How has this helped you to develop relationships with other agencies?
3. What programmes do you feel have impacted on innovation for the sector / companies, in particular for small / micro businesses? Why? How do you think food producers benefit from taking part in these programmes?
4. How do you develop programmes for small / micro food producers? Are programmes tailored for small / micro food companies?
5. Are you aware of any other programmes for small /micro food producers that have worked well – programmes that may be viewed as best practice (RoI, national and international) for small / micro food producers? What do you think is their perceived level of success?
6. Can / does your organisation learn from and implement best practice in context of small / micro companies to influence policy development, for instance, changes to internal / local policies?)
7. How have these programmes developed over time to meet policy/programme gaps. What were the key learnings?
8. Which stakeholders do you perceive to be important and why (e.g. Government agencies, colleges, private sector (delivery agent), food producers themselves, retailers, environmental health officers, suppliers, customers etc.)? Those groups who are not perceived as stakeholders (this could be less important, or who could be more proactive)? Why?
9. Which stakeholders would you have most contact with?
10. Is there any duplication in the key stakeholders' roles, policies and programmes for food producers? Any gaps?
11. What do you see as the main drivers / barriers to innovation for small / micro food producers?
12. What do you see as the main drivers / barriers for small micro food producers availing of support?
13. Communicating with members in a food network. How do you keep them informed / check-in / catch-up with them?
14. What do you feel are the benefits for owner-managers of participating in a network with other small companies?
15. How important is the development of trust in these networks? Does trust impact on the success of the network? Can you provide me with an example of where trust has been broken? The impact of this?
16. From your experience of the network is there one leader / key individuals who drive the network? Do they have a vision for the network? Tell me about that person / people?
17. How have you used the information gained to develop programmes to meet the needs of owner-managers to help them become more innovative? Have you been able to use this information outside of your organisation?
18. How have you developed relationships with other small companies and agencies from being involved in the network?

19. What do you think are the main qualities/characteristics for participating companies in a network to be successful? Why do you think a network is less successful?
20. How do members of the network co-operate to overcome obstacles and address key issues?
21. What advice would you give to small/micro food producers who are thinking about taking part in a business support programme?
22. Using the example of one programme you are familiar with, what feedback would you give to key policy makers / influencers on the programme? What worked well? Less well? How could this type of programme be developed in the future?
23. Is there anything else you would like to add?
24. Is there anyone you would recommend I contact?

## APPENDIX SEVEN: Observation Events

	<b>Event</b>	<b>Location</b>	<b>Date</b>
<b>1</b>	Kick-off event for a local council business support programme (A)	Banbridge	February 2013
<b>2</b>	Kick-off event for a local council business support programme (B)	Magherafelt	March 2013
<b>3</b>	Dublin Best Practice Visit as part of both local business support programmes (i.e. A and B)	Dublin	May 2014
<b>4</b>	Economic Policy Development Event	Ballynahinch	June 2014
<b>5</b>	Small Business Network Event	Belfast	September 2014
<b>6</b>	Concluding event for a local council business support programme (A)	Belfast	November 2014

**APPENDIX EIGHT: Sample of Summary Observation Notes (Event 1)**

When	Event	Aim	Research Role	Key Observations
February 2013	Kick-off event for local council business support programme (A)	Inform programme participants about the programme aim and activities	Facilitator/observer. Contributed to event agenda. Arranged for leading international guest speaker to participate.	<p>Some of the small business owner-managers had participated in a previous programme and were not sure what to expect from the second programme. This was mainly due to a new delivery agent managing the programme. Participants who were involved in the first programme were also keen to learn how the second programme would benefit them. Participants showcased their produce and this allowed for other participants to engage directly about the products, and also sample produce. Photo shoots took place and the event was publicised in the local press following the event.</p> <p>Adviser characteristics: formal presentation style and delivery; lack of interaction during presentation with participants – possible engagement/empathy issue (<i>trust relations</i>)?</p> <p>Engagement levels – around 60% attendance but weather conditions affected turnout. Was this the only reason for lack of engagement? (<i>engagement in business support</i>).</p> <p>Engagement was mainly one way from the panel of speakers (however the acoustics in the room were poor - the room was too big for the number of people present and this may have been a barrier to engagement). Few questions were asked. However, participants appeared to bond well over lunch and coffee breaks and this was a good networking opportunity for all. Nevertheless, it was noted that the members of the first programme engaged with one another at frequent periods throughout the event (<i>bonding social capital and trust</i>).</p> <p>Council officers were in attendance and appeared to have developed good relationships with participants (<i>personal trust relations</i>).</p> <p>Picked up on some negative comments from a small number of participants about the value of the event and how the programme would benefit them and their businesses (<i>perceived value of business support</i>). This was recorded, for follow up at interview stage with participants.</p>

### APPENDIX NINE: Sample Selection of the Nodes Emerging from the Nvivo Analysis

Phase 2 - developing cats 9 Aug 2016 (version 1) [Autosaved] - Microsoft Excel (Product Activation Failed)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Name	Sources	References	Themes (revised 26 July 2016)										
2	Contextual	1	7	Social networks										
5	Artisans	6	10	Regional context										
6	Authenticity	1	2	Local food systems	Chap 2									
7	Awards	2	3	Regional context										
8	Behavioural	2	7	Social networks										
16	Bord Bia	1	1	Types of Business Support										
17	Collaboration	12	25	Social networks										
23	Competitors	14	25	Social networks										
25	Confidence	7	17	Social networks										
29	Consumers	15	26	Small firm innovation										
32	Distribution	1	1											
33	Events	4	6	Small firm innovation										
35	Family associations	12	25	Small firm innovation										
38	XXXX	1	1	Types of Business Support										
39	Industry organisations	3	3											
40	Informal networks	8	21	Social networks										
48	Innovation	24	153	Small firm innovation										
97	Institutional support	30	279	Types of Business Support										
256	Institutional support - XXXX Programme	14	112	Types of Business Support										
316	Interactional	2	2	Social networks										
320	Local food	31	149	Local food systems	Chap 2									
334	Networks	0	0	Social networks										
340	Number employed	5	6	Regional context										
341	Owner-manager char.	24	105	Social networks										
349	Private support	1	2	Types of Business Support										
350	Regulations	3	13											
353	Short supply chains	19	61	Small firm innovation										
361	Social media	11	16	Small firm innovation										
362	Stakeholders	10	24	Social networks										
373	Structural characteristics	0	0	Social networks										
377	Information	0	0											
378	Policy	1	1	Types of Business Support										
526	Policy char.	7	9											

Ready Recovered Average: 20.96969697 Count: 132 Sum: 1384 86%



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