

Supply Chains Linking Food SMEs in Lagging Rural

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SUPPLY CHAINS LINKING FOOD SMEs IN LAGGING RURAL REGIONS IN IRELAND

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SUMMARY

This report reflects the Irish contribution to a 3-year EU-funded research project, SUPPLIERS, which was concerned with the development, innovation, competitiveness and sustainability of food SMEs in lagging rural regions (LRRs) of the EU and Poland. It summarises the results of the research conducted in Ireland, evaluates these findings and makes recommendations to benefit food SMEs located in Ireland's LRRs. Two regions were selected for study in Ireland. These were the West, comprising counties Galway, Mayo and Roscommon, and the Northwest, comprising counties Donegal, Sligo and Leitrim. Both are classified as Objective 1 regions reflecting their predominantly rural character, economic disadvantage and relative remoteness from urban centres. Three food products were selected for detailed study in each region. Products selected in the West were mushrooms, farmed salmon and speciality foods and, in the Northwest, organic produce, farmed shellfish and prepared consumer foods. This product range encompassed a range of chains from local to international, integrated to fragmented, direct to indirect, providing a basis for comparison and evaluation of different chain structures. This summary report concentrates on the results of four surveys carried out over the course of the study. Producers, intermediaries, commercial customers and support institutions were surveyed.

Seventy producers from both regions were surveyed. These producers saw themselves as having a significant role in their local communities by providing employment, increasing the local knowledge base and contributing in general to the social capital in their area. With the exception of organic producers, they used a range of supply chains; organic producers favoured direct sales as their preferred route to market. Trust and friendship were considered important factors for producers in developing communications along the supply chain. Producers were aware of the need to increase internal efficiency and control in their business and for many producers the adoption of ICT (information and communications technology) was a means of achieving this objective. While the sectoral agencies were generally considered supportive,

some producers engaged in exporting felt they needed increased marketing supports.

More than half of the 52 intermediaries interviewed were located outside the study regions reflecting the structure of the sector. Intermediaries based in the study regions considered their location as a commercial advantage when dealing with upstream suppliers. However, for many intermediaries this location advantage is increasingly being identified as a cost driver particularly when downstream activities are assessed and compared to competitors located outside the study regions. Intermediaries are not only adopting ICT to improve internal performance but also to gain advantage with downstream customers who wish to form coalitions through supply agreements. Several intermediaries were of the view that they were under-supported by the various development agencies.

The 54 commercial customers interviewed (these included multiples, members of symbol groups, specialist and independent retailers, and the food service sector) were generally satisfied that supply chains assessed in the study were meeting their commercial objectives. The individual products, through their quality attributes, were seen as lending a positive image to their outlets. However, they felt that some speciality food producers lacked the skills necessary to exploit existing markets. Multiple and specialist retailers in particular, demanded market-driven innovative products; however some producers were unable to satisfy this demand. The use of intermediaries was seen as a means of consolidating suppliers and this trend is set to continue as more and more retailers direct suppliers to preferred intermediaries. ICT continues to be an important tool not only for developing new supply chain networks but also in improving trading relationships with trading partners. Contact with the institutional sector was generally confined to providing "soft" supports such as POS (point of sale) material from various marketing support agencies and increasingly from the regulatory agencies with responsibility for food safety.

The nature of interaction between food SMEs and the 30 institutions surveyed

varied in accordance with the institution's role and function. Changes in both EU competition regulations and national policy have resulted in shifts in the type and delivery of supports offered by institutions to food SMEs and local communities. Institutions have developed strategies to reflect these policy changes and have directed funds to meet their development objectives. These policy changes have resulted in expanding the training programmes offered by many agencies and in particular ICT training. ICT is seen as a vital business tool by institutions and is expected to play an increasingly important role within food SMEs and supply chains in the future. While the increased use of ICT is not expected to confer any particular competitive advantage over competitors, it is hoped it will enable food SMEs to develop links between suppliers and customers. Those interviewed recognised that different types of chains yield different benefits both to food SMEs and rural development and believe local food production has significant potential to regenerate rural areas affected by long-term decline.

The research gives rise to a number of recommendations including some specifically targeted at various supply chain actors and the institutional sector. The need for SMEs to capitalise on existing production and operational strengths with new capabilities, including building technological capabilities, to support the development of high-value products and services is highlighted. Also, the need for institutions to recognise that lagging rural regions (LRRs) are not homogeneous so that blanket solutions to constraints may not be effective across LRRs is emphasised. The need for greater collaboration and communication within the broad supply network, both horizontally and vertically, is emphasised in a number of recommendations. From a policy perspective, recommendations are made relating to R&D and innovation, training and education, enterprise development, regional development and supply chain management and development. Enterprise networks are recommended as an appropriate vehicle for the implementation of many of the recommendations proposed.

A significant component of the food production sector in lagging rural regions (LRRs) consists of small-scale enterprises. Many of these enterprises utilise traditional production methods, emphasising local identity and distinctiveness, thereby differentiating products and servicing niche or segmented markets. Such enterprises frequently integrate with other sectors of the local economy, such as raw material suppliers, distributors, tourism and food service, thus enhancing local activity. Therefore, the development of marketing and distribution systems for products from SMEs is one of the most essential activities for business operations. For many rural SMEs, market access is a critical challenge in the development of their businesses (Gaffey, 1999). Distances from major centres of population, low volume output and the dispersed nature of enterprises are all factors influencing sustainability of these SMEs.

Recent changes in the food retail sector have accentuated these problems and may ultimately threaten the competitiveness and viability of rural food SMEs and their host regions. There is greater emphasis on supply chain management, which involves the integration of business processes, from end-user through to the original product producer and their suppliers. Retail chains have increasingly recognised that integrated and highly-managed supply chains can be a major source of competitive advantage and have invested heavily in Efficient Consumer Response (ECR) and Category Management¹. Moreover, competition between individual businesses, within and between stages in the supply chain, is being replaced by competition between chains. Such developments tend to militate against the involvement of small enterprise with major retailers, thereby limiting access for rural producers to major markets.

¹ Efficient Consumer Response (ECR) is a generic term that covers a number of related approaches and techniques that aim to deliver greater consumer value, more rapidly and with less cost.

The overall objective of the SUPPLIERS project was to assist the sustainable development of small-scale food enterprises in lagging rural regions through the development of new tools and models for supply/distribution chain integration leading to improved market accessibility and competitiveness. The project paid particular attention to ICT and its potential in aiding the achievement of these goals.

This research was carried out in 11 lagging rural regions in 6 countries across Europe. Two study regions were selected in each of the six participating countries, except for France where only one study region was examined (see Figure 1). These regions are all designated as either Objective 1 or 2 regions and are characterised by such features as relative remoteness from main centres of economic activity, low farm incomes, unfavourable farm structures, outward migration and an ageing population. This report will account for the two Republic of Ireland study regions of the Northwest and the West. The Northwest comprises counties Donegal, Sligo and Leitrim. The West includes counties Galway, Mayo and Roscommon. Three food products were selected for detailed study in each region. Mushrooms, farmed salmon and speciality foods were selected in the West and organic produce, farmed shellfish and prepared consumer foods were selected in the Northwest.

METHODS

The sequence of research activities started with the development of the project's theoretical framework and assessment of the food supply chain environment was ascertained using secondary information sources and a 'Delphi'² study employing a panel of key informants. An analysis of the study regions and their particular production and marketing circumstances was also carried out, using secondary information sources and a Consultation Panel of local informants.

² Delphi is a qualitative forecasting technique using independent heterogeneous experts.

Figure 1 The SUPPLIERS study regions



The main supply chain survey and analysis examined the activities and views of producers, chain intermediaries and customers in turn. The roles and strategies of institutions in supporting food SMEs and supply chain development were examined. These four surveys used semi-structured personal interviews.

FINDINGS

This report focuses on the findings from the four surveys carried out in the Republic of Ireland and highlights a number of resulting conclusions and recommendations. Details of findings from the other partner countries can be found in <http://suppliers.econ.upatras.gr>

Supply Chain Analysis: The Producers' Perspective

In Ireland, a total of 70 producers were interviewed, with more than half involved in exporting. While there was significant variation across each of the product categories, most of those enterprises surveyed faced similar difficulties in getting their product from their region to the market whilst trying to remain competitive and economically viable. Many of those exporting products from their respective regions adopted a differentiation strategy focusing on producing high-value 'quality' goods

Producer buying processes were complex, the decision-making process included not only price but also vendor guarantees on quality assurance and traceability. Producers' location often meant less frequent deliveries forcing producers' to hold larger stock levels than if the enterprise was more centrally located.

Personal and business ambitions, product characteristics and availability of services (e.g distributors) were some of the factors that influenced the range of chains supplied. Supply chain strategy was often influenced by proximity to market and personal relationships. With the exception of mushroom

producers, all businesses sold through a number of different supply chains with more than half using a wholesaler/agent. Many producers found it difficult to get a distributor offering marketing support. Producers indicated that retailers were becoming increasingly involved in directing the structure and evolution of the supply chain. Micro food business generally delivered to local outlets themselves and engaged distributors for more distant outlets. Direct delivery was seen as important to the independent sector as it facilitated personal contact and allowed the entrepreneur easy access to the owner or senior manager in the store. Larger retail customers often dictated to producers which distributor to use. Many of those involved in exporting used third party distribution for the overseas portion of the business. In general, export supply chains were considered easier to manage than national supply chains.

Respondents were satisfied with the stability of their customer base. Several producers had aspirations to service a number of supply chains and in particular the foodservice sector, but few had taken action to access these chains. Lack of time and/or organisational capacity to take on such a task were the main reasons given for not servicing these chains. Other proactive producers had developed new products, joined quality assurance schemes and initiated communications with potential customers in an effort to access new chains.

Most producers did not engage in developing long-term strategies and forward planning was often based on tactical issues. Written contracts were rarely used with most relationships based on verbal agreements. Spot trade was generally confined to the shellfish sector in times of seasonal surpluses. Independent speciality food retailers sometimes requested exclusive supply agreements from producers that prevented them supplying multiples. There was little evidence of adoption of supply chain management practices by producers.

Communications along the supply chain were described as informal and general interaction was based on trust and friendship. The adoption of

sophisticated forms of ICT (e.g. EDI³) was largely confined to businesses selling into central distribution systems with most other enterprises using telephone, mobile phone, fax and email to interact with suppliers and customers. The need to increase efficiency and control in their business was the main driver of adoption of ICT. While few respondents reported that ICT had any major impact on improving their relationships with customers, there was some evidence that producers are increasingly aware of the strategic possibilities that ICT offers, particularly in areas such as accessing new markets.

There was general agreement that the sectoral agencies were performing well, with most respondents reporting that they have accessed either the grant-aid or information supports offered by these agencies. However, producers thought that agencies offering marketing supports could do more to improve delivery of specific industry requirements. Exporting enterprises were more likely to criticise the marketing agencies.

Food SMEs perceived themselves as playing a significant role in the social and economic development of their areas. Producers agreed that they had a role in job creation and felt they contributed to improving the knowledge base and social capital of their local community.

Supply Chain Analysis: The Intermediate Chain Members' Perspective

Fifty-two intermediaries were surveyed, thirty of which were located outside the study regions, reflecting the structure of the sector. The importance of the products to the intermediaries interviewed varied across product categories. The farmed salmon and shellfish intermediary businesses were particularly reliant on product sourced in their respective regions. The prepared food and speciality food intermediary businesses were less reliant on product from the

³ Electronic data interchange

regions. These intermediaries were also more likely to be located outside the regions. The organic food distributors were generally not reliant on organic products from the study regions. Their businesses were in the main general distributors of organic foods and offered a wide range of product to their customers.

Placing an order was the most common reason for communicating with suppliers. The frequency of formal meetings ranged from weekly to annually and generally related to quality and planning issues. The type of planning between intermediaries and suppliers tended to be operational and tactical in nature. Most intermediaries considered there was little need for extensive communications.

The main criteria used by intermediaries to assess suppliers included ability to supply quality products, supply products which meet regulatory safety and traceability requirements, guarantee supply on a consistent basis and provide products that return a satisfactory margin. Respondents also felt their suppliers should show a willingness to continuously improve their operations. Producers' NPD⁴ capability was also an important criterion for intermediaries in the speciality food and prepared foods sectors.

While most respondents stated that products produced in Ireland had a sales advantage over imported products on the Irish market, they also stated that customers did not place any additional value on products from a specific region within Ireland. However, farmed salmon and shellfish intermediaries noted that some customers placed a higher value on products that were harvested from the Western seaboard because of consumers' concerns surrounding pollution. The up-market foodservice customers had preferences for products sourced locally.

Intermediaries perceived their main customer requirement criteria to include

⁴ New product development

a satisfactory margin, quality, safety and traceability and service levels that meet with their customers' expectations. Quality requirements were normally determined by the customer and could include quality assurance programmes as set out by independent agencies. A number of intermediaries noted that multiple retailers had created dominant power bases in their supply chains. The introduction of centralised distribution systems by the multiples was considered to have underpinned their control of the supply chain. A number of smaller distributors have focussed on developing sales to the foodservice sector as they expect their sales and margins to retail customers to decline. Increased demands in terms of food safety systems, marketing expenditure and logistics performance were also putting pressure on these distributors.

Demand factors, such as the need to increase efficiency and control in their businesses, were the primary drivers of investment in ICT. These were followed by customer requirements to implement EDI systems. ICT systems were also becoming a requirement of food safety systems. While intermediary businesses in retail supply chains were more likely to have implemented EDI systems, it was less likely that they had ICT linkages with suppliers. Intermediaries dealing directly with producers expected the Internet to become a key part of their communications in the future.

Respondents that received support from institutional organisations tended to have a positive attitude to these institutions. Several distributors expressed disappointment with the fact they were found to be ineligible for support. Some respondents suggested that the institutions should re-examine the role of distributors in food supply chains so that they may be included in future industry support programmes.

While location in the study regions was generally considered an advantage from the perspective of dealing with suppliers, it is often a disadvantage from the perspective of dealing with customers. Transport costs and poor road infrastructure were the most commonly cited disadvantages for intermediary businesses located in the study regions.

Supply Chain Analysis: The Commercial Customers' Perspective

A total of 54 commercial customers were interviewed of which 18 were located in the West, 17 in the Northwest and 19 outside the regions, mainly in the greater Dublin region. The businesses interviewed sourced products through a combination of intermediaries and directly from food producers; however the importance attached to these varied considerably. At least one-third of commercial customers purchased study products directly from small food producers. A few food service operators purchased the study products in small quantities from other retailers from whom they obtained discounts.

Despite the purchasing power of the multiple retailers, wholesalers and distributors are still significant players in the Irish retail environment. The major retail groups use intermediaries as central distribution centres for their retail network. Both the retail and food service sector expressed a preference to reduce the number of suppliers dealt with for efficiency reasons. Some retailers preferred to deal directly with small food producers due to difficulties in dealing with intermediaries who they thought performed poorly. Nonetheless, an increasing trend to source products through intermediaries was evident across all sectors as part of supplier rationalisation programmes.

The main supplier selection criteria included HACCP/traceability/food safety issues, product quality, personal relationships and location of supplier. Other criteria included continuity of supply and payment terms. Relationships with suppliers were generally very good. Personal relationships were important particularly in the foodservice business.

Retail grocery buyers expected suppliers to be innovative and to produce new products on an on-going basis. They also expected new products to be presented with a marketing plan and some ideas on how the product fits within the retailer's category offering.

Many retail food buyers and in particular multiples were supportive of food producers' innovation activities. The types of support provided included market information, technical support and advice on factory operations. Other buyers provided information to suppliers with a view to improving the product after the product had been developed.

Size of supplier was not seen by most as being a deterrent to developing business relationships with suppliers, provided their standards were being met. Suppliers did not need to be large-scale to be able to access the multiple retailers. There was a perception among some commercial customers that some suppliers lacked core marketing skills. Poor product packaging was highlighted by specialist retailers as a weakness in the product offering of some small food producers. Flexibility in terms of physical distribution was considered important, particularly daily deliveries, a service favoured by the food service sector. Food safety and commercial performance were seen as very important criteria for assessing the food supply chain performance.

The need to increase efficiency was the main driver of investment in ICT. However for the future, ICT is expected to be increasingly important in relation to providing access to new supply networks and improving trading relationships with business partners.

Supply Chain: The Institutional Analysis

Thirty institutions, 15 per region, were surveyed to examine each institution's role in assisting food SMEs or other enterprises within the supply chain. All institutions surveyed in Ireland were involved with food SMEs to varying degrees and with supply chains in general to a lesser extent. These institutions included relevant government departments, national, regional and local development agencies, and national agencies with a specific sectoral remit. Unsurprisingly, the nature of interaction differed according to the institution's role and function. Regulatory and strategic institutions tended to correspond with SMEs regarding specific issues relating to the interpretation and

implementation of legislation and regulations. Those bodies providing direct support to food SMEs focused on the implementation of sectoral or regional development programmes whilst policy influentials interacted with institutions and food SMEs with regard to a large variety of issues. Few of the institutions had a clear view or understanding of the functioning of supply chains and how these influenced the development of food SMEs. Even in the limited number of cases where institutions have developed an understanding of supply chains, they had not implemented programmes that incorporated all supply chain members.

In recent years there has been a shift in the type and delivery of supports by institutions to food SMEs and local communities. Increasingly funds are provided to groups, *e.g.* producer networks, or for training. This shift in emphasis away from the provision of direct capital grant aid is a result of changes in EU competition regulations and the realisation that one of the primary barriers to development lies in the limited human capital available to enterprises in LRRs.

In general, institutions considered the adoption and effective utilisation of ICT by food producers and supply chains to be low. All institutions surveyed believed ICT will play an increasingly important role within food SMEs and supply chains in the future. ICT is seen as a vital business tool that facilitates the management and effective operation of enterprises and, by extension, supply chains. ICT, according to those surveyed, will not however confer any particular competitive advantage given the increasingly ubiquitous nature of the technology amongst all businesses. Rather, ICT acts as a facilitator enabling businesses to link with their suppliers and customers which should increase internal and external efficiencies and consequently maintain the competitiveness of food SMEs and the supply chains that they utilise.

Institutions considered food SMEs and the supply chains that they access to be key contributors to rural economies. It was generally recognised by those surveyed that different types, in terms of product, structure and organisation,

of supply chain yield different contributions to rural development. Export-oriented supply chains function in an extremely competitive market, which is resulting in the reorganisation of chains in an effort to reduce cost and improve the efficiencies of remaining chain members. Institutions supporting food SMEs in the mushroom, salmon and, to a lesser extent, shellfish sectors believed that greater benefits were accruing to chain members outside of the region whilst producers bore a greater proportion of the costs. Those surveyed were keen to point out however, that despite this trend, export-oriented food SMEs provide vital returns to the local, regional and national economies. Classification of benefits centred on the provision of employment in regions that experience difficulty in attracting alternative sources of employment.

Chains supplying domestic and local markets, speciality and organic foods, also provide basic economic returns to their local and regional economies. However, these tend to be limited as these sectors predominantly comprise micro-enterprises employing less than 3 people. Notwithstanding the issue of scale, these enterprises were considered by those institutions surveyed to be important contributors to LRRs as they frequently supported small farm holdings and maintained traditional activities which are increasingly threatened by contemporary global trends.

Case Study Evaluation

Twelve enterprises were selected for case study analysis. These were selected because of their success in regional, national and international markets through utilising a range of supply chains. A number of best practices are highlighted in these case studies. These case studies can be accessed through the SUPPLIERS website: <http://suppliers.econ.upatras.gr>

CONCLUSIONS

- The research suggests that some Irish food SMEs did not have a clear understanding of what attributes buyers perceive as important, nor did

they appreciate that these attributes can change over time.

- Geographic location was a significant cost driver for most food producers interviewed, with location having a particular influence on the costs of raw materials, inventory and logistics.
- Export supply chains were considered by some producers to be more efficient and easily managed than national supply chains.
- The demand for innovation was strong in many supply chains and was considered to be an important factor in gaining and maintaining market access.
- Intermediaries were more likely to adopt a tactical approach to planning and were reluctant to engage in strategic planning with their suppliers.
- Intermediaries placed considerable value on the “Irishness” of a product; several reported that, with the exception of fish products, regional provenance was less important.
- The multiples were expected to continue the pressure on intermediaries and producers to improve price margins.
- It was expected that more intermediaries will focus on the growing foodservice sector because of its potential to deliver growth and profit.

RECOMMENDATIONS

- Irish food SMEs need to identify the important influences in the supply chains in which they operate, assess the impact of these influences on their business and plan accordingly. This activity needs to be conducted on a periodic basis to reflect the dynamic competitive environment in which they operate.
- SMEs need to ensure that they continue their commitment to the highest

standards of food safety at all stages in the food chain.

- Institutions need to support food SMEs to access suppliers of quality and cost competitive raw materials, *e.g.* by developing a programme to facilitate increased business contacts with suppliers as well as buyers.
- Food SMEs need to place an increased focus on opportunities in the expanding foodservice sector and explore possibilities arising from the emergence of new retail formats, including internet shopping.
- Food SMEs should recognise the importance of, and assume responsibility for, improving management capabilities.
- To address the shortage of intermediaries in LRRs, efforts are required to encourage new start-up intermediaries with strong growth potential to locate in the LRRs and raise awareness among existing intermediaries of the business advantages of locating in LRRs.
- Relationships need to be built between the institutional sector and intermediaries. An initial step in this process is the need for awareness raising of the role, activities and programmes of institutions amongst intermediaries.
- Institutions should encourage small companies to work together so that, by networking, they may overcome their disadvantages of scale and location.
- Development agencies will need to achieve greater collaboration and develop enhanced skills, particularly supply chain management skills, to support enterprises in a changing environment.

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REFERENCE

Gaffey, Sheila (1999). *Regional Images and the Promotion of Quality Products and Services in the lagging Regions of the European Union. Final Regional Report, Ireland*. Department of Geography, NUI Galway.

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