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# REGIONAL ECONOMIES OF LOCAL FOOD PRODUCTION TRACING FOOD CHAIN LINKS BETWEEN 'SPECIALIST' PRODUCERS AND INTERMEDIARIES IN THE SCOTTISH-ENGLISH BORDERS



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## Abstract

There is currently strong political desire at both European and national scales to 'relocalize' food production and supply. While advocacy remains high, few studies have interrogated the form of these 'new' food chains. This article provides an analysis of such chains in the Scottish-English borders. It traces supply links between small-scale 'specialist' food producers and associated intermediaries for three product sectors. Linking the two stages of the food chain together, the analysis shows differences within and between, as well as similarities across, sectors in terms of spatial and economic organization. It also reveals the 'hybrid'

nature of specialist food chains in the region; local producers have created their own 'niche spaces' within the food system. The article thus contributes to debates on new agro-food geographies and regional economic geography and argues that local (specialist) small-scale enterprises do not usually establish food chains which are 'independent' of the wider food supply system.

**KEY WORDS** ★ food chains ★ hybridity ★ local food ★ Scottish-English borders ★ specialist products

## Envisaging a new European agro-food geography

By the late 1990s, a new kind of European agro-food geography had reportedly started to emerge, with a topography shaped by the 'quality turn' in food production and typified by various strategies to valorize local/regional food products (Murdoch et al., 2000; Marsden et al., 2002; Goodman, 2004; Ilbery et al., 2005). A well-rehearsed illustration of this new vision is Protected Designation of Origin (PDO) and Protected Geographical Indication (PGI) quality status awarded to dedicated regional foods and, more generally, various efforts to encourage economic growth through the production of speciality/niche market foods (Ilbery and Kneafsey, 2000; Parrott et al., 2002). These developments are often, perhaps problematically, positioned as part of an 'alternative food economy' that challenges conventional food supply systems which, over time, have made food production an increasingly industrialized and

intensive process (e.g. Renting et al., 2003; Sage, 2003; Watts et al., 2005).

The exact shape and composition of this 'new' food economy is highly amorphous and includes the introduction of environmental quality and animal welfare standards, new forms of consumerism and food activism, and the reconstruction of food chains around notions of quality, territory and social embeddedness, including a growth in food sales from 'alternative' retail points rather than supermarket outlets (Ilbery and Maye, 2005a; 2005b; 2006). The spatial and economic re-composition of food chains along these lines responds to various well-documented concerns which include: environmental and socio-economic disbenefits associated with intensive farming; the uneven distribution of industrial forms of agriculture in core agricultural regions, and an increasing fracture between, on the one hand, farming and the rest of the food chain and, on the other hand, farmers and final consumers.

Appraising these developments, Whatmore et al. (2003: 390) argue that: ‘without too much exaggeration, “quality” has become the hallmark of policy shifts and political realignments in the European Union . . . that, for the first time, position food and farming at the service of wider regional development, environmental and public health objectives’. As Goodman (2004: 6) puts it, the different components are held to offer ‘a more endogenous, territorialized and ecologically-embedded model to the allegedly exhausted and crisis-ridden modernization model of conventional industrial agriculture’. This new vision of European agriculture potentially opens up new spaces of rural social economy which must be contextualized against a backdrop of change in both supranational and national agricultural policy, especially various and on-going reforms to the Common Agricultural Policy (CAP).<sup>1</sup>

One final, and related, point concerns changes to the governance of rural space, with an increasing decentralization of government structures across Europe (evident, for example, in Finland, Spain and Hungary). In particular, the UK has, since the publication of the Rural White Papers in the mid-1990s, redrawn its rural policy map through the twin processes of devolution and regionalization (Murdoch et al., 2003). Winter (2003a) argues that this regional agenda became more apparent after the 2001 Foot and Mouth crisis. The reasons, he suggests, are twofold. First, Regional Development Agencies (RDAs) played a key role in managing the crisis and highlighting the need for a regional system of governance. Second, the crisis brought regional government structures together under a new vision for sustainable agriculture, which crucially included promoting the local food economy as a tool for ‘reconnection’ (see also Duffy et al., 2005). In fact, the Report on the Future of Farming and Food (Policy Commission, 2002: 43), prepared in response to the crisis, advocated local foods ‘as one of the greatest opportunities for farmers to add value and retain a bigger slice of retail value’.<sup>2</sup>

Clearly, there is strong political desire at both European and national scales to ‘relocalize’ food production and to encourage such systems of provision as tools for endogenous rural

development. Often implicit in this is an emphasis on the *specialist* part of the local food economy. While advocacy remains high, empirical evidence about the form and shape of these ‘new’ (specialist) food chains is less well-established (Morris and Buller, 2003). Much of the analysis is also based on examples which are geographically distinct from one another.<sup>3</sup> Renting et al. (2003) thus call for work that begins to establish more general conclusions about the dynamics of these chains, moving beyond individual business examples to assess whether these developments are more economically, socially and environmentally sustainable, as well as to examine the extent to which they are truly embedded within regional economies.

This article responds to that call. From the outset, the authors are keen to position the contribution that the article makes to the wider body of literature on ‘alternative food geographies’ (see Watts et al., 2005 for a review). The focus is thus purposely specific, interested in the *local dimension of ‘specialist’ production* and the physical transaction of products between associated actors in the food chain. These endogenous businesses are thus seen as ‘alternative’ in the sense that they produce dedicated rather than generic commodity-based products for different retail markets. Crucially, the article provides an analysis of supply chain links between producers *and* intermediaries for three specialist food product sectors in the Scottish–English borders.<sup>4</sup>

By comparing developments at the level of the individual enterprise, the analysis suggests that food chains in the region are quite varied, both within and between sectors, at least when surveyed in terms of the nature and geography of supply links. Specialist food chains are, it is argued, ‘hybrid’ in form in the sense that businesses are dependent on national and international supply links, including links with ‘mainstream’ suppliers. Any rigid distinction between alternative and conventional economies is thus problematic in this context; instead, local specialist producers have created ‘niche spaces’ *within* the overall food system. This argument is developed from a food chain perspective. A review of the concept within agro-food geography is outlined below.

## Food chains, regional innovation and new economic spaces

The supply chain has become increasingly important to various geographical contributions which seek to 'map' the social and spatial organization of 'new' economic practices. A useful illustration of this is the number of articles published recently in *European Urban and Regional Studies* which employ the concept (although using different methods) to examine, for instance, the kit car industry in Britain (Raven and Pinch, 2003), the automotive industry in Portugal (Vale, 2004) and the clothing industry in Eastern Europe (Smith, 2004). In particular, the food chain has become central to agro-food studies, especially those that map quality food practices (see, for e.g. Str ate's [2004] analysis of quality production in the Norwegian dairy industry in this journal). Hartwick (1998: 425) defines food chains as 'significant production, distribution and consumption nodes, and the connecting links between them, together with social, cultural and natural conditions involved in commodity movements'. The food chain is not a new concept, but it has, as this review argues, been re-cast in important ways as a 'food system', 'food circuit', 'food network', or 'food convention', with each conceptual iteration tied to a wider theoretical project.

In the 1980s, work on the political economy of food and agriculture, for example, highlighted the significance of 'commodity chains' (Jackson et al., 2003). Friedland et al.'s (1981) seminal study of capital, labour and technology in the US lettuce industry thus demonstrated how farm labourers had become victims of technology change within the industry. Crucially, their analysis took them beyond the farm-gate to discuss corporate power and agricultural production as a commodity chain. In the early 1990s, Fine and Leopold (1993), through their analysis of the food and clothing industries, introduced commodity-specific chains.<sup>5</sup> In this case, each commodity represents a unique 'system of provision' that can be 'distinctly delineated according to the strength of linkages across its constituent activities other than at the level of consumption itself' (Fine et al., 1995: 201). Both

contributions made significant impacts within agro-food studies and both emphasized the 'whole food chain', including vertical links 'upstream' (e.g. raw material supplies, agro-technology supplies) and 'downstream' (e.g. processors, food retailers) from the farm/primary producer.

By the mid-1990s, the theoretical plates had again shifted. Developments in cultural geography sparked an interest in 'cultures of consumption' and recognition of the role of consumer knowledge, or what Cook and Crang (1996) refer to as 'circuits of culinary culture', in reshaping food chains. The increasing popularity of poststructural philosophies in geography, especially Actor Network Theory (ANT), also provided agro-food geographers with a new tool to 'read' food chains (see Murdoch, 2006 for a useful introduction). Notable is Whatmore and Thorne's (1997) challenging account of commercial and fair trade coffee networks which conceptualizes agro-food systems as partial and unstable orderings, constructed by numerous practices which extend across space and place and between 'actants'.

These food chain readings in the 1980s and 1990s did much in terms of providing critical insight into the workings of the agro-food system. Commodity chains analysis, for example, helped to unveil processes of appropriationism, substitutionism and supply chain verticalization. Responding to criticisms about an overemphasis on production, circuits of consumption provided insights into consumer preference, while ANT opened up analytical spaces to understand the movement of goods as an economic activity which included, rather than ignored, the role of nature and non-human 'actants' in agro-food studies (see also Lockie and Kitto, 2000). Yet, despite these different iterations, the food chain concept still retains, it would seem, central currency in agro-food studies, especially in literature relating to specialist food production, regional innovation and rural development.

Murdoch (2000), for example, highlighted the supply chain as central in distinguishing between 'vertical' and 'horizontal' rural development networks. The former are sector-based and involve large-scale production and consumption networks, while the latter link small-scale producers to learning and innovation networks which foster

growth in a region. Following this, Marsden et al. (2000; 2002) and Murdoch et al. (2000) usefully conceptualized interest in food provenance as offering small-scale producers the potential to develop 'short food supply chains' (SFSCs) which shift food production out of 'industrial modes' by building new chains that enable them to capture a better proportion of value added and to make direct connections with final consumers. While the number of nodes between the producer and the consumer may be minimized, the crucial distinction is that SFSCs carry the food to the final consumer 'embedded' with information about where the product comes from and how it is produced.

SFSCs take two main forms: first, the production and retail of food products within a county/region through forms of direct marketing or the sale of products to local retailers; and second, the sale of 'locality foods' (usually speciality/traditional food products) as value added commodities for export outside the locale. Crucially, this '*re-spatialization*' of food chains aligns itself to the above noted emerging regionalization agenda, focusing attention back on the primary producer, with positive opportunities for food SMEs to (among other things): create and retail value locally as an innovation strategy; strengthen regional identity; improve associational capacity, clustering and localized learning; and benefit wider local businesses linked to the food enterprise.

Various contributions (e.g. de Roest and Menghi, 2000; Murdoch et al., 2000; Parrott et al., 2002; Strate, 2004) have already conceptualized food chain developments along these lines, using ideas from regional economic geography, especially Storper's (1997) four 'Worlds of Production' version of Conventions Theory. Storper distinguishes between two key product dimensions: whether it is 'standardized' or 'specialized' on the one hand, and 'generic' or 'dedicated' on the other hand. The first distinction concerns the construction of the production process, which opposes standardized products which are not dependent on specific production factors, and focuses on specialized products, produced from specific production factors. The second distinction concerns the construction of the market, which opposes generic products and emphasizes dedicated products which are made for clients in a specified and unique

manner. In food terms, therefore, local businesses in a region can turn from producing standard products to producing *specialized products* and can construct suitable SFSCs to pass these quality products to *dedicated markets* inside and outside the region. This assumes a new kind of regional economic space, built around specialist dimensions of the food economy, including organic, local and regionally branded food products.

The social nature of these new supply chain relations is also deemed to be different (Winter, 2003b). Various studies have used Granovetter's (1985) work in economic sociology to explain this process, emphasizing how economic relations are embedded in, and mediated by, social relations of trust. Thus while market relations are seen as derivative of long food chains, short food chains are manifested through higher levels of social capital and mutual trust. Critics of 'social embeddedness' argue that the concept unhelpfully separates economy and society. These contributions imply that short food chains and localized economies can also hold 'dark relations' in terms of unequal power relations, conflict and personal gain (Hinrichs, 2003; see also Ilbery and Maye, 2006). This echoes Harvey (1989) more generally, who argues that, although the economy may be read as an 'object' of post-modernism, the 'attitudes' underlying these 'new' economic spaces (e.g. capital imperative) remain as before.

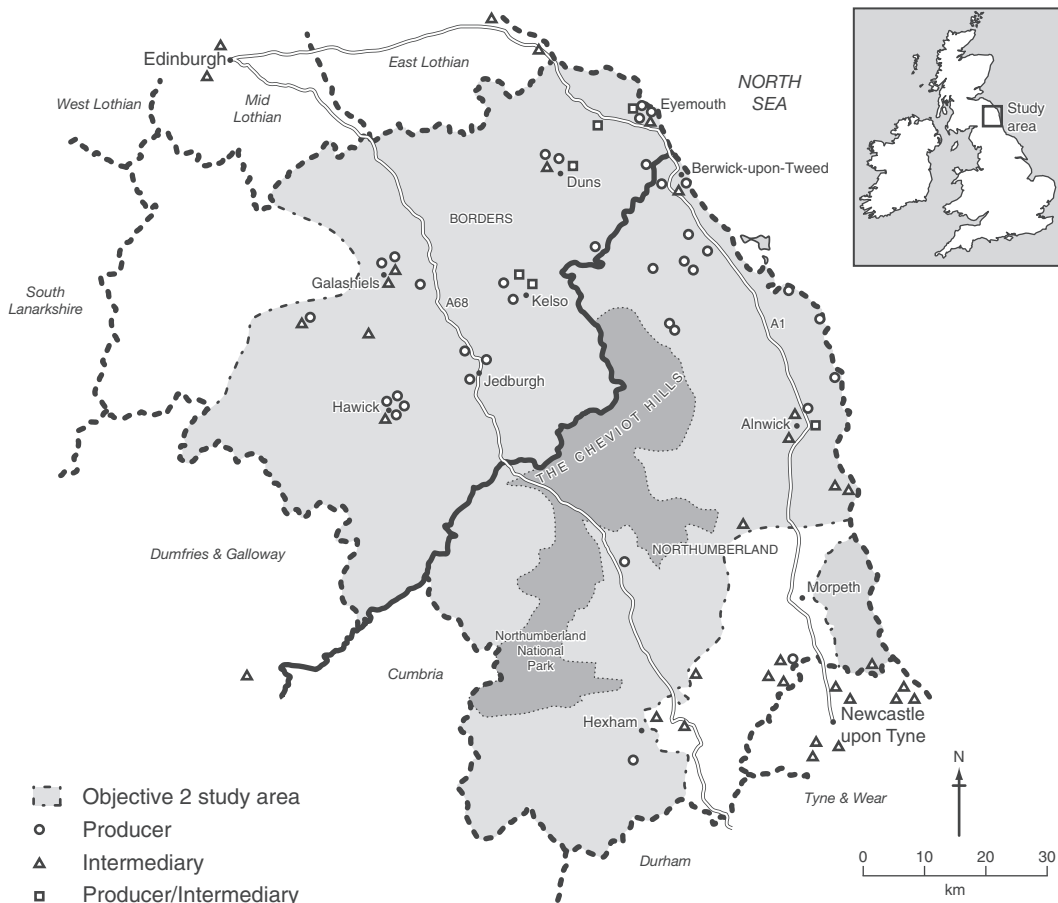
The conceptualization of SFSCs is also problematic because it ignores the 'upstream' dimensions of the supply chain and assumes that the starting point of the food chain is the primary producer (Ilbery and Maye, 2005a; 2005b). By doing so, it omits a central component of past food chain readings and unbalances meaningful comparisons with previous supply chain arrangements. The downstream aspect of the SFSC concept is also open to critique, especially the lack of discussion about the nature of supply links between producers and associated intermediaries.

Interviews with specialist livestock producers in the Scottish-English borders region have suggested that a straightforward polarity between, on the one hand, mainstream food systems and, on the other hand, locally dedicated food systems is unlikely (Ilbery and Maye, 2005a). This article extends this food chain analysis a stage further by

examining three specialist product sectors in the same region. Instead of adopting an abstract theoretical project, such as Conventions Theory, to describe how dedicated products are produced and processed in the region, the *'whole food chain'* is adopted as the key methodological tool. In particular, the analysis focuses on the spatial nature of food chain interactions and the transactions between producers and intermediaries for each of three specialist product sectors.

### Introducing specialist food businesses in the Scottish–English borders

The Scottish–English borders study region comprises the counties of Northumberland and The Borders (Figure 1). Both counties are predominantly rural in character and characterized by a dispersed, low-density population. Northumberland, for example, has an average population density of 62 persons per sq. km,



**Figure 1** The Scottish–English borders study region and surveyed businesses

compared with 245 per sq. km in the UK overall. Large proportions of the area have also been designated as Objective 2 by the European Union.<sup>6</sup> Agricultural land is generally of poor quality and typified by upland, low-intensity livestock farming. The Agricultural Census suggests a general increase in agricultural holdings in the last decade or so, especially for smaller (<20ha) and larger farms (>100ha) in the region. The Borders and Northumberland both retain relatively high numbers of employees in the primary sector (8 percent and 7 percent respectively) compared to the UK average (3 percent), especially in agriculture and fisheries. The area was badly affected by the Foot and Mouth crisis in 2001. Since then, 'buy local' campaigns and initiatives to promote specialist products from the region have grown, including the formation of a North East regional food group ('Northumbria Larder').

During late 2001 and early 2002, a series of interviews were conducted in the region with 43 small-scale food producers and 40 associated intermediaries (e.g. abattoirs, transporters, wholesalers).<sup>7</sup> Figure 1 shows the location of businesses in or around the region, with some designated as both producer *and* intermediary due to the nature of their enterprise. A key part of the interview involved asking respondents to draw a *food chain diagram* for their business, including upstream and downstream supply links. This formed the platform for a series of questions about the supply chain, especially relationships with suppliers and

customers (including intermediaries). The surveys started at the producer end of the food chain. Only businesses deemed to produce specialist/dedicated food products were sampled. This was based on the use of the two counties' specialist food guides and supported by a 'Consultation Panel' specially convened for the project, members of which also provided lists of suitable businesses. After detailed discussions, specialist businesses were sampled from three broad sectors: livestock products; bakery, confectionery and preserves; and fish products. Surveyed producers also identified other businesses. As will be seen, inclusion in specialist food guides is more often about 'localness' than dedicated production. Intermediaries were selected because of their links with surveyed producers in the region.

The principal products made by surveyed food producers are summarized in Table 1. Product characteristics are a composite list summarizing the responses given by producers when asked to identify such features. The most striking thing about Table 1 is the sheer diversity and range of products on offer. Most surveyed producers considered themselves a part of the region's 'quality food scene'. Some, however, are not explicitly specialist; instead, they produce a range of products for customers. Equally, some surveyed businesses included in the food guides/local databases produce fairly 'mainstream' products (e.g. breads, jams, farmed trout). As some producers noted, inclusion is sometimes determined more by the local nature of the business, rather than

**Table 1** Product range and characteristics for producers in the Scottish-English borders

Sector	Product range	Characteristics identified by producers
Livestock products (20)	Beef, lamb, pork, game, ostrich, cheese, yoghurt, cream, ice cream, eggs.	Free-range, traditional breeds, organic, local products, traceable, good animal welfare standards, unique or novel products, 'natural' ingredients, traditional production methods, handmade, vegetarian, healthy food.
Bakery, confectionery and preserves (13)	Honey, honey mustard, breads, cakes, biscuits, spiced fruits, chutneys, jams, curds, jellies, vinaigrette.	Organic, homemade, gourmet, traditional production methods, high-quality ingredients, local products, no added colours or flavourings.
Fish products (10)	Farmed trout, fresh salmon and trout, eels, shellfish (e.g. prawns, crabs, lobsters, scallops, winkles), kippers.	Fresh, 'live', natural, approved fishing methods, controlled fish farming, unique products, traceability, continuity of product/service.

*Note:* The number in brackets indicates the breakdown of producer surveys according to product sector.

the distinct qualities of the product itself; this is aided by an institutional commitment in the region to create a forum for improved business networking (see Ilbery and Maye, 2005b).

### *Producer businesses*

All surveyed producers were small or medium-sized enterprises (SMEs), with the majority being micro-scale enterprises employing fewer than 10 people. Family ownership was dominant across the three product sectors and, while some businesses had been in operation for many years, a number, especially in the livestock sector, had started after 1990. In some cases, such ventures were a new enterprise *within* an already established business (e.g. part of a dairy farm).

Most producers were motivated by factors such as product interest and a commitment to making 'good food', as well as a means of diversifying current production and adding value. Some producers, especially in the livestock sector, were also keen to emphasize that they operated in the local food sector as an opportunity to re-establish links with their customer base and to maintain traditional modes of production. Other surveyed businesses (e.g. bakers, butchers, fish merchants) argued that they had been part of the local food economy for some time, although the same products may not have been sold with the same vigour for promoting local distinctiveness. A position exists, therefore, between '*new*' local food producers, most involved in some form of direct marketing, and '*old*' local food producers, who may have been 'doing local', in a traditional sense, for many years.

### *Intermediary businesses*

On average, intermediary businesses have been established in the area for 30 years, longer than most surveyed producer businesses. Most of these businesses can be categorized as either small (between 10 and 49 employees) or micro-scale enterprises. Overall, 26 of the 40 businesses were located within the study region, with small clusters prominent in and around Newcastle and Edinburgh (see Figure 1). Some intermediary businesses are

**Table 2** Intermediaries surveyed for the Scottish–English borders

Type	Livestock	Bakery	Fish	Other
Processor	6	1	8	–
Transporter	–	2	2	2
Wholesaler	5	4	3	–
Abattoir	4	–	–	–
Cooperative	2	–	1	–
Total	17	7	14	2

difficult to define, performing more than one function (e.g. processing/distribution), while others operate along different parts of the food supply chain.

The type and function of intermediaries are also a reflection of the product sector (Table 2). For instance, there is a lack of bakery intermediaries, with production and retail controlled by the baker. Meanwhile, secondary processing is dominant in livestock and fish. However, this includes examples of butchery (2) and fish processing which are similar to surveyed producer businesses. Like the producer surveys, there is a notable mix of 'new' and 'old' businesses in the study region. For example, in the livestock sector, newly established, often farm-based, processors (e.g. 1995, 1999) operate alongside abattoirs and processors who have been established in the area for a number of years (e.g. 1917, 1954).

### Tracing supply chain links between specialist food producers and intermediaries

Using the individual food chain diagrams drawn during the interviews, this section of the article traces the supply chain links between specialist producers and intermediaries for the three product sectors in the Scottish–English borders region. In each case, the discussion starts at the producer stage (e.g. farmer, baker) and analyses the '*whole supply chain*', showing links with upstream suppliers and intermediaries/commercial customers downstream. It next presents findings from the intermediary surveys, examining links with surveyed producers (upstream) in the



region, as well as commercial customers (downstream). Chain diagrams for individual businesses are presented as examples which illustrate how certain producers/intermediaries operate and link with one another in the region. The length of the discussion for each product sector is a reflection of the overall survey sample size.

### *Livestock products*

The sector is divided into two key parts: first, dairy, eggs and poultry products; and second, meat-based products. At the producer stage, most upstream links are largely informal and verbally based. Establishing transparency in the food chain is a key concern for livestock businesses.<sup>8</sup> As one organic poultry producer explained: 'The main characteristic of the whole business is the fact that they are traditionally reared and they are killed and processed on the farm. That is the main selling point really. It goes back to this buzzword traceability' (*Organic Poultry Producer*, 30 Nov. 2001).

Analysis of upstream supply links reveals that a number of businesses use non-local supply inputs. Producers reported having informally based business relations with selected suppliers. When asked to explain supplier selection, various, potentially contradictory, factors emerge. Overall, price is the central criterion influencing selection. The desired quality of inputs (e.g. rennet, organic feed) and the lack of local availability also explain why some businesses source from outside the region. In dairy, for example, it is important to note that the main product and ingredients for processing (e.g. milk, cream, eggs, jam) are usually sourced from the farm or through a local supplier (see Figure 2Ai). Other ingredients are often less available in the region, with businesses accessing whatever node they can to source the right product at the right price. With limited economies of scale, this may involve using second or third level national and/or international intermediary suppliers. The following discussion with one artisan cheese producer (23 Jan. 2002) demonstrates these supply chain links well:

*Producer:* 'Rennet and other ingredients come direct from the Netherlands . . . The starter culture is from a French-based company. Although it's French, it's

actually bought from another company that holds stock . . . they are based in the UK . . . For the cheeses we are making we have to go to where the technology is. Some of the companies are so big that you cannot buy orders direct from them, you have to go through someone else.'

*Interviewer:* 'So what are the main criteria influencing your choice of supplier?'

*Producer:* 'It's all to do with price really, where I can get the cheapest available stuff. Value for money and quality are important. I suppose competitive technology, so those that are best at what they do. You go to them because you know their product works.'

Most red meat livestock producers also aim to minimize input supplies. However, contrasting pictures emerge. So, while some surveyed organic and rare breed producers (Figure 2Bi) have developed supply links with other likeminded producers (e.g. links with other local, organic or rare breed farmers to buy stock/materials), other on-farm and traditional butchers source some or all of their product from 'mainstream' suppliers (e.g. livestock marts, livestock agents, wholesalers, producer cooperatives, other butchers), in some cases outside the study region. For the latter group, the shortened nature of the food chain downstream is the key difference.

Downstream, traditional livestock channels – such as abattoirs, wholesalers and food processors – have also not been abandoned. So, although meat producers have set up their own cutting units for value-based processing, they must still 'dip into' more established nodes. In the meat sector, the obvious link is the abattoir. These businesses are usually smaller than the abattoirs that supply supermarkets, and better suited to specialist producer requirements. In dairying, surveyed cheese farms use wholesalers to sell product, although again many are more specialist enterprises dedicated to sourcing product from artisan producers. Livestock producers also supply to different types of outlet to disperse risk and vulnerability. For a number of businesses, growth has been dependent on the emergence and development of new retail nodes. Farmers' markets (FMs) are especially important here.

However, further discussion with livestock producers revealed that in many cases these chains are relatively insignificant, at least in terms of volumes sold. Thus, while a number of businesses

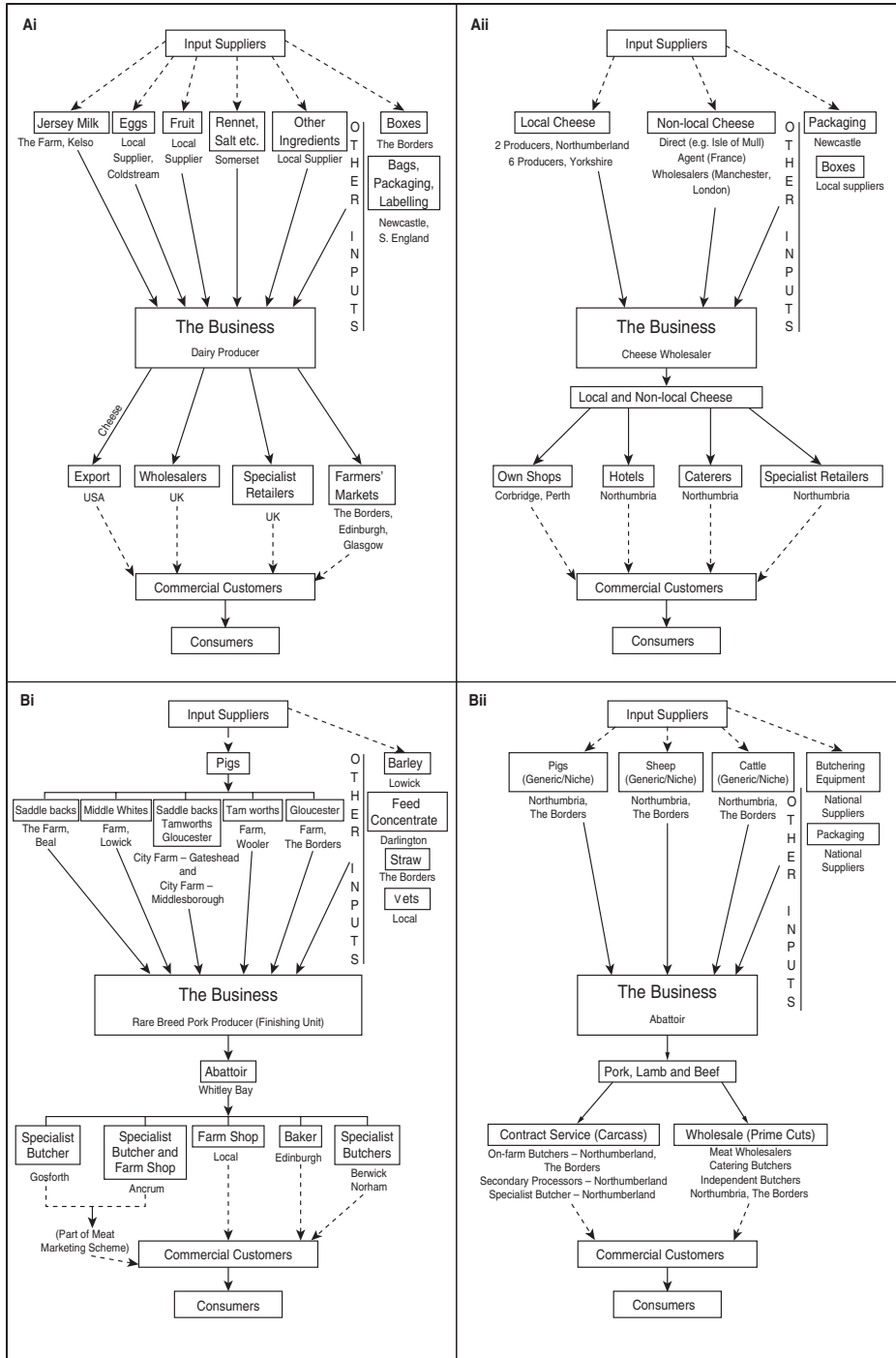


Figure 2 Food chains for livestock products

sell some product through direct marketing channels (e.g. farm shops, FMs, mail order), they also rely heavily on more mainstream outlets to sell large proportions of stock; for example, two pig farms sell to a large commercial cooperative and a cheese farm sells the bulk of its product to Sainsbury's supermarkets. Producers also seek more 'stable' direct marketing options, particularly establishing their own farm shop. Downstream links and contracts are usually verbally based and informal, with contact often initiated by the livestock producer. The ability to control the food chain and where the product is sold is a significant factor.

At the intermediary stage, activity in the study region appears under-represented in terms of available abattoirs, cutting and processing facilities. However, some producers have started to fill this void by providing a service for other local farms. For example, one farmer in The Borders now provides an important contract service for other local meat producers (e.g. curing, cutting and packing), as well as hiring FM equipment (e.g. stalls, display cabinets). This puts the producer in a strong position, but not without notable antagonisms:

There is definitely conflict from the contract killing side of things . . . People [names two rare breed pig businesses] want us to cure their bacon the same way that we cure ours. We don't compromise on our bacon because it's our best selling product. We don't give them the same cure, we use another cure and they know that it's not our cure and that pisses them off a bit . . . We have to safeguard our own identity. We have our identity and in the long term it will be our identity that actually comes through. (*Pig, Beef and Sheep Farmer/Processor/Farm Shop/Butcher*, 23 Jan. 2002)

Three other factors are significant at this stage of the supply chain. First, the intermediary surveys with abattoir owners, processors, wholesalers and so on highlighted the small size of the region's specialist livestock sector overall. Despite this, local/specialist livestock products are important for some intermediaries in the region (e.g. local cheese wholesaler and small abattoir; see Figures 2Aii and 2Bii). The intermediary businesses provide a very important service for specialist producers, a service that would not exist without the buttress of established distribution channels. For example, a small abattoir can only viably deliver rare breed

carcasses back to a local farmer (who sells his meat direct) alongside supplying wholesale products to catering and butchering customers who have been doing business with the abattoir for a number of years.

Second, much of the intermediary livestock sector is highly commercialized, making life difficult for the smaller intermediaries, with price the governing supply chain relation; links with local specialist producers must be cost-effective and profitable. Responding to consumer and customer demands, larger red meat intermediaries (e.g. processors/wholesalers) surveyed in the region have developed or become involved with regional branding schemes. Examples include Northumberland Lamb and Specially Select Scotch Beef and Lamb. The traceability and integrated nature of the chain are key marketing factors. Governed by Quality Meat Scotland, Scotch Beef and Lamb, for instance, links together assured feed suppliers, farms, hauliers, auction marts and processors. It has also been awarded PGI status. Although part of a dedicated market, these businesses operate for different national retail markets, with few links to surveyed livestock producers in the region.

Finally, in the meat sector there is sometimes resistance towards specialist livestock products, echoed by the sceptical views expressed by some respondents when asked about the potential for things like rare breed meats and/or direct marketing. As one meat wholesaler remarked:

We don't really have much to do with the niche thing. It's in a sense too difficult. We don't take the preparation of the stuff to the last degree. A lot of these 'niche people' want it all done for them. It means a lot of extra effort for a particularly low volume and it doesn't compute as a middle person. It's okay for them to turn some strange Soya sheep into £70 each, but they would want me – the man in the middle – to perform for £5. We don't pursue this. (*Meat Wholesaler*, 25 June 2002).

### *Bakery, confectionery and preserves*

As with livestock producers, agreements are mostly verbal and dependent on price. Analysis of individual food chain diagrams reveals that most producers source some inputs from national

suppliers, particularly secondary supplies such as jars, pots and packaging. However, the nature of these upstream links varies dramatically according to business size and type of input. For instance, most small bakeries (large in size in comparison to other surveyed producers in the sector) invariably use one or two key national suppliers or wholesalers (e.g. Bako Northern, 3663) for the majority of raw materials (Figure 3Ai). In contrast, 'cottage style' bakers and confectioners, often working from the kitchen table, use local retailers to order their supplies. These micro businesses do not have the necessary economies of scale to trade directly with large upstream suppliers already reluctant to deliver to the area. One small organic baker explained it thus:

Getting ingredients can be a real problem. I now have an arrangement where I get my ingredients [e.g. organic flour, yeast, flavourings] delivered to a shop in Duns. He is quite happy for me to go along and collect whatever I have ordered and I pay him whatever he requires each week to pay for that. (*Organic Baker*, 4 Dec. 2001)

For many businesses, the real strength of the product comes in terms of how it is made. The honey farm in Figure 3Bi, for example, only sells its own local honey, while secondary supplies are sourced from as far away as Denmark.

Downstream, established bakers sell product through their own shops, as well as to other local retailers, including local multiples (e.g., Tesco). The interviews revealed a lack of intermediaries in the sector as many businesses deal direct with individual customers and organize and deliver product themselves. However, in response to poor sales locally, some bakery and preserves businesses (see Figures 3Ai and 3Aii) have started to develop links with national wholesalers and manufacturers to sell product outside the region. The following response from a chutney and preserves producer/processor in The Borders typifies this adjustment well:

I would say that about 80 percent of the product now goes to what we call 'wholesale customers'. This includes the Greggs division [which the producer is now a part of] who take the product to a central warehouse in the UK and from there distribute to individual shops . . . In the past, the retail side of the business was the main supply chain. In the last five years this has completely

turned around to the detriment of the smaller retailers unfortunately . . . We are not interested in Mr Smith the butcher who only wants 10 jars of chutney every six months, it's not where we want to be any more which is sad, but that's the nature of the business. (*Preserves and Chutney Producer*, 5 Dec. 2001)

In contrast, newly established home bakers and jam makers prefer to sell products direct (e.g. home delivery, friends, FMs) and to local independent retailers. The intermediary surveys confirmed the lack of activity at this stage of the supply chain. Interestingly, surveyed wholesale businesses also produce product themselves. As one specialist business in Edinburgh explained: 'We are a manufacturer, that's what we are about. The products that we take on are really complementary to what we do' (*Manufacturer/Wholesaler*, 26 June 2002). Some surveyed producers also buy in products, not necessarily from local suppliers, with sourcing determined by demand for a product at the right price which will complement what the business already produces.

Two national wholesale businesses were interviewed that source bakery products from surveyed producers. The first, 3663 – a food service wholesaler – sources frozen product from one local baker because of their ability to supply product at the right volume, with products distributed to caterers in the North East of England and nationally. The second, Cottage Delight – a specialist foods wholesaler – sources cakes from a specialist baker in Northumberland because of product quality and price; the product is labelled under the wholesaler's own brand and sold to retailers and catering customers in the UK (Figure 3Aii).

One significant intermediary component in the sector is distribution. Surveys suggested a limited number of local distributors operating in the region itself, some using other courier networks to distribute product. For example, one baker's products are delivered, along with two other local businesses, by a small distribution agency direct to Cottage Delight (see Figure 3Bii). The business in question also passes deliveries to a larger company in Newcastle which then processes the order through its national delivery system. Other distributors deal with more than one study product – as a courier service. Again, these businesses have (or use) established

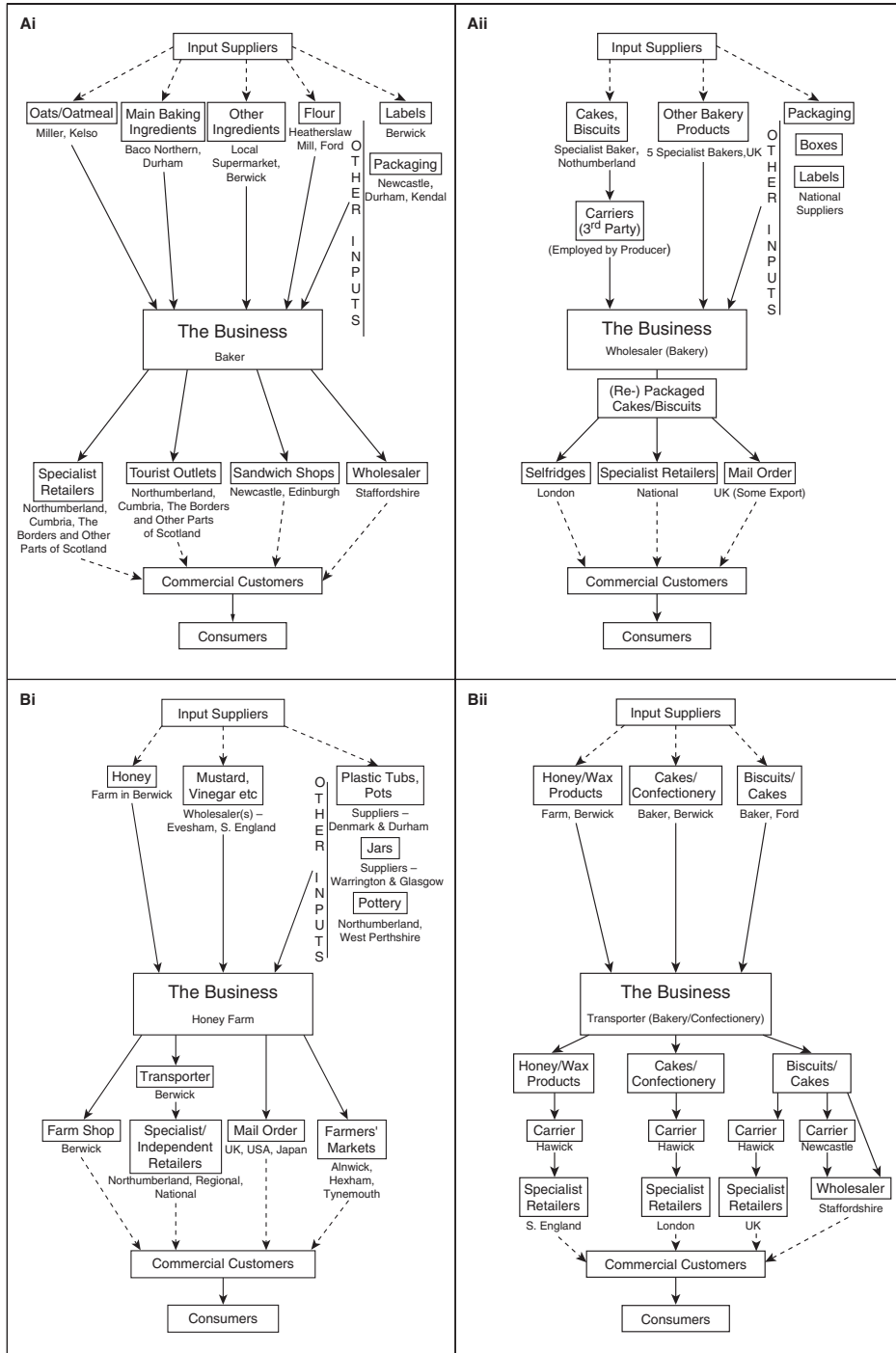


Figure 3 Food chains for bakery, confectionery and preserves

national networks to distribute product for the customer, food-based or otherwise.

### *Fish products*

The producer surveys included a farmed fish example, local smokers and shellfish processors, all with different supply chain arrangements. Upstream, businesses have local and/or national and/or international supply links. Take farmed fish, for example. The surveyed farm operates on a contract basis using mostly non-local supply links, with fish eggs coming from as far as South Africa. Smokers are less clear-cut. One smoker in The Borders, for instance, uses local supplies, except for trout (Figure 4Ai). Other smokers, mostly specializing in kippering, source product from outside the region, in some cases from as far as Iceland and Norway, usually via a UK-based intermediary. Meanwhile, primary shellfish processors/merchants – which include a number of primary processors in Eyemouth in The Borders – source most products from ports in the North of England and Scotland (Figure 4B).

Trade relations between suppliers are usually informal. The trout farm is one exception, contracted to a Scottish cooperative. For shellfish, price arrangements are made day-by-day, usually negotiated through port agents and dependent on market value. However, this is a highly competitive market, particularly for langoustine and other shellfish, as ports and businesses in the region compete directly with one another for supplies, many having adjusted their efforts (partly in response to changing fish quotas) from white to mostly shellfish catches.

Analysis of business links downstream again reveals diverging supply chain features. For example, farmed fish are supplied direct to a cooperative (Scot Trout) and then to national supermarket supply chains. Knowledge about exactly where the product goes is limited and not important to the farmer:

... ownership passes as the lorry goes out the farm-gate. After that it belongs to them [Scot Trout]. They sort it all out, they process it, market it and get it to the retailer ... they do everything ... I don't know where the fish is going and they don't tell me. (*Fish Farmer*, 30 Jan. 2002)

The lack of customer knowledge is of no concern to the farmer; his role in this vertically integrated supply chain is to produce fish to a particular size and standard: 'I suppose it's a difficult thing to understand because everybody knows their market, but I don't really. It's not my job to and I don't need to. What I need to worry about is farming the fish' (*Fish Farmer*, 30 Jan. 2002).

In contrast, smokehouses sell product in different ways, some local and direct, others national and indirect. For example, the business in Figure 4Ai, specializing in smoked salmon and trout, supplies 70 percent through direct sale and small retail outlets in The Borders, refusing to supply wholesalers and supermarkets. Products are distributed further afield using couriers, like the one featured in Figure 4Aii. In contrast, another similar business supplies most products to the Waitrose supermarket chain. For shellfish, the most significant fish sector in the region, the supply chain has a distinctly European flavour, with the export market to Boulogne, in France, the key outlet. Price is the dictating factor. Product is taken by own carrier or, more normally, is collected by national transport carriers which ship product from the central belt of Scotland to mainland Europe. Relationships are reportedly very informal, with prices and deliveries arranged day-by-day; contractual or formalized agreements are unsuited to the buoyancy of the market and the supply chain. One processor summarized the links thus:

With the Europeans it's all about personalities and getting to know people ... They want to get to speak to you on a daily basis ... it's about making associations and long-term commitments ... That's the way they like to cultivate business. (*Shellfish Processor/Merchant*, 15 Jan. 2002)

The intermediary surveys included fish smokers, processors, a local cooperative and distributors, each with interesting supply chain features. Two small fish smokers are similar in profile to businesses surveyed at the producer stage, but also provide a smokery service for local meat producers. These examples are contrasted with a large fish smoker and processor who sources local wild salmon (via the local fishing cooperative), alongside farmed salmon from Norway. Meanwhile, the main crab processor in Eyemouth (see Figure 4C) sources from local

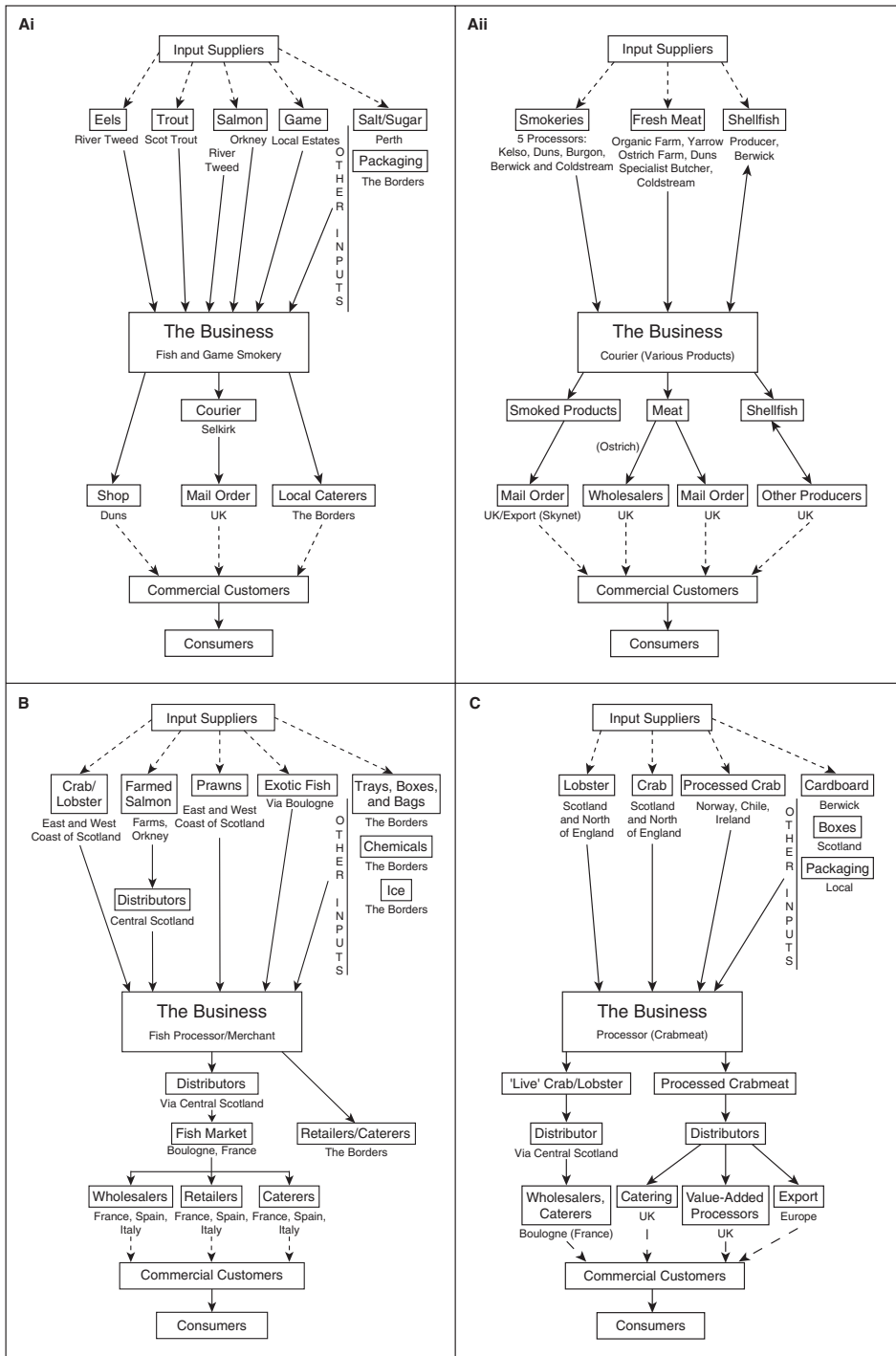


Figure 4 Food chains for fish products

boats, as well as product from Chile, Norway and Ireland. Overall, secondary processing, particularly in The Borders, is limited due to high transport costs, seasonality and unsuitable fishing stocks. One of the largest UK processors of prawn, based in Newcastle, sources most products from around the world, but also sources local langoustine, in direct competition with smaller processors in North Shields in Tyne and Wear.

Despite very good distribution, particularly for European markets, few operators exist in the region itself. One exception is a small business in Amble. The business drops product at two main logistics companies – Frequecosse and Norfolk Line – which then forward product to European customers. Meanwhile, local wholesalers source fish product from local merchants, with product availability determined by seasonality and price. Most products are sourced through national wholesalers.

At the intermediary stage, fish products are sold in various ways. For example, two small smokers sell product to local specialist retailers, FMs and mail order, as well as to the catering trade. Meanwhile, two wholesalers sell most products to a local customer base, usually with their own vans. This is in contrast to a much larger processor in Duns in The Borders which sends wild salmon (along with the rest of their processed, commercially produced product range) to supermarkets in Switzerland and Belgium. Wild salmon supplied by the Eyemouth fishing cooperative is also sent to Waitrose (seasonally), as well as regularly to Billingsgate Fish Market in London, along with other fish products. Shellfish processors supply a range of markets, with export dominating. The link with distribution is essential. For example, one large chilled distributor (David Price) services nationally, as well as exporting via a link with a German distributor. The surveys also revealed that most shellfish products are sent to Glasgow, with seven companies each servicing different parts of the European market.

## Conclusions

This article began by introducing some key ideas about quality, regionalization, alternative economies and localized food systems which have gained recent precedence within European agricultural geography.

The food chain, especially the composition of SFSCs, has become a key tool to help understand these new economic practices. The article argues that a 'whole food chain' perspective must be adopted which includes an analysis of supply links both upstream and downstream from the point of production. With an array of metaphors now in use to capture such interconnections, the article concerns itself only with the local specialist food sector. More specifically, the argument has been developed by presenting results from a project which surveyed local specialist food producers and associated intermediaries in the Scottish–English borders.

The main theoretical points to emerge from this analysis are summarized below. The first point is that local specialist food chains are often of a 'hybrid nature' when surveyed in terms of the geography of their supply links. Businesses in the region are thus dependent on national and international suppliers, including links with 'mainstream' suppliers. In a recent article, it was argued that specialist livestock producers in the region were creating hybrid chains which involved a 'mixing together' of 'alternative' and 'conventional' economic systems (see Ilbery and Maye, 2005a). Having now examined two stages of the supply chain, for three specialist product sectors, it is possible to take this argument a stage further. It would appear that local specialist producers are in fact developing their own 'niche spaces' within the one overall system. In practical terms, at least, producers have not really moved from one system to another – the new arrangements are *part* of the one overall system.

The primary objective is to create spaces within the food system which enable producers better to control their supply chains. In the livestock sector, for example, analysis of upstream supply links confirms the non-local nature of some food chains. Intermediate links downstream with abattoirs and wholesalers show how local livestock producers 'dip into' more established chains in the region. Livestock businesses also report selling through a variety of supply chains, some arguably more 'mainstream' than others. Interviews with small abattoir owners and wholesalers confirmed this process, with intermediaries only able to provide producer services by 'piggy backing' normal deliveries. Intermediary businesses are also looking for innovative links to compete in a system which



favours large-scale production. Meanwhile, in the fish sector, particularly for shellfish, the aim is to source product, process it and then export to merchants and wholesalers in mainland Europe. Larger processors source most products from around Europe and further afield, but also have links with local merchants and agents. Most local fish businesses in the region do not appear to see themselves as part of a specialist regional economy, but recognize that their product has commercial value, especially in parts of Europe. Crucially, like livestock and bakery producers, individual enterprises each interact with various suppliers to create their own place in the market.

The second point to note is that the region's speciality food sector constitutes a *diversity of businesses*. There are, for example, relatively new enterprises versus older established businesses, producer versus intermediary chains, and also differences in terms of commercial versus more idealistic business orientations. This in turn creates interesting spaces of exchange and practice as new producer enterprises try to establish business relations with intermediaries which are well established in the region. More generally, most supply chain links are built around informal, usually *verbally based relations*. At the same time, many producers and intermediaries report that price is an important variable determining business relations and most stress that a strong economic imperative drives their small-scale food businesses. This does not mean that economic imperative undermines the social dimension. Rather, it argues that businesses are likely to act to improve competitiveness, economic value and control. It is difficult to interpret 'trust' in the food chain. Watts et al.'s (2005) recent discussion of *'reliance'* may be more instructive here, demonstrated in the case of dairy farmers, bakers and fish processors who rely upon selected suppliers and customers as part of their business.

One can distinguish both sector-based differences as well as similarities between sectors. On the last point, for example, diversification and adjustment in response to wider supply chain pressures are similar in all three sectors, as is the extended geographical links with suppliers and customers. More interesting, and the third key point emphasized here, is that there are *differences within sectors which are common across the sectors*. This seems

to further support the overall argument about hybridity. In the livestock sector, for example, differences exist between and within dairy and meat-based chains; for instance, there are different upstream links for on-farm butchers. In the bakery sector, most producers have links with national suppliers, but these vary according to the size of business; so, while large bakers use wholesalers direct, other cottage businesses must use local retail links. Difference then is not often a feature of specific product sectors, but determined by the size, motivation, location and so forth of individual surveyed businesses.

The fourth and final point noted here is to recognize important *differences in the way quality definitions are applied*, which makes it difficult to identify a clear delimitation of the 'specialist sector' and the 'local food economy'. The analysis includes, for example, local products, local sourcing initiatives, differentiated modes of production (organic, rare breeds), artisanality, short producer-consumer links, and so on. This in turn poses obvious methodological problems – especially in terms of establishing a coherent criterion for sample selection (see also Ilbery and Maye, 2005b). Food businesses were carefully selected here as 'specialist enterprises' because they were included in local guides and/or part of regional food groups. However, the surveys suggest that the criteria for business selection in such guides are unclear.

These theoretical discussions raise various critical comments concerning the nature of local specialist food economies in European regions. The most critical argument is to suggest that the organizational and spatial puzzle associated with specialist food production is not part of an 'alternative system'. This does not diminish the value of an alternative food project in an ideal sense, but qualifies the nature of physical supply chain interactions between specialist producers in practical terms. An important factor in this interpretation may, of course, be the region itself and the product sectors sampled and surveyed. The former, for example, influences both distribution and transport costs and may force small-scale businesses to 'piggy back' already existing supply links which service established companies inside and outside the region. Further analysis across other European regions is needed to critically evaluate the conclusions outlined here. Although tentative, the

findings at the very least raise important research and policy questions about the potential of relocalization strategies to enable lagging regions and dedicated food sectors to compete in more liberalized markets.

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## Notes

- <sup>1</sup> This includes, most recently, the Mid-Term Review of CAP (2003), especially the introduction of the Single Farm Payment. For a useful summary of these reforms see Rutherford (2004).
- <sup>2</sup> This trend to 'regionalize' governance structures was also supported by Lord Haskins' (2003) review of rural policy. See: [www.defra.gov.uk/rural/pdfs/ruraldelivery/haskins\_full\_report.pdf], accessed in March 2005.
- <sup>3</sup> See, for example, van de Ploeg and Renting's (2000) account of pluriactivity and quality food production in Western Europe. They present business case-studies from France, Germany, Italy, Spain, Ireland, the Netherlands and the UK.
- <sup>4</sup> The study region was selected as part of a wider European project on food chains in 'lagging regions'. In this article, no direct attempt is made to provide a comparative analysis of the product sectors on both sides of the international border.
- <sup>5</sup> This conceptual emphasis on commodity-specific chains is similar to *filière*.
- <sup>6</sup> Under the Agenda 2000 guidelines, Objective 2 status is awarded to lagging regions which are facing structural difficulties in an attempt to support economic and social conversion.
- <sup>7</sup> All the interviews were tape-recorded, selectively transcribed and annotated. They were later analysed and theme-based information from the transcriptions was coded.
- <sup>8</sup> For a detailed discussion of specialist livestock producers in the region, see Ilbery and Maye (2005a).

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