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Food Relocalization for Environmental Sustainability in Cumbria

Les Levidow 1,* and Katerina Psarikidou 2

- ¹ Centre for Technology Strategy, Open University, Milton Keynes MK6 6AA, UK
- Department of Sociology, Lancaster University, Lancaster, LA1 4YT, UK; E-Mail: a.psarikidou@lancaster.ac.uk
- * Author to whom correspondence should be addressed; E-Mail: L.Levidow@open.ac.uk; Tel.: +44-1908-655708; Fax: +44-1908-654825.

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Abstract: In the past decade, many European farmers have adopted less-intensive production methods replacing external inputs with local resources and farmers' skills. Some have developed closer relations with consumers, also known as short food-supply chains or agro-food relocalization. Through both these means, farmers can gain more of the value that they have added to food production, as well as greater incentives for more sustainable methods and/or quality products, thus linking environmental and economic sustainability. These systemic changes encounter difficulties indicating two generic needs—for state support measures, and for larger intermediaries to expand local markets. The UK rural county of Cumbria provides a case study for exploring those two needs. Cumbria farmers have developed greater proximity to consumers, as a means to gain their support for organic, territorially branded and/or simply 'local' food. This opportunity has been an incentive for practices which reduce transport distances, energy costs and other inputs. Regional authorities have provided various support measures for more closely linking producers with each other and with consumers, together developing a Cumbrian food culture. Going beyond the capacity of individual producers, farmer-led intermediaries have maintained distinctive product identities in larger markets including supermarket chains. Although Cumbria's agro-food relocalization initiatives remain marginal, they counteract the 1990s trend towards delocalization, while also indicating potential for expansion elsewhere.

Keywords: food relocalization; local food networks; food security; environmental sustainability; rural development; Cumbria

1. Introduction

Since the 1990s 'sustainable agriculture' has become a mainstream policy concept. Agro-industrial systems have been put onto the defensive for various environmental harms such as soil degradation, vulnerability to pests, greater dependence on agrochemicals, pollution, genetic erosion and uniformity, *etc.* In response to these criticisms, diverse remedies have been called 'sustainable agriculture' [1]. Originally it meant producers developing alternatives to crop monocultures, e.g., via less-intensive and agro-ecological methods, as a basis for independence from the agricultural supply industry. However, soon the term 'sustainable agriculture' was recast to mean a future high-yield productivist agriculture based on capital-intensive inputs [2,3].

Those two agendas promote divergent ways to link environmental with economic sustainability [4,5]. As food insecurity has been aggravated by climate change and competing demands for land use, this problem likewise has divergent diagnoses and remedies [6]. From a capital-intensive perspective, the Life Sciences are meant to provide more efficient inputs which increase productivity, while also minimizing resource usage and pollution. By contrast, alternative agendas support less-intensive agri-production methods which replace external inputs with local resources and farmers' skills, as means of adding value to food production.

In the last decade, such alternatives have been increasingly promoted as a basis for support from policy measures and consumers. Through closer relations with consumers, farmers can gain more of the value that they have added to food production, as well as greater incentives for more sustainable methods and/or quality products. These closer relations have been variously called short food-supply chains, local food systems or agro-food relocalization.

This paper explores the following questions about agro-food relocalization initiatives:

- How do they link environmental with economic sustainability?
- How do they expand markets beyond the capacity of individual producers, especially through larger intermediaries?
- How do they initially gain state support—and gain greater independence from conventional food chains?

Those questions will be addressed through a case study, the UK's rural county of Cumbria. Until recently, this region was known for industrial-scale production of standard food and drink, importing raw materials from elsewhere, rather than for territorial characteristics favoring local specialty products. Thus Cumbria may have general relevance to other unfavorable contexts.

The next section reviews literature on agro-food relocalization—first in Europe generally, and then in the UK, including relevant policies of the New Labour government (1997–2010). Subsequent sections focus on the Cumbria case—regional policy support for food relocalization, cooperative support networks, and larger-scale marketing of local or territorial brands. Finally, the Conclusion locates the case in its wider context and suggests implications for prospects elsewhere.

2. Food Relocalization: Impetus and Means

Since at least the 1990s, European food retail and processing have become increasingly concentrated in supermarket chains or at least controlled by them. They have subordinated agricultural producers to standard requirements, narrowly defined 'quality' criteria, marginalized local independent retailers and separated producers from consumers [7,8]. This has been called food delocalization, reinforcing a more globalized and industrialized agri-food system whose production methods became more dependent on capital-intensive inputs [9]. In the past decade, however, various difficulties have led some farmers to develop less-intensive methods, while also circumventing supermarket chains.

2.1. Sustainability Improvements via Relocalization

UK agro-food relocalization has had many stimuli. Food scares, especially the 1996 mad cow scandal, highlighted hazards of agro-industrial systems and generated endemic distrust among consumers. Another stimulus was the cost-prize squeeze, whereby farmers' production costs increased faster than their incomes from product sales. Together these pressures have stimulated various strategies, some towards higher-value products and more diverse economic activities:

As the cost-price squeeze tightens, farm families all over Europe are innovating and finding new opportunities; becoming rural entrepreneurs, adding extra value to their produce, switching from intensive to more sustainable farming, and becoming pluriactive ([10], p. 11).

Along those lines, more sustainable methods can mean: substituting farmers' skills and local resources for external inputs, substituting grass for animal feed, recycling organic waste, re-integrating animal and crop production, *etc*. These various responses have been theorized as endogenous development strategies:

[These are based] on locally available resources, making full use of the ecology, labor force and knowledge of an area as well as those patterns that have developed locally to link production and consumption. Endogenous development strategies are therefore more concerned with integrating the farm and farm household into its own local area and environment ([10], p. 9).

Environmental sustainability has become a core theme in endogenous rural development—in policy terms, called integrated rural development. This concept was appropriated from the global South for the European context, where closer relationships with consumers have become an important means for producers to gain trust and to gain more of the value that they have personally invested. Bypassing supermarket chains as intermediaries, these more proximate relations construct diverse values and meanings of 'quality' or 'local', especially by connecting producers through co-operative relations and a sense of shared identity ([11], p. 399). This greater proximity has become popularly known as short food-supply chains, local food systems, or simply local food. In academic literature, this greater proximity has been theorized as re-localization, re-spatialization and re-connection [11]; likewise as alternative food networks, or AFNs [12].

Given the dominant marketing chains, which are generally linked to the productivist model of global agri-industrial production, AFNs encompass various alternatives:

For those operating at the 'production' end of the food chain, the notion of 'difference' becomes critical to the process of reconnection: creating a difference in 'quality' between specific products and mass-produced products; creating a difference between geographical anonymity in food provenance and territorial specificity; and creating a difference in the way certain foods are produced ([13], p. 118).

For such differences in quality, the 'local' becomes a central concept linking spatial and social meanings. Local food systems facilitate a 'resistance to agro-food distanciation'. They allow actors to rework 'power and knowledge' relationships, especially through physical and social proximity between producers and consumers ([14], pp. 24-25). They are also seen as 'seeds of social change', which 'seek to construct and portray alternatives to the construction and reproduction of hegemonies of food and agriculture in the conventional food system' ([12], p. 62). They 'present both critique-opposition to the existing food system and an alternative vision of socio-ecological relations embedded in food' ([12], p. 61).

The concept agro-food 'relocalization' expresses such processes building greater proximity than in conventional food chains. Producers go beyond distinctive products, towards distinctive co-operative, proximate relationships—e.g., farmers' markets, box schemes and community-supported agriculture. In many cases relocalization enhances social cohesion, community development and consumers' knowledge about food production methods, especially for reducing external inputs [15].

Through collective farmers' marketing, cooperation has taken many forms. According to an EU-wide study, these include:

- pooling volume in order to increase bargaining power further along the value chain, while also ensuring compliance with regulations;
- promoting high-quality distinctive food products, e.g., using organic or animal-friendly production methods; and/or
- promoting regional food products by linking each product with the territory—e.g., via distinctive landscape values, ecological resources, farmers' skills, product taste, *etc.*—as a means to valorize territorial resources and strengthen local economic development [16].

Such initiatives depend upon various enabling factors. These include: policies in support of market differentiation and labeling; knowledge and research centers on rural development; proximity to urban centers; location of farms in tourist areas; new opportunities in public procurement; quality orientation and involvement among consumers; and new kinds of food networks ([16], p. 264). Collective marketing has been generally grounded in territorial networks, featuring strong links with rural development initiatives.

Territorial networks have been promoted especially by the LEADER program (*Liaison entre actions de développement de L'économie rurale*). This combines three novel features: a territorial basis (rather than a sectoral one); use of local resources; and local contextualization through active public participation. Through Local Action Groups, participants have built collective capacities and established structures to sustain the local development impetus beyond the initial support [17].

Through the Leader program, local mobilization and capacity building have been supported through vertical relations of governance. Leader-type measures have been incorporated into the Rural Development Program (RDP), *i.e.*, Pillar 2 of the Common Agricultural Policy (CAP) from 2007–2013; there Leader has been meant more as a delivery mechanism for the main measures than as a measure in its own right. In this context,

... the LEADER experiment can be seen as so significant, both in its achievements, despite its modest budget, and also in terms of its very substantial unrealized potential to address and explore solutions to issues at the heart of both neo-endogenous rural development and place-shaping concepts ([18], p. 7).

In these ways, the Leader program has provided crucial stimulus for efforts to relocalize food.

2.2. Food Security as An Extra Impetus

For sustainable development strategies, a more recent impetus has come from global food insecurity, resulting partly from climate change and partly from greater global competition for land use. Since the 1970s Europe's productivist system has increased its dependence on animal feed imports, especially as soya production became industrialized in Latin America, in turn supporting European meat production. Likewise fertilizer use has been dependent on imports of increasingly scarce phosphates. Food insecurity has raised the stakes for Europe's significant imports, especially of intensive inputs, including energy in various forms. Like unsustainable agriculture in general, however, food insecurity has divergent diagnoses which have been characterized as productivist *versus* sufficiency perspectives [6].

From a productivist perspective, food insecurity arises from low or variable production levels, which must be made more efficient via technological innovation which can use and recycle renewable resources. For example, 'To guarantee future food security, output needs to be boosted significantly'. Moreover, 'biotechnology is a fundamental requirement for long-term regional (and perhaps global) food security' ([19], pp. 38-40). When managing natural resources, 'the whole supply chain must also be sustainable, to ensure food security, supply sufficient quantities of renewable raw materials and energy, reduce environmental footprints and promote a healthy and viable rural economy' ([20], p. 9). This perspective conflates more efficient inputs and productivity with food security.

From a contrary diagnosis, agro-industrial systems aggravate Europe's dependence on imported inputs and vulnerability to stress. Therefore, according to a coalition of NGOs and farmers, Europe needs efforts towards extensification and food self-sufficiency, also known as food sovereignty [21]. According to a related declaration of agricultural experts, the EU faces food insecurity from dependence on imports, especially soya as animal feed, thereby undermining environmental sustainability abroad as well as in Europe ([22], p. 9). Similar proposals have come from a broad coalition of civil society organizations:

We call for a progressive shift from industrialised agriculture towards a sustainable form of farming, which sustains productive farming everywhere, builds on the regional and local diversity of farming and economies, makes far lighter use of non-renewable resources, respects animal welfare, puts good agronomic sense and agro-ecological innovation at the heart of

farming decisions, and achieves a wide range of positive environmental, social and economic outcomes, linked to the vitality of rural areas ([23], p. 7).

Some proposals incorporate elements of both those perspectives—or even attempt to reconcile them. In particular, 'sustainable intensification' has been a flexible concept for incorporating diverse perspectives. According to a UK Royal Society report,

... we must aim for sustainable intensification—the production of more food on a sustainable basis with minimal use of additional land. Here, we define intensive agriculture as being knowledge-, technology-, natural capital- and land-intensive. The intensity of use of non-renewable inputs must in the long term decrease ([24], p. 46).

Necessary means include 'agroecological processes such as nutrient cycling, biological nitrogen fixation, allelopathy, predation and parasitism', as a means to minimize external inputs ([24], p. 17). Although the Royal Society report embraces biotechnology as an essential tool, it also proposes closer linkages between research and farmers' knowledge:

Linking biological science with local practices requires a clear understanding of farmers' own knowledge and innovations. There are past examples where science has seemingly offered 'solutions' to a problem but without success, because of a poor fit with local circumstances and a lack of local engagement with end-users at an early stage in the innovation process ([24], p. 18).

Government policy has given mixed messages on the role of imports in UK food security [25]. On the one hand, it has proposed to reduce such dependence:

Around two-thirds of energy consumption in UK agriculture is in the form of indirect inputs such as fertilizer, tractors and animal feed. Reduced fertilizer use is a key driver of the overall decline ([26], p. 95).

On the other hand, it has regarded large-scale imports as essential for the long term: 'Food security is enhanced by diversity of supply of both domestic and overseas production' ([26], p. 84).

A more recent *Foresight* report reiterates sustainable intensification, again encompassing diverse elements. Although it proposes greater investment in all technologies, the report also proposes 'a redirection of research to address a more complex set of goals than just increasing yield'. Moreover, 'Demand for the most resource-intensive types of food must be contained' [27]; the latter potentially means a shift to less-intensive methods. The UK's Coalition government has endorsed sustainable intensification, with an emphasis on 'the developing world' [28], so this has unclear relevance to European agriculture.

Amidst those diverse problem-diagnoses and solutions for food security, neo-endogenous rural development can find extra grounds for its shift towards agroecological methods and renewable resources. The next section examines efforts towards food relocalization in the UK—its advances, limitations and tensions, especially from contradictory policies. This provides a wider context for the Cumbria case study that will follow.

3. UK Food Relocalization: Prospects and Limitations

In UK agro-food practices, relocalization has made significant advances but has encountered many obstacles. Environmentally more sustainable production methods have been made more economically viable, partly through direct sales which gain higher prices, especially for 'quality' products. But significant expansion needs producer-led, larger-scale intermediaries to maintain proximity with consumers in wider markets. The New Labour government espoused many societal benefits of food relocalization, as well as a territorial approach to rural development, e.g., as a means to sustainable agriculture. But these pathways have remained marginal in funding priorities and related policies in England (which has its own Rural Development Program). Such tensions will be explored first in relevant literature and afterwards through the Cumbria case study.

3.1. Need for Producer-Led Intermediaries

Several pressures and opportunities have generated alternatives to the dominant agro-industrial food system. In addition to the cost-price squeeze, stimulus has come from food scares, especially the 1996 mad cow scandal, the late 1990s controversy over GM food and the 2001 food-and-mouth epidemic. That crisis led the government to offer grants for food producers to start anew, e.g., via organic conversion [29]. As the Common Agricultural Policy (CAP) decoupled single-farm payments from production levels, instead coupling payments with on the area cultivated, this basis too provided an incentive for higher-quality production. For example, farmers' knowledge was enhanced through agro-ecological methods replacing purchased external inputs, alongside direct sales to help finance less-productive methods.

Such shifts have stimulated efforts to relocalize food chains. Through higher-value territorially branded products, *i.e.*, locality foods, producers have gained more of the value that they have personally invested, and a special territorial identity has been spatially extended to more consumers [30]. Early pioneers were Southwest England and Wales [31-34]. But specialty products remain vulnerable to incorporation within conventional food chains ([9], p. 30); supermarkets have perpetuated producers' dependence and kept them distant from consumers.

Beyond greater financial gain for producers, local food networks have had broader aims—developing a sense of community integration, keeping alive traditional knowledge, and re-establishing trust between producers and consumers. Beyond locality foods at premium prices, some producers build closer links with consumers for simply local food, 'lying within the interstices of the mainstream' ([33], p. 564). Local food networks have been promoted as a pathway to a more sustainable agriculture. In addition to shorter transport distances, these networks also help to finance less harmful production methods, e.g., organic and integrated systems. They can enhance 'economic behavior mediated by a complex web of social relations', linking consumers with products of environmentally beneficial production methods ([34], p. 334).

A special case has been organic food. Supermarkets chains have been procuring and selling over 70% of organic products [35]. Many organic producers have faced a dilemma: the organic vision (as well as their income) was being lost through conventional chains, but they had difficulty in selling

much produce by other means. Moreover, supermarket chains were throwing them into competition with cheaper imports.

As an initial solution, some organic growers created more direct relations with consumers, e.g., via box schemes. Along these lines, organic food gained a special role in linking local products with sustainable development through consumer preferences and loyalty [36]. As a novel form of direct sales, UK farmers' markets have also expanded significantly since they began around 1997. A decade later, farmers' markets were being held at 550 locations, creating 9,500 market days and 230,000 opportunities for stallholders per year. By 2006 total annual turnover was estimated at £220 m (€250 m). These opportunities have been jointly created by local authorities, community groups, stallholders, producer cooperatives and companies managing the markets [37].

However, organic farmers still encountered limits of direct sales and so identified a need for new intermediaries. These would be 'something in between traditional markets and the multiples', i.e., the supermarket chains, as a necessary means to reach more consumers ([38], p. 452). This gap has become a general difficulty for alternative food networks: 'AFNs potentially face difficulties when trying to distance themselves from the conventional food chain, given the current shortfall of intermediaries able cope with alternative forms of production, i.e., abattoirs. transporters, to wholesalers' ([39], p. 253). For this reason, larger intermediaries have been sought for reconnecting producers with more consumers and socially embedding food products.

3.2. UK Policy: Contradictory Aspects

Given the efforts to link environmental with economic sustainability via food relocalization in the UK, these modest initiatives encounter various limitations in direct sales. They also face contradictory policies, which espouse benefits of local food but relegate all responsibility to market actors.

Food relocalization has gained prominence in policy circles. A government advisory body, the Curry Commission, recommended economic regeneration by reconnecting people with food production: 'Reconnect our farming and food industry; to reconnect farming with its market and the rest of the food chain; to reconnect the food chain with the countryside; and to reconnect consumers with what they eat and how it is produced'. It distinguished between local food, defined simply by geographical proximity, and 'locality food', e.g., specialty or territorial brands which can gain advantage also in longer-distance supply chains ([40], p. 6). However, as a main conduit for relocalization, the Curry report emphasized supermarkets and food processors. Some have stocked lines of territorially branded food or simply 'local food'; this arrangement perpetuates farmers' dependence, long food chains and the cost-price squeeze.

The New Labour government took up the Curry Commission proposals on food relocalization in relation to sustainable agriculture and reconnection with consumers. It espoused many benefits of local food, but without significantly changing its policies to facilitate such development. These contradictory messages span several policy areas—special support measures, a territorial approach to rural development, and public procurement—which will be surveyed in turn.

In the context of the CAP reform, which has gradually delinked subsidy from production levels, the Department for Environment Food and Rural Affairs (DEFRA) has celebrated new market opportunities for linking environmental and economic sustainability:

For the farming and food sector this [CAP reform] presents real opportunities both to meet the demand for high quality, seasonal or locally sourced produce delivered through strong local food chains and, importantly, to help deliver our future energy needs....

There are consumer trends that could work to the advantage of sustainable food and farming, including the premium paid for fresh food in out-of-home purchases, celebrity chefs and the re-emergence of a food culture within the UK, the rapid rise in interest in seasonal food, in animal welfare and the continued growth of demand for organic products ([41], pp. 2, 28).

However, the Department has given little material support for developing such alternatives. At least on paper, a priority was to support 'the quality regional food sector' in three key areas—trade development, consumer awareness and business competitiveness ([41], p. 18). Three years after announcing this strategy, however, it offered little more than advice to food producers and consumers [42]. By default, the policy has depended on consumers taking responsibility for food choices that enhance sustainability within current food markets.

That scant support from UK programs relates to the EU policy framework, which has tensions between productivist *versus* alternative agendas. In the former, agriculture poses an opportunity and imperative to enhance economic competitiveness via greater efficiency. The EU's Rural Development Program promotes 'the sustainable development of rural areas', closely linked with efficiency and modernization [43]. In EU policy on multifunctional agriculture, there is also scope for less-intensive methods and higher-quality products in economically less favored regions, e.g., ones which cannot compete on productivity. The latter remain a marginal niche in the dominant policy, rather than a wider strategy for relinking environmental and economic sustainability.

In implementing the CAP reforms, the Rural Development Program England has moved towards regionalization, which opens up prospects for a territorial perspective that reintegrates farming into rural development. This can increase farmers' income by several means, e.g., regional branding of quality products, adding value to on-farm products, *etc.* [44]. State funding can combine several sources, e.g., Structural Funds and Leader+, whose bottom-up Local Action Groups propose development agendas.

However, according to an academic critique, UK policy remains oriented to agricultural productivism along with non-agricultural activities: the New Labour government has not seriously considered how to reconstitute an agricultural component of rural development. This failure has several sources. DEFRA has been reluctant to decentralize many powers to the regions, instead setting rules for greater market competition among producers ([32], p. 429). More fundamental has been the New Labour government's commitment to neoliberal policies, seeing market liberalization as a general remedy, while also avoiding responsibility:

The real ideological politics of agri-food in the UK is to let 'the markets' (increasingly dominated by the corporate retailers, of course) become more 'liberalized' and to avoid any deviations from the principles of European competition policy that might strengthen local and regional protectionism ([32], p. 429).

Consequently, rural development grants have largely favored industrial-scale food activities seeking global competitiveness through greater efficiency. Under the RDP England 2000–2006, for example,

the Processing and Marketing Grant (PMG) scheme had a minimum £50,000 per grant, which could only cover 40% of the total project costs, so the applicant must provide at least £75,000. Given these requirements, grants have been available only for medium-size or large businesses seeking to expand. Consequently, substantial RDP funds have gone to businesses which may obtain their ingredients from the cheapest source, regardless of distance, thus favoring long food chains.

A commitment to market liberalization has likewise constrained public procurement of local food, despite its promotion by the Curry Commission. EU rules require state authorities to accept 'the economically most advantageous tender' ([45], Article 26). Such a judgment can include quality and environmental criteria [46], e.g., 'fresh' food and greenhouse gas emissions, but cannot specify 'local'.

Throughout Europe, however, many local authorities have been reluctant to justify locally sourced food, especially if it is more expensive; in practice their contracts favor larger suppliers and long food chains. Despite DEFRA statements supporting local food, UK local authorities face an extra constraint: government policy favors 'aggregated purchasing' from large suppliers in order to reduce costs [47].

For many years public procurement managers in the UK have convinced themselves that they cannot procure food from local producers because this is prohibited by EU regulations, which uphold the free-trade principles of transparency and non-discrimination. In reality, these regulatory barriers are more apparent than real... ([48], p. 23).

Wherever those apparent barriers are taken as real ones, contracts go to multinational companies, e.g., 3663 First for Foodservice or Sodexho in the UK. They can offer lower prices and have expert teams to write tenders for contracts.

Having identified tensions around market expansion and state policies for food relocalization, the next section introduces the Cumbria case study; then subsequent sections explore the tensions already surveyed.

4. Cumbria Case Study: Context and Methods

4.1. Agricultural Features

With a half-million people, the County of Cumbria is rural, mountainous and partly protected from development by the Lake District National Park. More income is derived from the tourism industry than from agriculture. The wider North West region has a wetter climate than some other parts of the UK, but sunshine hours are also lower, so conditions are adverse for horticulture or arable production. Agriculture is mainly based on livestock, especially upland hill farming. These geographical characteristics limit agricultural diversity and food self-sufficiency. So does agro-industrial concentration, which has increased since the 1990s. At issue is whether that process can be slowed down, or even reversed, through alternatives which relocalize food production and consumption patterns.

Cumbria may seem an unfavorable context for relocalizing food. Like most of northern Europe, Cumbria has few territorial characteristics favorable to specialty food products. As a centre of industrial food and drink production, moreover, Cumbria imports many raw materials for 'local' producers which are effectively global food factories. These price-competitive, long-supply chains potentially marginalize local small-scale local producers. So efforts towards relocalization there can indicate prospects and difficulties relevant to other unfavorable contexts.

Starting from the questions posed in the Introduction, the above literature survey informs a hypothesis for Cumbria: that environmental sustainability-via-relocalization there depends on new forms of cooperation among producers and with consumers, together developing a territorial identity—based on social commitments to sustainability, more than on specialty foods. The case study explores how agro-food relocalization initiatives link environmental with economic sustainability.

4.2. Case-Study Methods

For this case study, initial data sources were internet-based documents of Cumbria policies and practices: regional development agencies (Cumbria Rural Enterprise Agency, Northwest England Development Authority, their funding programs (Distinctly Cumbrian, Cumbria Fells and Dales, Leader+, etc.) farmers' organizations (Cumbria Farmers' Network, Cumbria Organics), farmer-led cooperative marketing initiatives (e.g., Hadrian Organics, Plumgarths) and small-scale businesses (box schemes and farm shops, e.g., Howbarrow Farm). Those documents provided a basis for 12 semi-structured interviews with practitioners; interviewees mainly represented the above bodies, though a few ran small-scale businesses. We selected initiatives which develop short-supply chains and favor cultivation methods with low external inputs. Most interviews were conducted in the working environments of the practitioners (e.g., farms, farm shops or offices), thus giving us a greater familiarity with their everyday practices. Snowballing contacts was an extra method for identifying relevant practitioners and their networks; interviewees mentioned links or analogies with other food initiatives, e.g., via self-description and anecdotes. Given their work commitments, only some practitioners were willing to give us their time for interviews, thus limiting our choices. Interviews were carried out during 2008–2009, with some follow-up in 2010–2011.

Interview questions were adapted from a larger research project about alternative agro-food networks (see Acknowledgements section; also note 15). Drawing on concepts in the literature on AAFNs, we investigated how practitioners discursively position themselves and their activities in relation to conventional food chains. Interview questions asked how Cumbria initiatives differ from conventional food chains—as regards their aims, knowledge, production methods, networks, producer-consumer relations, *etc*. All interviewees described such differences, with various levels of enthusiasm and emphases.

Whenever an interview question asked about 'alternative' aspects, however, interviewees generally dissociated themselves from the term. Some even gave the term 'alternative' pejorative meanings—e.g., outsiders, marginal, weird, oppositional—as noted in previous studies ([39], p. 253). Some interviewees expressed an aim to be seen as mainstream or to become mainstream—*i.e.*, to be normal, larger and successful—though without being incorporated by conventional food chains.

All interviews were recorded, transcribed and then analyzed along two lines: (i) practitioners' understandings of differences between Cumbria food networks and conventional food chains; and (ii) practitioners' meanings of terms such as local food and Cumbria food; the latter was done initially by searching for those terms. Although 'local' could simply denote a short geographical distance, many interviewees gave the term broader social, cultural or political meanings. In this way, we could better identify interviewees' various aspirations and strategies.

Our draft analyses were circulated for comment from interviewees and other practitioners. Preliminary results were pre-circulated for a stakeholder workshop on 'Cumbria food networks' held in April 2009. This attracted eight local participants; one had been previously interviewed and two were later interviewed, especially about how regional agencies support farmers' cooperation. Workshop discussions provided data for further analysis and insights for further research. In March 2010 a summary was circulated for comment to fifteen key individuals, including all interviewees and workshop participants; some provided comments clarifying points.

Through the above methods, this paper analyzes the language used by interviewees and other practitioners, as an extra insight into their practices. An analytical focus is their meanings of local food and/or Cumbria food, especially how they link environmental and economic sustainability. Empirical results are juxtaposed with academic research and relevant policy documents—at national, regional and local level.

5. Cumbria's Food Relocalization: Mutual Support and Favorable Policies

Regional policy changes have facilitated more environmentally sustainable production methods and producer cooperation towards a Cumbrian food culture. Together these practices build agro-food relocalization, as described in this section. Such practices have been expanded beyond direct sales, towards larger intermediaries, as described in the next section.

5.1. Impetus for Food Relocalization

Aggravating the cost-price squeeze, economic disruptions have stimulated changes in agro-food systems, especially in Cumbria. After the 2001 foot-and-mouth crisis, many Cumbrian farmers were compensated for loss of livestock. Some food producers used this opportunity to diversify agro-food business models, e.g., towards organic or other higher-quality products. The New Labour government provided substantial funds for economic regeneration, especially for organic conversion, thereby avoiding agrochemical inputs in such farms. Around the same time, the CAP single farm payments were being decoupled from production levels. With a weaker incentive for high productivity, farmers faced a challenge and opportunity: to reduce external inputs, while also remaining financial viable.

As an extra way forward, direct sales were initiated by Cumbrian farmers attempting to gain premium prices and closer relations to consumers. They established farm shops, farmers' markets or vegetable box schemes, with visitors who often made return visits because they enjoyed the food as fresh, different, local, *etc.*, according to a survey of consumer attitudes in Northwest England [49]. On-farm shops and farmers' markets complemented each other; both outlets attracted similar consumers who recognize quality food from familiar, trusted suppliers [50].

For many producers, 'local' food means building a Cumbrian food culture around both local and locality or specialty products. The latter build and benefit from a territorial identity in local markets, as promoted by the regional authority as well as by cooperative marketing. Some 'Cumbrian' food has been highlighted as distinctive along several lines, e.g., organic and biodynamic cultivation methods, or rare-breed animals with a special taste. With the rise of these specialty labels, the region remains the target market, and there seems little danger of imitators. Cumbria has requested a Protected Geographical Indication (PGI) for only two products—Cumberland Sausage and Herdwick Lamb [51].

Food relocalization has given various meanings to 'local' or 'Cumbria' food, according to our analysis of documents and interviews. For many food producers, those terms mean: local resources rather than external inputs, revitalization of local knowledge, regional branding, mutual support and interdependencies, producer cooperation, greater social proximity to consumers, their support for local agriculture and an economy supporting local businesses. These meanings have been elaborated in producers' support networks, especially Cumbria Organics and Cumbria Farmers Network.

Cumbria Organics includes farmers, growers, processors, retailers and consumers. With over 70 members, it carries out education, promotion and organic production. It was set up in 1999 'to provide self-help support to the increasing number of local farmers converting to organic production' [52]. It helps to develop supply chains and provides technical information for producers interested in farming to organic standards. It builds a wider food culture through public outreach, e.g., via stands at local festivals, a model farm, books, leaflets, games, quizzes and farm walks. Cumbria Organics also help members to obtain contracts for public procurement, e.g., by explaining ways to fulfill requirements of tenders.

Despite their common commitment to organic methods, Cumbria Organics' members have disagreed about whether to supply supermarkets, which often supplement more direct sales. Early on, membership meetings became difficult:

Instead of really addressing the marketing issues, we end up getting involved in arguments between these two camps.... So we have [separate] meetings for the direct selling businesses, who were selling direct to the consumer and want to develop those alternative networks, and then for the people who sell to the wholesale markets, to help them find contacts and find out about prices [53].

This internal division indicates a missing option: large intermediaries which can maintain producers' control over pricing and labeling across longer supply chains.

Encompassing all agricultural methods, the Cumbria Farmers Network was established in 2005 to promote producer cooperation. With changes in the CAP, moving payments away from a production basis, farmers could 'still produce food in an environmentally sustainable way—not necessarily a financially sustainable way, of course' [54]. Dependent on CAP single farm payments, farmers had become socially isolated. So the Leader program facilitated farmers' cooperation, especially in production and marketing skills; such skills have helped to regain control over food chains: 'Our members have become more aware of the benefits of working cooperatively and really have taken control of their own futures, rather than allow the government or market forces to dictate' [54].

Moreover, Cumbria Farmers Network has helped to build a regional 'food culture' by raising consumers' awareness of food quality, sources and production methods.

We are trying to make people more aware of how food is produced and when it is produced and what the product is. We have farm open days, when the consumer can come along and look at how the food that they are going to buy and eat is being produced and how it links to the environment [54].

'Promoting local farms to local people' has become a key expression, giving social meanings to the word 'local' [54]. In these ways, conventional farmers too have benefited from and extended the efforts by organic farmers towards relocalization. Shorter food supply chains reduce transport costs and energy inputs, relative to conventional chains, as well as helping to finance more sustainable practices that may be less productive. How do these initiatives gain state support—and gain greater independence from conventional food chains?

5.2. Policy Support for Local Sustainable Food and Producer Cooperation

Those efforts towards food relocalization have depended upon state support of various kinds, especially at an early stage. Such support includes: promotion of a Cumbrian food culture, producer networks for mutual support, collective marketing, infrastructure for farmers' markets, processing equipment for individual producers, *etc*. Together these measures help to enhance the economic viability of environmentally more sustainable production methods and so facilitate their continuation and/or adoption by more farmers.

As the major distributor of relevant funds, e.g., from Structural Funds and the Rural Development Program (RDP), the Northwest Development Authority applies a broader understanding of 'local' food than in food relocalization: 'By provenance, we mean the product must demonstrate a link in some way to the place of its production, the production method or the people who produce it' ([55], pp. 13-14). Thus 'local' can mean simply a local site of production, even if the ingredients have a distant source, as in the global food factories prominent in Cumbria. At the same time, the agency has promoted territorial branding, e.g., through regional competitions for 'fine foods' and a consumers' guide [56].

Along the latter lines, the Northwest England RDP helps farmers to 'reconnect with their consumers', especially through high-quality regional foods and shorter food chains. This strategy links environmental, economic and social sustainability:

The goal will be to demonstrate a true community-led approach to rural regeneration across all Axes.... The Forestry Commission and Natural England will engage with the new Leader Groups as the approach offers sustainable, holistic and integrated public benefit delivery.... Key here are the bottom-up approach and the autonomy that the partnerships need to be given ([57], p. 16).

Opportunities also exist to develop locality food brands, offering farmers the chance to add value to commodity production. Potential may also exist to link economic and environmental assets through food branding; especially in areas of high landscape character ([57], p. 8).

Along those lines, Cumbria's RDP has offered small grants for equipment to small businesses, e.g., to expand from domestic kitchens to larger-scale production, or for on-farm processing. For example, the scheme funded The Pie Mill to acquire equipment for pastry rolling and chilling, especially as a means to produce the small-size pies required by schools and old people's homes. Along environmental sustainability lines, RDP grants also have helped farmers to develop renewable energy—e.g., via small wind turbines, solar power, water capture, anaerobic digestion, biogas boilers, etc.—thus minimizing environmental burdens from energy usage. These grants have been crucial because producers need to wait several years before recouping the investment through lower energy costs. For farmers seeking or receiving grants, however, there have been heavy administrative requirements—e.g., detailed reporting requirements and lengthy inspection visits—especially in

relation to the small amount of money made available. These burdens deter other small-size businesses from applying for small grants.

5.3. Support for Producer Cooperation

Since its inception, the Leader program has sought to develop a bottom-up approach by involving local stakeholders in Local Action Groups. As in New Labour policy for the RDP, the Cumbria Fells and Dales Leader strategy has promoted economic diversification, including non-agricultural activities. At the same time, it promotes agricultural production methods which minimize environmental burdens and offer quality characteristics recognized by consumers:

There will also be the wider agenda: local branding/marketing (including adding value and local processing); collaborative working (e.g., cost sharing and "share to rear"), improving animal welfare actions, agri-food tourism; role of farmers in public goods delivery and whether rewards can be obtained for High Nature Value Farming systems; consideration will also be given to increasing the take-up of organic farming; and there will be a further exploration of the creation of a hill farming brand ([58], p. 69).

In particular, organic agriculture is promoted as a means to enhance food security and minimize environmental burdens:

Food security is beginning to be a concern again, and issues to do with the environmental costs of production (especially the price of oil and the related costs of animal feed) may well drive further growth in the local produce economy. There is strong national consumer demand for organic production but a static or slightly increasing domestic supply ([58], p. 25).

The strategy includes a 'scheme to support co-operative ventures to reduce product miles and increase availability and productivity of local produce' ([58], p. 50). Given the importance of tourism, hotels and restaurants have great potential for promoting local food products. According to a Leader manager:

Overall the Leader program works with the agricultural production sector, focusing on food security and shorter supply chains. The local food economy is supported via production and processing grants. The promotion of local produce into the tourism sector is supported by some revenue investments. Leader also provides some funds for community-supported agriculture (CSA), producers' markets and similar initiatives [59].

However, the Cumbria Leader program has minimal resources for such aims; it receives a small proportion of the overall RDP budget. Moreover, the European Commission found that the Government Office North West (GONW) had applied inadequate controls under the previous RDP and so was asked to return some (according to our interviewees). In response, the NWDA has been closely managing the Local Action Groups within the standard criteria of the RDP England, e.g., economic competitiveness via efficiency measures. This constrains pathways towards relocalization, while reinforcing DEFRA's reluctance to decentralize control over Leader ([32], p. 429). There had anyway been tensions between the RDP's formal criteria and Leader's bottom-up approach, so these may become more difficult in the future.

Beyond grants to producers, regional agencies offer assistance for small businesses to accommodate various legal and quality requirements. Cumbria Rural Enterprise Agency (CREA) has held training seminars for small-scale food and drink producers. It also provides kitchen facilities to help them accommodate strict hygiene regulations, which would otherwise pose a major obstacle.

Support bodies help to develop a territorial identity for quality food. As a strategy for territorial branding, Distinctly Cumbrian has provided business support, aiming 'to strengthen the rural economy of the county by providing advice and grants to rural businesses in the quality food, drink and craft sectors which make added value products able to be marketed and identified as distinctive to Cumbria'. 'Made in Cumbria' has been another economic development initiative of Cumbria County Council, with funding from the NWDA and the European Commission's Objective 2 structural funds. Made in Cumbria has provided support to four of the county's 15 monthly farmers' markets. It also organizes 'Meet the Buyer' events, helping small producers to meet larger buyers—e.g., the National Trust, the Youth Hostels Association, Centre Parcs Oasis, numerous hoteliers and supermarket chains. These events help small-scale producers to gain self-confidence in dealing with buyers.

Regional agencies have also stimulated producer networks for cooperative activities, thus overcoming several obstacles—farmers' social isolation, mutual distrust and historical dependence on CAP funds. Successive Leader programs have facilitated producer cooperation as a crucial means to sustainable development, e.g., via Cumbria Organics, Made in Cumbria and infrastructure for farmers' markets. The Leader program has played an animator role by developing cooperative relations among producers, leadership skills, business skills, advice on equipment, *etc.* according to Leader managers [59]. These efforts have led to farmers' collective marketing in various forms (see next section).

As the host of the Leader program, the NWDA established Local Action Groups to formulate many measures, while also linking food with a local identity:

There are several strands where a degree of learning has been identified as a prerequisite. By raising awareness of consumers of the products of the countryside, a greater loyalty is engendered and purchasing habits do change. 'Sense of place' and 'know your place' training packages have helped other areas to create local pride, develop community spirit and also contribute significantly to the local tourism offer ([58], p. 35).

For such developments, many producers acknowledge dependence upon training programs and producer cooperation, at least at an early stage of business development. This basis provides a more grassroots approach to rural development, by targeting community links and local needs, according to Leader managers [60].

As another support measure, public procurement has also favored local food producers through policies of Cumbria County Council (CCC). The Strategic and Commercial Procurement Team 'is committed to responsible procurement, including the use of social, economic and environmental evaluation'. Its commitment to sustainability means 'protecting the environment and taking responsibility for minimizing the wider environmental effects of its purchasing decisions' [61].

Along those lines, the Council's procurement policy has emphasized quality and sustainability criteria. These include carbon footprints, animal welfare, distance travelled to an abattoir, *etc.* [62]. According to the Principal Buying Manager, 'Winning a tender is not just about price but also product

quality, sustainable behavior and a clear indication that a business has processes in place to deliver what they say they will' [63]. Cumbria Rural Enterprise Agency (CREA) has helped local small food businesses to do so [59]. Also the Council has issued tenders for relatively small contracts, which are split up along several lines: product type, locality, production and distribution roles [64]. This structure helps local small-scale producers and distributors to gain contracts, while deterring multinational companies such as Sodexho.

The Council was named winner in the Sustainable Procurement category for the public sector at the Northwest Business Environment Awards in June 2009. The award emphasized how the Council 'thinks about the wider implications of the products and services it buys—particularly the food and drink products it buys for school meals and caring for older people'. Green purchasing need not cost more: the Council has made savings of £3.5 million and 150,000 food miles through 'smarter procurement' [65].

In sum, regional policy and grants have facilitated direct sales promoting quality food of various kinds. Cooperation among producers has built territorial branding—of simply local food as well as special locality foods—together comprising a Cumbrian food culture. These shorter chains also facilitate links between environmental and economic sustainability. The next section analyzes efforts to expand such practices beyond direct sales through larger intermediaries.

6. Proximate Intermediaries for Relocalization

Despite support from Cumbria's regional authorities, smaller-scale producers face several obstacles. These include: statutory paperwork, a standard fee for organic certification regardless of size, and few local abattoirs, thus requiring longer-distance transport, according to interviewees. Individual farmers have limited capacity for direct sales; such activity diverts their attention from farming and requires social skills of communicating product quality to consumers. For medium-size producers to localize sales, the larger-scale market remains a major challenge. For all these reasons, market expansion poses a dilemma, especially for larger-scale organic producers, who have become divided over supplying supermarkets.

As a way forward, producers have developed cooperative or collective marketing along with specialty brands. These activities complement wider efforts to build a Cumbrian food culture, so that consumers learn more about environmentally sustainable production methods and aesthetic qualities of local food, as a basis to favor such products. This section describes producer-led intermediaries which expand markets beyond the capacity of individual producers for direct sales, while also building or maintaining closer relations with consumers.

6.1. Producer-Led Intermediaries

Hadrian Organics is a farmers' co-operative which does direct sales through collective marketing, whereby farmers take turns selling members' products. With initial support from Leader funds, Hadrian Organics facilitated the initial cooperative links. A network of farmers' markets solved a major problem—how to increase sales while maintaining a close connection with consumers, rather than sell to supermarkets: 'We provide local food for local people', meaning that producers build consumer support for local, cooperatively sold organic food [66].

Producers' co-operation is vital for empowerment of the co-operative. Members emphasized the direct benefits—mutual support on the production side (e.g., in haymaking), personal relationships that help farmers to overcome isolation and territorial branding. The latter has been emphasized by a practitioner: 'Hadrian Organics has a very good name. Our brand is strong and sales are going up' [66]. These rising sales indicate links between social, economic and environmental sustainability.

Howbarrow Organic Farm is a vegetable box-scheme selling produce of theirs and other organic farmers, totaling 1,600 product lines. According to its representative:

Now we are dealing with the whole shopping experience, we start to compete with the supermarkets. People can choose to use us rather than a supermarket group [chain] which go into areas and close down local retailers [67].

Its box scheme faced such a threat from plans to open a Booths supermarket in nearby Grange. Regardless of that particular outlet, supermarkets often win the competition for supplies of high-quality products:

We have very little buying power, even though we deal with a wholesaler who purchases more than us. The supermarkets are such large buyers. Veg is more positive because we are dealing directly with the farmers. There are more and more farmers who want to sell direct [67].

This box scheme illustrates how relocalization efforts encounter more powerful intermediaries and difficulties in shortening supply chains for quality food; supermarkets compete on a similar basis, selling organic and even 'local' branded food.

Another small intermediary, Low Sizergh Barn Farm Shop and Tea Room, illustrates the earlier historical shift. After many years of conventional farming, the tenants converted to organic production in 2001–2002. A decline in farm-gate prices led them 'down the organic route' as a way to add more value and to gain more of that value by shortening the food chain; this change was also encouraged by the consumers' willingness to pay more, as crucial for environmental sustainability. As they said: 'Price is important but people expect they are buying into other benefits such as environmental standards' [68]. Visitors to the Farm Shop become familiar with the food production process, via a dairy below the café an educational program and nature walks around the farm.

An additional benefit of the Low Sizergh Barn shop stems from its co-operative relations with other local businesses in the county. Although it does not source all its food locally, Cumbria Organics members supply many products, such as fresh organic vegetables from the Growing Well project and flour from the Water Mill, which in turn uses grain from biodynamic cultivation methods. These initiatives see themselves as part of a support network favoring local, seasonal and organic sources [69]. By 2011 feed prices and market forces had led Low Sizergh farm to leave registered organic production, though high standards remain a core priority.

As an unusual example, the Growing Well project develops more environmentally sustainable methods and educates people about them, while also providing social inclusion for people recovering from mental illness. This combination provides a basis for social justice, resource conservation through agriculture and popular education about these issues.

We aspire to be more sustainable, so to use less water and less power...we try to use environmentally friendly products where possible, those sorts of things....

Our social aim is to help people who are recovering from mental illness, build their confidence and their skills, so we do that by involving them in the running of an organic growing business... We also train people in horticulture, so we use the organic business as a way of teaching people about vegetables and we provide school visits to children... [70].

Following their sustainability principles, local shops sell its products as a way to reduce food miles, support the local economy and build stronger, socially just and healthy local communities.

6.2. Mainstreaming Relocalization

For medium-size producers to localize sales, the larger-scale market remains a major challenge for mainstreaming relocalization. Although collective marketing creates larger markets, these are limited mainly to individual consumers making special efforts to reach a sales point and paying premium prices. Medium-scale producers remain dependent on conventional wholesalers and supermarket chains, which increasingly sell 'organic' or even 'local' food but often obscure the supplier's identity.

To reach larger markets, the Curry Commission report encouraged food producers to negotiate better contracts with supermarket chains:

Well-facilitated collaboration can give small farmers access to professional marketing and technical advice. It can also put them in a better negotiating position when dealing with large customers or suppliers. Smaller-scale regional supermarket chains collaborate in exactly this way when negotiating with their suppliers ([40], p. 34).

Along those lines, some Cumbrian producers have cooperated to create large intermediaries which extend social proximity to consumers through larger buyers. Bypassing conventional wholesalers, these intermediaries more directly supply buyers, including supermarkets. Such intermediaries depend on producers sharing skills of production, marketing, distribution, in order to take advantage of funding and sales opportunities.

New larger intermediaries have provided means to mainstream small-scale producers into local food markets. Starting from a food stall, some expand to supply farm shops, retail groups and supermarkets. Expansion becomes dependent upon a local hub, *i.e.*, a site for collecting goods from various producers and distributing them to buyers, by analogy to hubs of each supermarket chain.

As the most prominent example in Cumbria, Plumgarths Farm Shop established a local hub for distributing products from numerous suppliers to large-scale buyers. By 2006 it was supplying 12 Asda supermarket stores with 80 products from 15 local suppliers. This initiative expanded into Plumgarths Food Park, with food processing units and a food-service supply business. Its website promotes meat from rare breeds with special aesthetic qualities, along with grassland grazing, thus contributing to product quality as well as environmental benefits by avoiding animal feed.

This larger market has offered new opportunities for local producers. Previously, many small-scale producers were selling to local suppliers or farmers' markets, while also doing another full-time job. Plumgarths helped them to expand sales and produce food as their main job, some even employing staff. By selling through Plumgarths, producers also gain commercial experience and confidence to speak directly with other buyers [71].

Such intermediaries have supplied more large-scale retailers, thus reducing transport distances relative to multinational suppliers: 'Although retailers traditionally rely on centralized distribution through large depots, most appear to be willing to work with local food hubs or other specialized intermediaries to facilitate sourcing of local food', according to a report, *Supplying Local Food to Mainstream Customers* ([72], p. 20). Hubs can distribute single pallets to local pubs and hotels, thus removing need for large-scale distributors. Such hubs initially supplied local high-quality products to Cumbria hotels. Later they made a similar request to Pioneer, a medium-size distributor which combines many local producers to supply large buyers, including public authorities [64].

Several other hubs have been created or supported by small-scale producers whose local brands are recognized by consumers. For example:

- Herdwick Lamb is supplied directly to Booths' supermarkets from a coordinated group of 10–20 farmers using a local slaughter facility.
- Lakes Free Range Eggs Company brings together many small producers on a traceable basis, so that customers can 'Trace your egg'. It supplies large outlets such as McDonalds, which has attempted to localize its supply chains towards traceable suppliers.

The Plumgarths founders advocate more local hubs—partly to enhance economic sustainability, and partly to address climate change:

More widely, local food is considered to provide benefits to all of the aspects of sustainability. If food travels shorter distances, and particularly if it is distributed to major customers through local food hubs or other intermediaries as recommended in this report, it can help to reduce the carbon emissions which are the principal driver of climate change... Local food production, distribution and sale help to promote sustainability ([72], p. 4).

They also see links between food security and localization, meaning local diversity and practices that reduce dependence on imports: 'We conclude that food security means not putting all your eggs in one basket. Local food contributes to the diversity of the food chain, and its further development will strengthen security' ([72], p. 18).

In several ways, then, producer-led intermediaries mainstream relocalization, while also linking environmental and economic sustainability. They provide ways for higher-quality products and/or environmentally sustainable production methods to gain better remuneration, thus making them economically more sustainable. By shortening the food chain to large buyers, new intermediaries offer producers extra local markets, more control over branding, fewer middlemen and/or less dependence on supermarkets. The shorter chain maintains producers' territorial and specific identity, along with greater proximity to consumers than conventional intermediaries. Marketing emphasizes organic methods or grassland-fed animals, partly as a basis for consumers to pay premium prices. Other environmental benefits (e.g., from on-farm energy production, nutrient recycling) remain less visible; they may apply to only some producers.

All these practices strengthen farmers' incentives to use local renewable resources, rather than commercial inputs such as animal feed or chemical fertilizers, in the face of great commercial pressures from the conventional agro-food system. But farmers' collective marketing remains vulnerable to many uncertainties and difficulties. As three examples: New or larger markets depend on

extra investment, whose financial return depends on successful strategies to gain from added value. Farmer-led intermediaries must make special efforts to obtain and maintain contracts with larger buyers, who could easily find cheaper suppliers. As meat prices rise, some farmers may sell more produce on the open market and withdraw from a farmer-led intermediary, thus potentially undermining its role. Amidst such difficulties, the Leader program staff provide somewhat intangible but crucial support—by targeting grants at farmer-led intermediaries, advising them, and strengthening individual farmers' commitments to them [73].

6.3. Future of Support Measures

After the 2010 UK general election, the New Labour government was replaced by a coalition of Conservative and Liberal Democrat parties. Since then, most public expenditure programs have faced great reductions and uncertainties. Even if the government maintains previous budget levels for the RDP and Leader, it may reduce others (e.g., Structural Funds), thus weakening measures that had combined those sources.

Regional Development Agencies will be replaced by Local Enterprise Partnerships (LEPs) by 2012. As their main mandate, LEPs should provide 'strategic leadership in their areas to set out local economic priorities', including 'partnerships with the private sector'. LEPs will be more numerous and smaller in geographical range than the RDPs, e.g., Cumbria alone, rather than the entire Northwest England. In autumn 2010 the government approved Cumbria's proposal for an LEP. Its agenda for agriculture incorporated many features of the previous RDP, especially support for upland farmers to provide public goods and to gain from the value that they have added. In particular:

- Ensuring our upland farmers are able to contribute to delivery of public benefits such as carbon storage, flood alleviation, biodiversity and access.
- Ensuring farmers secure the added value from the sale of produce ([74], p. 12).

Upland farming was also the focus of a Parliamentary report on rural development. Among its recommendations were the following:

The Government must enable hill farmers to make a financial return from the provision of public goods such as carbon storage and water management. Hill farmers will require access to improved knowledge transfer and extension services to make the most of those opportunities, as well as improving agricultural productivity and sustainability ([75], p. 3).

From those indications, the government will continue support for integrated rural development, to be implemented by a new Cumbrian agency. This role will likewise continue previous tensions over aims, e.g., between higher productivity for competitiveness *versus* farmers' knowledge for higher quality, as well as between the RDP's formal criteria *versus* Leader's less tangible facilitation role.

7. Conclusions

In Cumbria's processes of agro-food relocalization, shorter supply chains help to finance environmentally more sustainable practices. These include grass-feeding or locally-sourced feed for livestock; organic or biodynamic cultivation methods, and on-farm production of renewable energy.

Many Cumbrian farmers have adopted such methods, often for 'quality' products of various kinds, e.g., organic, territorially branded, rare breeds, *etc*. These practices reduce transport, energy and agrochemical inputs, relative to conventional chains.

As a pervasive tension, environmentally better methods may lack economic viability. By minimizing external inputs, farmers reduce their costs but may also reduce productivity, relative to agro-industrial methods. As a way forward, producers have sought a higher price by developing greater proximity with consumers and gaining their support via quality brands. This agro-food relocalization helps to link environmental with economic sustainability: producers gain more of the value that they have added to production, while businesses recycle income within the local economy.

These short supply chains reduce transport costs as well as dependence on food imports. Self-sufficient production methods avoid or reduce dependence on external inputs, e.g., animal feed, chemical fertilizer and energy. The region also breeds animal stock with special qualities (e.g., taste and scrapie resistance) for cross-breeding with stock elsewhere in the country and Europe. These activities contribute to food security, though significant advances are inherently limited by Cumbria's geographical terrain, given its scant arable land.

The new linkages between sustainability and security have several motives, as expressed by the term 'local' or 'Cumbria' food. Their various meanings include: local resources rather than external inputs, revitalization of local knowledge, regional branding, mutual support and interdependencies, producer cooperation, greater social proximity to consumers, their support for local agriculture and an economy supporting local businesses. These meanings are elaborated through cooperative relations of many kinds, most formally via farmers' membership organizations.

Within those agro-food relocalization processes, this paper has focused on two generic issues—efforts to create larger yet proximate intermediaries to expand local markets, and state support measures during the New Labour government (1997–2010). Regional authorities have devised measures favorable to relocalization, though within a contradictory policy framework (see Section 1).

Cumbria's efforts have pursued distinctive aims by operating within the tensions of national policy. England's RDP emphasizes greater competitiveness via productive efficiency; likewise Cumbria's RDP favors large-scale 'local' processors, even if their raw materials come from distance sources. At the same time, a regionalization policy has opened up opportunities for other approaches: Cumbria regional agencies also fund agro-food relocalization as a means to link environmental and economic sustainability, as well as food security (though the latter has only modest prospects in this territory, given its scant arable land).

Regional development agencies have provided support of various kinds for a Cumbrian food culture more closely linking producers with each other and with consumers. After the 2001 crisis over foot-and-mouth disease, such agencies offered grants for organic conversion and small-scale processing equipment. Funds also facilitated initial networking and cooperation among producers, a common infrastructure for farmers' markets and territorial branding for a range of quality products. These modest funds were crucial for overcoming the social isolation which had resulted partly from farmers' historical dependence on CAP funds. Training programs and kitchen facilities help small-scale producers to overcome bureaucratic obstacles, e.g., hygiene regulations. Such grants have come from a combination of sources, e.g., Structural Funds and the Leader+ program; the latter has been

crucial for collective capacity-building and producer cooperation which can continue after the initial funding [16]. Moreover, the Council's tenders for public procurement effectively favor local food suppliers, thus circumventing UK government policy on 'aggregated purchasing'.

With such help from regional authorities, especially at an early stage of development, producers have shortened food chains by expanding direct sales and establishing new intermediaries for larger markets. Producers gained a higher price via farmers' markets, especially for organic or territorially branded products, although also simply for 'local' food. However, some producers had limited capacity or other difficulties to expand such activities; for example, they lacked skills to deal directly with consumers or to comply with various regulations. Dissatisfied with supermarket chains, some organic producers established collective marketing, especially via box schemes. Also small-scale producers established 'farm shops' selling other produce. These arrangements give a higher price to producers, who maintain their own product identity with consumers. New intermediaries deal with trading and hygiene regulations, apply for grants, provide public information about food and explain food production to consumers.

Those intermediaries had a limited niche market, attracting mainly affluent consumers. Medium-size farms remained dependent upon wholesalers and/or supermarket chains; the latter often incorporating supplies into its own-brand label, thus distancing consumers from the producer. A way forward has been a much larger producer-led intermediary distributing quality food to large buyers. Those initiatives combine several roles—pooling volume in order to increase bargaining power, promoting high-quality distinctive food products, and promoting regional food products—roles which may characterize separate initiatives elsewhere in Europe [15].

In developing more environmentally sustainable production methods and short food chains in Cumbria, modest success has been due to several related factors: producer cooperation, consumer support, and regional agencies orienting rural development to farmers' livelihoods. Agency-farmer partnerships and farmers' cooperation together have enhanced many factors that enable agro-food relocalization [15], thus promoting neo-endogenous rural development through place-shaping concepts [18]. Many initiatives have gained economic independence from their start-up grants, though some still depend on collective infrastructural support, e.g., for farmers' markets. Regional agencies cite UK policy and the RDP England to justify these measures. Yet they undergo tensions with the national policy orientation towards agricultural productivism plus non-agricultural activities, as well as tensions with DEFRA's centralized control over the RDP [32].

In summary, this case study has verified our earlier hypothesis: Sustainability-via-relocalization has depended on more proximate, cooperative relations among producers and with consumers. Together they developed a territorial identity around sustainability, as expressed by various meanings of the terms 'local' or 'Cumbria' food, more than around specialty foods *per se*. As an extra condition for success, state agencies have provided training in marketing skills and modest funds for equipment or common infrastructure. As the most important support, though somewhat invisible, the Leader program has facilitated cooperative relations among farmers so they can develop mutual trust, learn from each others' skills, develop collective marketing and confidently deal with any difficulties that may arise. These success factors imply a general recommendation for agro-food relocalization: such

efforts should promote long-term farmers' cooperation through bottom-up programs such as Leader, with staff experienced in these activities.

Although Cumbria's agro-food relocalization initiatives remain marginal, they resist the trend towards delocalization. In attempting to link social, economic and environmental sustainability, these initiatives also indicate modest means towards food security. Cumbria is readily typified as an industrial-scale food and drink producer, importing many raw materials from elsewhere, rather than a region with territorial characteristics favoring local specialty products. So its advances towards agro-food relocalization indicate potential for expansion elsewhere, including contexts which may seem unfavorable.

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