

The Answer Is Blowing in the Wind? Development Strategies at Crossroads in Shetland

*Yoko Kanemasu, the University of the South Pacific (Fiji) and
Ina Horlings, Cardiff University (UK)*

Cardiff, December 2010

FINAL DRAFT



This report is a follow-up and appendix of the Etude-project, the case study report on Devon (deliverable 4.4, Y. Kanemasu, R. Sonnino, T. Marsden, 2008).

This follow-up research is financed by the School of City and Regional Planning, Cardiff University, UK.



TABLE OF CONTENTS

1. Introduction	5
2. Research Problem and Analytical Framework	7
2.1 Research Problem	7
Identification of rural development strategies: eco-economy vs. bio-economy	7
Role of policy and the public sector	8
Entrepreneurial collaboration	9
2.2 Framework	9
2.3 Methodology	10
3. Rural strategies in Shetland	11
3.1 The bio- and eco-economy	11
Eco-economical trends	11
Bio-economical trends?	12
Contestation	17
3.2 Regional branding and story-lines	20
SIC branding strategy (2003)	20
Tourism	22
Agriculture	23
Knitwear	24
Fisheries	25
Challenges and achievements	27
4. Rural networks	28
4.1 Entrepreneurial cooperation	28
Agriculture	29
Tourism:	30
Knitwear	30
Fisheries	31
Crucial weakness: contributing factors	32
4.2 Policy and public-sector leadership	34
SIC as a key economic sector	35
SIC as a key development driver	35
SIC as a development constraint	37
5. Domains of the rural web	39
5.1 Socio-economical conditions and trends	39
5.2 Institutional arrangements	39
5.3 Endogeneity	40
5.4 Governance of markets and novelty	40
5.6 Social capital	41
5.7 Sustainability	41

5.9 The rural web, vital coalitions and the quality of life	42
6. Recommendations	44
7. Conclusions	47
8. References	49

1. Introduction

The Shetland Islands are the most northerly local authority area of the UK (see figure 1). Its uniqueness however lies not only in its extreme geographical peripherality but also in its development history: it has enjoyed over 30 years of economic prosperity based on the rapid growth of the petroleum industry from the early 1970s onwards, a relatively successful fisheries sector and well-resourced public administration. Shetland remains a relatively wealthy community today: its average earnings are above the Scottish and Highland and Islands levels (HIE 2007a) and its unemployment rate of 2.4% is significantly lower than the Scottish (4.5%) and the UK (5.3%) figures (NOMIS Official Labour Market Statistics 2009). According to the 2004 Scottish Index of Multiple Deprivation, Shetland is indeed the 5th *least* deprived local authority in Scotland and is the *least* deprived in comparison to similar remote and/or island authorities (SIC 2007). A 2006 quality of life survey found that Shetland was the best place to live in Scotland and the 11th best in the UK (cited in Morgan and Morley 2007: 28).

Figure 1. Map of Shetland



Shetland is endowed with particularly high quality environment – distinctive landscape, along and varied coastline, complex geology, a cool, temperate oceanic climate, and fauna and flora that are often unique in the UK (see Figures 2 and 3). These are reflected in

environmental designations such as three National Nature Reserves (Herma Ness, Keen of Hamar and Noss), 81 Sites of Specific Scientific Interest and a National Scenic Area (which covers seven of the finest sections of coastline) (SIC 2000: 12; SIC 2007b: 53). The Islands are also known as one of the finest seabird stations in the world (Ibid.).

Figure 2. Puffin making a nest



Figure 3. Coastline of Shetland



After three decades of relative economic prosperity, Shetland is today searching for a new, “post-peak-oil” development strategy. Oil/gas production is expected to continue to make significant economic contributions for a foreseeable future, with the plans of new oil fields to be developed by the French company Total.¹ Similarly, fisheries is likely to remain a primary income and employment generator in the years to come. However, as highlighted in our previous report (Kanemasu *et al.* 2008), the gradual decline of oil incomes and the eventual (if not immediate) exhaustion of the oil/gas resources, as well as the limitations of commodity production in the other sectors, have engendered a sense of urgency amongst key development actors, especially the Shetland Islands Council (henceforth SIC), for steering Shetland’s development strategy towards a more dynamic and resilient one that maximises the potential of a range of economic sectors and their unique territorial qualities.

The purpose of the previous study was to examine whether what we referred to as a rural “web” – i.e. interrelations, exchanges and positive mutual externalities which shape the relative attractiveness and competitiveness of rural spaces – could be found to be developing in Shetland. It was noted that Shetland’s development trajectory had long been shaped by an economic strategy based on territorial (especially oil and marine) resource mobilisation or *endogenous development* facilitated by powerful public-sector-led *new institutional arrangements* (a configuration of SIC, statutory organisations, public-private partnerships and local/international business enterprises). This, we argued, was in the process of transition, as SIC was beginning to seek to revamp

¹ These oil fields are described by *The Guardian* (2010) as “the North Sea’s last frontier, which contains more than a fifth of Britain’s remaining oil and gas reserves,” an estimated 4 billion barrels of oil and gas.

the conventional development strategy with an increased emphasis on other rural development (henceforth RD) dimensions such as *market governance*, *novelty* and possibly *sustainability*. Whilst such a shift was expected to result in the emergence of a more dynamic rural “web”, we also pointed out that a relative absence of local actor collaboration, ownership and entrepreneurship (i.e. insufficient mobilisation of *social capital*) was a missing link in this emergent development model.

Following on from this and other related research, we intend in the present study to increase our understanding of the dynamics, processes, prospects and outcomes of the web in Shetland, especially in light of the developments that have taken place in the last 2-3 years. The previous study identified the key elements of the emerging development vision – i.e. quality branding in agri-food, tourism, knitwear, etc. as well as a possible large-scale wind farm project. SIC spearheaded the branding initiative in 2003, linking it specifically to tourism but also more loosely to other sectors. Wind energy production, noted in the previous study as a new development agenda faced with a growing oppositional force, has since been magnified in significance, developing into a controversy of a scale almost unprecedented in Shetland. We intend to examine developments in these and other relevant areas to better understand the achievements and challenges of the new development strategy and what they mean for the future prospects of the unfolding of the web.

More specifically, the goal of this research is four-folded: First we intend to *adapt* the theoretical model of the rural web, especially by describing the intertwinement of the domains with the wider socio-economical conditions and trends. Second, we propose to *widen* the scope of our research by locating the developments in Shetland in the context of regional development discourses. The difference between the bio- and eco-economy is especially relevant here. We will also refer to the regional branding strategy. Third, we intend to *update* our analysis by describing the empirical developments in the last 2-3 years and how these affect the rural web. We will describe the domains of the rural web and show how links between them have been weakened or strengthened in the recent years. This section will address all major sectors, but focus especially on the wind farm project in Shetland. Finally, we seek to *deepen* our insights by exploring the roles of entrepreneurship, co-operation, social capital and leadership in regional networks. Shetland’s rural development trajectory is very illustrative in this sense. At the end of the study we also intend to make some recommendations for the successful unfolding of the web to be considered by Shetland development stakeholders.

2. Research Problem and Analytical Framework

2.1 Research Problem

Identification of rural development strategies: eco-economy vs. bio-economy

Further analysis following the initial research (see Marsden 2010) has indicated that an important outcome of the unfolding of rural webs is the emergence of a rural and regional “eco-economy” defined as: “[t]he effective social management and reproduction of ecological resources (as combinations of natural, social, economic and territorial capital) in ways designed to mesh with and enhance the local and regional eco-system rather than disrupting and destroying it” (Kitchen and Marsden 2009: 294). This is distinguished

from what is referred to in some policy and academic circles as a “bio-economy” (see Marsden 2010; Juma and Konde 2001; Anex 2004; Wang 2004; Mol 2007, McMichael 2009). Central to a bio-economy is the (largely corporate-controlled) production of bio-mass and bio-fuels, along with other related strands (e.g. bio-technology, genomics, chemical engineering, enzyme technology). A bio-economy is intricately linked with industrial ecology and operates at global corporate economic levels, in contrast to local and regional value adding phenomena characteristic of an eco-economy.

In our initial study, we observed that one of the key outcomes of the unfolding of the web in Shetland was likely to be its successful transition from a “marginalising area” with a declining agriculture and a reliance on non-branded, anonymous commodity production towards to a “segmented area” characterised by multifunctional land-use, whereby agriculture, tourism, knitwear and other sectors variously pursue high quality production. One of our objectives in the present study is to expand on this analysis and achieve a greater understanding of the dynamics and outcomes of the unfolding of the web by applying the concept of eco-/bio-economy. Are the outcomes of the unfolding of the web implicated in any way in the development of an eco- or bio-economy? In other words: *Will new activities and initiatives such as the branding strategy and the wind farm project be part of an eco- or bio-economical development strategy in Shetland?*

Role of policy and the public sector

One of the key findings of our initial research concerned the significance of the role of the public sector, especially SIC, as a key development actor. SIC was established in 1975 soon after the discovery of oil in the East Shetland Basin with taxation powers over oil companies, which secured a number of income streams relating to the industry, most importantly the Oil Reserve Fund.² This has allowed SIC to develop a range of economic infrastructure to meet local industry and community needs, offer financial and advisory assistance to local businesses, provide large-scale employment to the residents, and fund various development initiatives. Shetland has since remained a “clientelist countryside” (Marsden *et al.* 1993; Murdoch *et al.* 2003) where state agencies provide the primary driving force for development processes in contrast with other rural areas such as Devon where these are much more driven by private networks. In this follow-up study, we would like to further explore the implications of such strong public sector leadership, especially in relation to the emergence of an eco-/bio-economical development agenda. We also feel that SIC’s role can be usefully analysed in light of our previous observation of the relative absence of local actor collaboration, ownership and entrepreneurship. Our research questions here are: *What is the role of the public sector leadership in advancing a bio/eco-economical development agenda in Shetland? Does SIC as a primary development actor harness or constrain local actor collaboration and entrepreneurship?*

² Under the Fund, the industry provides SIC with a penny per ton of oil coming through the Sullom Voe Oil Terminal. SIC has gained also from owning a port and a harbour, co-owning a tug company, providing accommodation for oil workers, etc (Hamilton 2008, personal communication).

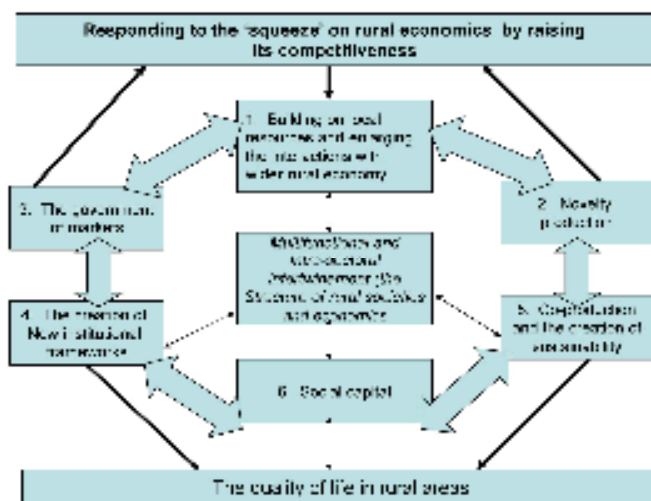
Entrepreneurial collaboration

The question of local actor collaboration also merits a separate analysis in its own right, due to its critical importance as an urgent development challenge. For Shetland's rural web to continue to unfold into a coherent and sustained development process, it requires the "cement" of social capital to hold positive domain interrelations together and to cultivate strategic synergies between them. In the present study, we intend to pay special attention to this issue, not only in the context of agriculture as we did in the previous study but also in the other key sectors of tourism, fisheries and knitwear. Our key question here is: *What are the existing constraints and support for new vital (private-private, public-private) coalitions rooted in social capital and leadership aimed at a new overarching future (bio-/eco-economic) agenda?*

2.2 Framework

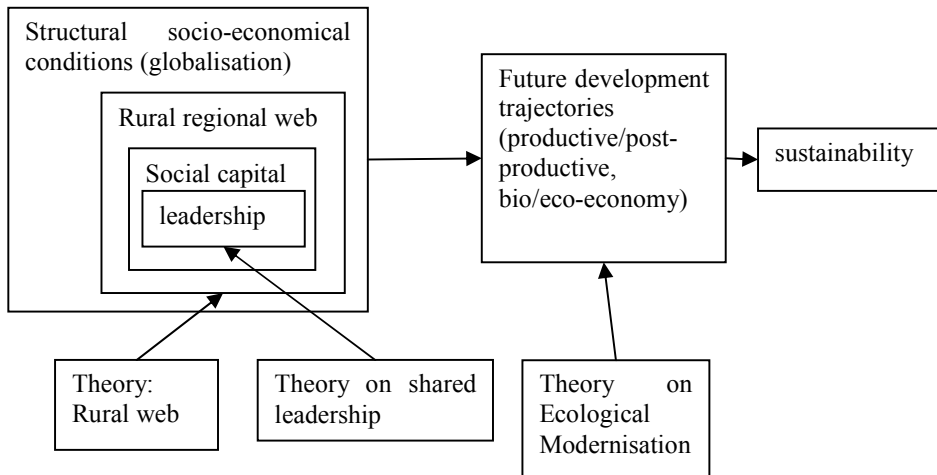
This study employs the theory of the rural web (see Figure 4.) as a primary analytical schema, but is also informed by a number of other interrelated rural/regional development theories and concepts. But amongst them, we make particular use of the concepts of eco- and bio-economy discussed above for the further refinement of the rural web theory. In addition, we will pay particular attention to the question of (public sector) leadership, which was not addressed in depth in the previous study. Figure 5 shows how these conceptual tools are drawn upon to form an analytical framework for the study.

Figure 4. Conceptual Model of the Rural Web



(Source: van der Ploeg and Marsden 2008)

Figure 5. Analytical Framework



2.3 Methodology

In this follow-up study, semi-structured interviews with a total of 15 key development actors (see Figure 6) were undertaken in April 2010. Our methodological approach is a qualitative one that pursues an in-depth understanding of development processes rather than statistical inferences and measurements. While we do utilise some general statistical data, our goal is not to achieve a statistically accurate description or explanation of development processes in Shetland but to arrive at a greater understanding of their complexities. An important part of this pursuit is an ongoing refinement of theoretical devices such as that of the rural web. Quantitative methods such as a questionnaire survey were deemed unsuitable for these purposes. This however does not preclude the potential benefit of more statistically oriented approaches in future research

In the interviews, an interview guide was employed as a loose format to facilitate discussions, but with a considerable amount of freedom for the interviewees/interviewers to digress to capture new insights, issues and themes. Most of the interviews were tape-recorded with the interviewees' permission and later transcribed. A thematic approach was adopted in the analysis of the interview data with a focus on the key research questions identified above. To ensure accurate representation of the participants' views and accounts, a form of "member check" (Guba and Lincoln 1981; Lincoln and Guba 1985; Lather 1991) was carried out, whereby the participants were invited to comment on, and correct if necessary, an earlier draft of this report.

Figure 6: List of Interviewees

Name	Title and Organisation
1. Hansen Black	Chief Executive, Shetland Fishermen's Association
2. Richard Cammen	Waiter, the Grand hotel, entrepreneur

3. Ronnie Eunson	Chairman SLMG
4. Alastair Hamilton	Former Senior Advisor, Economic Development Unit, Shetland Island Council (SIC)
5. Maree Hay	Northmavine Development Company Project Worker, Northmavine Community Development Company
6. Neil Henderson	Principal Marketing Officer, Economic development Unit, SIC
7. Douglas Irvine	Head, Business Development, SIC
8. Louise Irvine	Spiders' Web
9. Brian Isbister	Chief Executive, Shetland Fish Producers' Organisation
10. Kevin Learmonth	Vice-Chair, Sustainable Shetland
11. Drew Ratter	Chair, Crofters Commission Shetland, formerly Chair of Development Committee, SIC
12. Karl Simpson	Formerly the Taste Shetland manager, Shetland Livestock Marketing Group
13. Rosa Stepanova	Sustainable Shetland
14. Lisa Ward	Communication Officer, Viking Energy
15. Allan Wishart	Project Co-ordinator, Viking Energy

3. Rural strategies in Shetland

3.1 The bio- and eco-economy

Eco-economical trends

An eco-economy, as noted above, is a development model that rests upon the production of socio-ecological goods and services by the use of territorial resources, such as soils, landscapes, minerals, water catchments, plant and animal ecologies and geologies. Marsden (2010: 7) points out that each region “holds different sets of what we may term ‘initial endowments’ of such ecological resources, many of which may have been hidden from view in past modernisation phases.” It is the key challenge of a rural web to renew and exploit these endowments in an innovative way that recaptures value at the local and

regional level and creates new markets and consumption niches. We find considerable affinity between this and Shetland's emerging development vision which stresses a radical shift from mass commodity production to territorially-specific, branded, value added production. Whilst Shetland's extreme remoteness and the associated transport and communication costs have long been perceived to be major development obstacles, the emerging strategy represents an innovative attempt to redefine and reconfigure Shetland's unique territorial endowments which have long been "hidden" by the conventional development discourse of low-value high-volume production: i.e. the special qualities that Shetland's unique environmental, historical and socio-cultural heritage is believed to create in a range of products. Here, Shetland seeks to reposition itself as an exclusive regional brand that caters for urban (mainland) niche markets for specialised meat products, unique adventure/eco/cultural tourism, luxury knitwear, etc. In other words, the rural web, consisting of positive interrelations between *endogenous* resources, effective *institutional arrangements* for their mobilisation, creative *market governance* strategies and *novelty* production, entails a multi-sectoral rural economy resting on a diverse set of socio-ecological goods and services. An added benefit of this would be *sustainability*: it would not result in a net depletion of resources as is the case clearly in oil production and arguably in (especially white)fish catching under the previous economic model, but on the contrary, would add economic and socio-environmental value to these resources (Kitchen and Marsden, 2009). The dynamics of Shetland's emerging rural web hence parallels the principles of an eco-economy.

If the successful unfolding of this web is concomitant to the emergence of an eco-economy, then we may ask to what extent this has taken place to date. Our follow-up research indicates that Shetland is facing some challenges in achieving its new development vision. In tourism, there is some public perception that SIC's branding initiative has lost its momentum, and the sector continues "business as usual" in the most part, relying on oil-industry-related demands. In agriculture, the Shetland Livestock Marketing Group (henceforth SLMG)'s processing/branding initiative that we reported in the previous study has been stalled. In fisheries, we have found that branding is a particularly complicated marketing strategy that has not been attempted widely. Knitwear continues to face problems of labour shortage and absence of an overarching and protected brand. There are a number of factors that we believe contribute to these challenges, not least the somewhat contradictory role played by the strong public sector leadership and the challenges of sectoral and cross-sectoral entrepreneurial collaboration. These will be discussed later in greater depth (see Sections 4.1 and 4.2). At the same time, however, it is important to note that new initiatives are also emerging, such as SLMG's focus on local markets, the fisheries sector's successful operation of an electronic auction system, and strategic connections that are being made between tourism and local food (see Section 3.2). Many of these instances indeed point towards a possible emergence of clusterings of more micro-economic behaviour and practices, which indicates a greater coherence with the logic of an eco-economy.

Bio-economical trends?

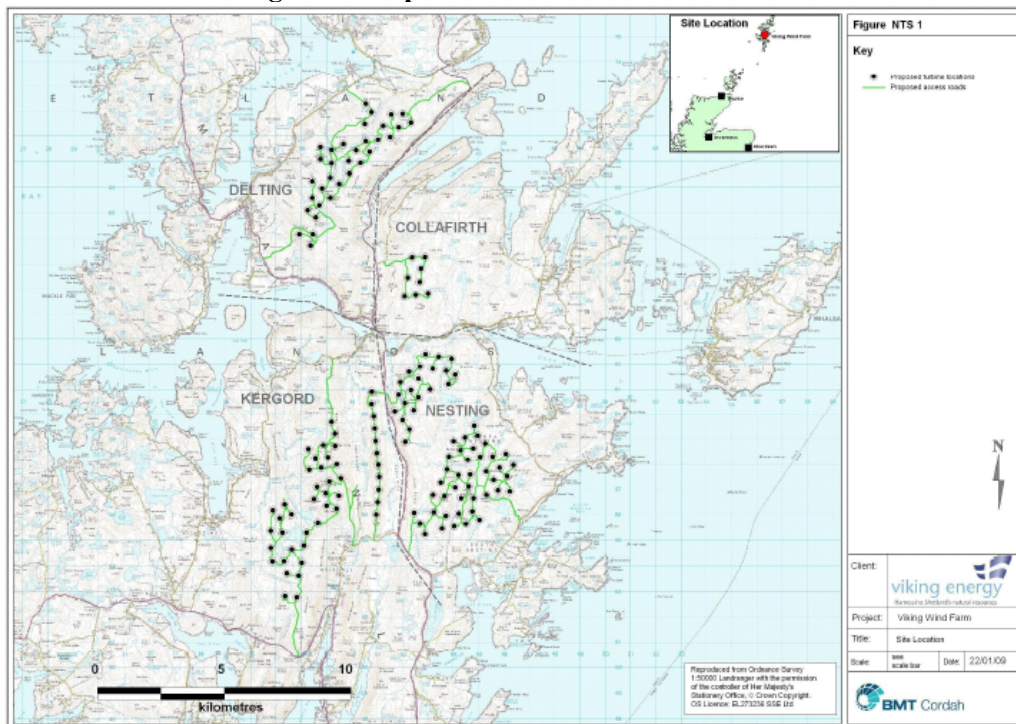
In our previous study, we observed that it was unclear what role Viking Energy's wind farm project was to play in the unfolding of the rural web (Kanemasu *et al.* 2008). On the

one hand, the project could be seen as a simple replacement for oil as a secure source of energy/income/employment, which does not seem to fit well with the ethos of the emerging vision of niche-oriented, branded high quality production. On the other hand, exploring the economic and socio-environmental potential of the hitherto neglected resource, combined with more socio-culturally embedded value added production, could effectively accelerate Shetland's transition to a more resilient rural economy with dynamic and multifunctional land-use (although this will depend largely upon the design, scale and implementation of the strategy). Much of this ambivalence seems to remain today, obscuring the future direction of the unfolding of the web. Indeed, the controversy over the project has intensified since our initial study and appears to have had considerably divisive effects on local communities. Curiously, this division seems to derive at least in part from two opposing interpretations of the project – i.e. one that defines the wind farm as a bio-economical enterprise inherently contradictory with the principles and values of eco-economical development, and the other that believes that the project, whilst containing some bio-economical elements, is checked by local community ownership and therefore potentially in harmony with, and support of, eco-economical pursuits in the renewable energy and other sectors.

Viking Energy is today a 50:50 partnership between Viking Energy Ltd. and SSE Viking Ltd., a subsidiary of Scottish and Southern Energy Plc. Viking Energy Ltd is 90% owned by the Shetland Charitable Trust (henceforth SCT),³ while the remaining 10% is owned by four individuals who developed the Burradale Wind Farm, the only existing wind farm in Shetland. The project has not been officially approved to date. An Environmental Statement was submitted in 2009, followed by 8 weeks of public consultation, which attracted both positive and negative feedback. Based on this feedback, Viking Energy is currently preparing an addendum to the project, to be submitted for approval by the Energy Consents Unit of the Scottish Parliament Government in 2011. The construction of 150 wind turbines, 145m in height and of 3.6-megawatt capacity each, is expected to produce 540 megawatts of power which will feed the Shetland grid with a large amount of surplus to be exported through an interconnector cable to the Scottish mainland. The project is vast in both geographical and financial terms: it is to be the largest wind farm in Europe, covering over 12,800 hectares (see Figure 7) at an estimated cost of £800m (Ward and Wishart 2010, personal come; Viking Energy, no date).

³ The Trust was established in 1976 when the Sullom Voe Terminal began operating to receive and disburse the compensation monies paid by the industry. Its activities aim to “‘top up’ public services, in line with the community needs” (SCT 2009: 7) by providing grants (about £12 million a year) to local organisation such as Shetland Arts, Shetland Recreational Trust, Folk Festival, Shetland Amenity Trust, Shetland Art Therapy, Disability Shetland, Fiddle and Accordion Festival towards the cost of providing social, leisure, cultural, heritage and environmental activities (Ibid.).

Figure 7. Proposed Wind Farm Site Location



(Source: Viking Energy 2009)

The project seems to be driven at least in part by bio-economical principles – in terms of its scale, the involvement of large corporate capital, its reliance on new environmental techniques, a considerable amount of state influence (via SIC which owned 45% of Viking Energy prior to selling its shares to SCT) and its potential to reproduce a mono-sectoral economy dependent on mass export (see Horlings and Marsden 2010). However, the project also presents other elements that do not mesh easily with the bio-economical paradigm. Unlike typical bio-economical models where power tends to be transferred to transnational organisations and economical activities become less territorially bounded (WRR 1998), the wind farm project is 45% owned by SCT, which seems to present some scope for local community control, and the production of energy is bound directly with the unique typological characteristics of the local territory (The wind resources in Shetland are believed to be the most efficient in the UK).

Viking Energy discourse:

Viking Energy and its supporters⁴ simultaneously emphasise the project's bio-economical benefits and its possible linkage with more eco-economically oriented initiatives in the rest of the economy. The company points out that Shetland's privileged quality of life is owed to the oil incomes that have allowed SCT to spend some £1 million every month on local communities (see Footnote 3.) and SIC (along with other local

⁴ Wind Farm Supporters Group has recently been established by local supporters (Ward and Wishart 2010, personal com.)

trusts) to finance local infrastructure and social, cultural and economic services. In view of the decline of the oil industry and the expiry of the Sullom Voe oil deal in 2000 (D. Irvine 2010, personal com.; Ward and Wishart 2010, personal com.), Shetland is in urgent need of a new income in order to sustain this quality of life. The clear benefit of the project here is that it is estimated to generate total economic activity of £37m a year, including a £23m return to SCT and £1.6m in Community Benefit Payments to nearby communities. In addition, the project is expected to provide local communities with employment (50 jobs in turbine maintenance/servicing, 26 management jobs, and 350 spin-off jobs) and possibly cheaper fuel⁵ (Ward and Wishart 2010, personal com.). The vast scale of the project is justified not only in financial terms but also in technical terms: according to Viking Energy (no date), *“the wind farm needs to be of a sufficient size to give an acceptable return on investment and to be able to afford the usage charges for the necessary sub-sea cable to the mainland. ... Due to the limitations of Shetland’s existing local electrical network, it is impossible to have a project sized only to match Shetland’s local demand.”* Here the wind farm appears as an ambitious bio-economical project to substitute for oil as a large-scale corporate-led investment that offers potentially significant economic returns.

At the same time, the wind farm is linked to an environmentalist discourse, defined as a project that is motivated by sustainability values and goals, and is therefore in support of, rather than in conflict with, more eco-economically-oriented pursuits. Shetland currently relies on oil and waste gas for 93% of its energy production.⁶ Exploring the potential of its renewable energy resources may be seen as a major step towards environmental sustainability. In addition, in the developers’ view the construction of and connection with the interconnector cable, which is an integral part of the project, is *“crucial to any further development of renewable energy production in Shetland,”* as the existing Shetland grid cannot take on any more renewable energy (Ward 2010, personal com.). The project is thus positioned as an incentive for other, smaller-scale renewable energy initiatives and indeed as *“a symbol of the community that cares for the environment”* (Ibid.).

Furthermore, the project is regarded here as a community owned and driven one, on the basis of its 45% ownership by SCT. In light of Shetland’s relative success in protecting local community interests through the management of the petroleum industry over the past three decades, supporters envisage the wind farm to replicate this success and to act as a critical vehicle of empowerment by achieving economic and environmental autonomy for local communities.

⁵ This point has been subsequently challenged by Sustainable Shetland (2010 personal com.).

⁶ Shetland’s local electricity grid is supplied by an oil-fired power station, and excess energy is produced by gas turbines at the Sullom Voe Terminal. There is limited renewable energy production. The Energy Recovery Plant in Lerwick generates hot water by burning waste, and the 5-turbine Burradale wind farm has a total output of 6.68 megawatt, which can power 2000 homes per year (SIC 2008: 57).

Oppositional discourse:

Those who oppose the project present a different interpretation. A formal opposition group, Sustainable Shetland, was established in 2008 and has 668 paying members today, said to be the biggest membership organisation in Shetland. The organisation submitted a petition with 3,474 signatures opposing the project to SIC in July 2009 (Sustainable Shetland, no date). From these protestors' point of view, the project is driven primarily by a bio-economical development agenda. Stressing that the group is not "*anti wind energy*," the chairperson Kevin Learmonth explains the basis of the group's opposition as a lack of financial, environmental, ethical and social integrity in the project.

Financially, Sustainable Shetland points out that the wind farm would require SCT as a project partner to provide a vast amount of funding to supply some of the total capital cost of £800m, a considerable risk in light of its current reserve of £176m (SCT 2009: 18). The profitability of the project is also subject to a number of contingent factors, especially the cost of electricity transmission, which can be changed by the national government.⁷ Related to this is that, while Shetland's wind energy efficiency factor is higher than anywhere else in the UK, the vast cost of the construction of the interconnector cable and a convertor station (estimated to be £500m) would impact on the project's profitability. Further, Sustainable Shetland stresses that in the case of project failure, Shetland's exposure to financial damage could be as high as £360m (Sustainable Shetland no date; Learmonth and Rosa 2010, personal com.).

As for the project's environmental sustainability, the carbon payback calculations presented by Viking Energy, based on the best, intermediate and worst case scenarios, are 3.2 years, 5.2 years and 21 years respectively (Viking Energy, no date). This means, Sustainable Shetland stresses, that in the worst case scenario, "*the farm has to work perfectly for 21 years including all the variables ... to break even*" (Learmonth 2010, personal com.). In fact, Sustainable Shetland's worst case scenario (based on 200m hydrology impact rather than 100m) is 67.7 years (Ibid.). Learmonth (Ibid.) also claims that the capacity of the interconnector cable would not leave room for other renewable energy activities: "*It is basically closing Shetland for renewable energy. ... The wind farm closes the door for other projects.*" Other environmental concerns include disturbance to peat bogs, visual impact, destruction of bird habitat, loss of public space, noise impact and light impact.

Sustainable Shetland also makes ethical objections to the project. Whilst SCT owns 90% of Viking Energy Ltd., the remaining 10% is owned by four private individuals, one of whom is employed as a project officer of Viking Energy Ltd. In addition, the councillors on the SIC planning board that assesses the planning application are also the trustees of SCT⁸ (*The Shetland Times* 2010a).⁹ These connections cause the protestors a

⁷ Sustainable Shetland argues that, although Viking Energy is currently lobbying for transmission charge subsidies, the project is not profitable on the existing charging mechanisms.

⁸ Twenty-one out of the 23 trustees of SCT are SIC councillors (SCT 2009: 4).

⁹ The director of Viking Energy was previously an elected councilor and therefore

considerable amount of concern over the transparency of the project and the intertwined interests of the private and public sectors, which makes it difficult for the Council to take a neutral position.

Finally, there is a social dimension to the opposition. The project is seen to have been forced upon local communities by SIC (which owned the shares of Viking Energy Ltd. before they were sold to SCT and whose councilors are also the trustees of SCT) and individuals with vested interest: *“this is sold as a community project but people don’t feel they own it. There isn’t a feeling of ownership at all”* (Rosa 2010, personal com.): crofters, for instance, have little influence on the future or the design of the project unlike landowners. The project is hence found deeply disempowering. Sustainable Shetland refers also to potential health effects of the wind farm project as well as emotional effects caused by the distortion of Shetlanders’ long-standing relationship with the land and landscape: *“What is often left out of the equation is the effect on the community which affects mental and emotional health, and [the project] is also going to affect human beings connected to the landscape, which they live in, which has a personal value, a recreational value, cultural value”*. The assumptions of the benefit of “local ownership” claimed by the project are also questioned. Critics point out that disparity and social exclusion exist in Shetland,¹⁰ if masked by the appearance of a privileged community, and that a continued flow of SCT funding to “community” services does not necessarily reach these marginalised groups: not all communities will benefit from the project (Rosa 2010, personal com.). Moreover, the positioning of the wind farm as a substitute for oil as a possibly inexhaustive pot of money and the assurances of carbon payback deter people from making real changes to their fossil oil based lifestyle. The project is, in short, seen as an incentive for uncritical continuation and endorsement of the status quo with all its environmental and socio-economic injustices.

Contestation

Thus Sustainable Shetland presents an interpretation of the wind farm as a bio-economical enterprise that suppresses, rather than encourages, eco-economical development and is further undermined by a *“collusion between the government and the capital to force through projects”* (Learmonth 2010, personal com.). In Viking Energy’s vision, the project operates on both market and environmental principles, and is tempered by local control, to bring about significant socio-economic and environmental benefits that could enhance eco-economical practices and initiatives: in short, the project

automatically a Shetland charitable trustee. The Council appointed him along with 2 others.

¹⁰ Although Shetland’s unemployment rate is one of the lowest in the country (0.7% in June 2008) (SIC 2008: 63), according to the Scottish Index of Multiple Deprivation, 8.8% of the Shetland population was income deprived in 2006 (SIC 2008: 73). In 2007/8, 234 households were assessed as homeless, an increase by 50 since 2003/4. In addition, 23.9% (1,824) of the households are at risk of fuel poverty, and 74.5% of the population lives in the most ‘access deprived’ areas in Scotland. In August 2008 there were 106 people claiming Job Seekers Allowance, an equivalent of 0.8% of the population. (SIC 2008).

facilitates a strategic interface between bio-economical and eco-economical principles and agendas (Ratter 2010, personal com.). These competing discourses are summarised in the table below (see Figure 8.)

Figure 8. Opposing discourses on the wind farm project

	Bio-economical or eco-economical?	Economic implications	Environmental implications	Social and ethical implications
Viking Energy and supporters	Wind farm serves as a strategic interface between bio-economical and eco-economical principles and practices	<ul style="list-style-type: none"> ▪ Total cost estimate of £800m; ▪ £37million/year income (£23m return to SCT, £1.6m Community Benefit Payments); ▪ Employment (50 maintenance/service, 26 management, and 350 spin-off jobs); ▪ Possibly cheaper fuel for communities? 	<ul style="list-style-type: none"> ▪ 540 megawatt capacity ▪ Production of 2 billion units of green energy; ▪ Offset over 1m tonnes of CO2 per year ▪ Supply 20% Scotland's domestic electricity needs ▪ Carbon payback in 3.2 year (best case scenario), 5.2 years (intermediate) and 21 years (worst). 	<ul style="list-style-type: none"> ▪ Local control secured by 45% SCT ownership; ▪ Turbines as a symbol of a sustainable community;
Sustainable Shetland and critics	Wind farm, of proposed scale and structure, is a bio-economical enterprise hindering eco-economical development.	<ul style="list-style-type: none"> ▪ Current total cost estimate of £800m is a speculated figure and could be higher in reality; ▪ SCT's proposed initial stake (20%) is £72m, but down payment can be larger; ▪ Cost of transmission (key cost element) can be changed by national government. VE is lobbying for transmission charge subsidy, but on current charging mechanisms the project is not profitable. 	<ul style="list-style-type: none"> ▪ Carbon payback can take considerably longer, as long as 67.7 years (based on 200m hydrology impact rather than 100m) while turbines have a lifespan of 25 years; ▪ No incentive for smaller community-based renewable energy schemes; ▪ Peat bog disturbance; ▪ Destruction of bird habitat ▪ Visual impact; ▪ Loss of public space; ▪ Noise impact; ▪ Light impact, etc. 	<ul style="list-style-type: none"> ▪ Wind farm "forced" upon local communities; ▪ Disempowerment of the community and crofters; ▪ Lack of transparency; ▪ Uncritical continuation and endorsement of the status quo – a fossil oil based lifestyle and socio-economic disparity within local communities.

What this means for the unfolding of Shetland's rural web is that the web continues to struggle to make a critical synergy with the domain of *sustainability*. As discussed earlier, branded high quality production envisaged in agriculture, tourism, knitwear, etc. operates on the principles of sustainability insofar as it eschews mass commodity production and is grounded in the valorisation and further enhancement of territorial assets. But given the magnitude of its environmental, economic and social sustainability implications, the wind farm project has the potential to either boost this domain to rise to the core of the web, or seriously weaken it and thereby undermine the eco-economical potentials and outcomes of the web. It is therefore unclear at this stage whether the project (if implemented in its present form and structure) will steer the unfolding of the web in a more eco-ecological or bio-ecological (or perhaps intermediate?) direction.

In the meantime, the contestation has undermined the domain of *social capital*. There is today a significant amount of mistrust between the two positions. Viking Energy is perceived by the opposition as reluctant to release all or accurate information¹¹ and to have withdrawn from public debate (Learmonth and Rosa 2010, personal com.). The opposition is viewed by Viking Energy as based on "misunderstandings" and "myths" about wind farms and the project (Viking Energy, no date). What is particularly undermining, it appears, is the disengagement between the two opposing discourses, "*a lack of reasoned debate*" (Hay 2010, personal com.). There does not appear to be a forum that facilitates open, democratic and participatory discussion where differing views can be freely shared and debated on rational grounds, with an aim of reaching mutual understanding and consensus. Whilst SIC has historically endeavoured to play such a facilitating role, it is seen to have a close relationship with the project and may not be able to do this in a satisfactory manner. This also indicates a concerning gap in the *institutional arrangements* that are unable to mitigate or offset the lack of social capital. There is therefore an urgent need for the creation of an alternative medium of discussion and dialogue.

¹¹ In 2009, the Advertising Standards Authority prohibited Viking Energy from making certain claims about the project. In a direct mail sent to local households, the company claimed that: "50% of the profits will stay with the Shetland community"; that "[i]t is expected that a total of £25 to £30 million will be injected into the Shetland economy every year"; that "[i]t is likely that this figure includes annual income of - upwards of £18 million profits on average to Shetland Charitable Trust"; and that "[a] recent study by the Macaulay Institute and Aberdeen University showed that the carbon release associated with constructing turbines on peat can be cancelled out by their green power in less than three years." Upon receiving complaints from Sustainable Shetland, ASA ruled that the first claim was misleading as 50% of the profits would go to Scottish and Southern Energy and 5% to four directors. The claims about financial figures were found to be misleading also because Viking Energy had not supplied evidence such as contracts guaranteeing the prices of electricity that the wind farm would generate. ASA also noted that Viking Energy's own environmental statement estimated that carbon payback would be most likely after 3.7 years (Advertising Standards Authority 2009).

Viking Energy acknowledges that the organisation was in the initial stages concerned solely with the preparation of the Environmental Statement and not sufficiently with community involvement. The project was presented as a primarily technical one (Ward and Wishart 2010, personal com.), which may have hindered genuine community participation in the development or discussion of the project. As noted by Learmonth (2010, personal com.), *“the issue of sustainability is not an engineering or technical problem, it is a social one.”* It is crucial that all community members – not only developers, politicians, scientists, technocrats, activists and environmentalists but also those who have been excluded from the debate to date due to a lack of technical knowledge, political power, cultural capital, etc. – can engage in sustained discussion to determine whether Shetland’s “post peak oil” future should be shaped by an eco-economical or bio-economical development model, or by both (and if so, whether facilitating an interface is possible and sustainable), and whether the proposed project enhances or constrains this development vision.

3.2 Regional branding and story-lines

As noted above, Shetland’s key eco-economical tendencies are located in and around regional branding initiatives. These represent an attempt by Shetland’s development actors to move away from the dependence on non-branded low-value high-volume production towards territorially-embedded high quality production. This is most clearly articulated by SIC’s branding strategy but is also found in similar initiatives and activities in the private sectors. Below is a brief assessment of the recent progress made in relevant areas.

SIC branding strategy (2003)

SIC’s branding strategy, which was started in 2003, represents an important shift in the Council’s marketing approach. Prior to this, SIC did not have a clear marketing vision and provided promotional grants to local businesses more or less automatically when applications were submitted (Henderson 2010, personal com.). Corporate Edge, a London-based company which won a tender to assess Shetland’s “place brand,” published the strategy in 2003 along with a logo to represent the sea, music, pride, determination and land of Shetland (see Figure 9).

Figure 9. Shetland Brand Logo



(Source: Corporate Edge 2003)

The brand is summarised by the phrase “pride of place” and consists of the following elements:

- Vision: self-reliant, successful Shetland
- Goal: export and tourism enhancement
- Philosophy: excellence
- Positioning: a small, clever, specialised country
- Focal customer: “successful idealists” – i.e. “*high-end of society, with a lot of disposable income*”; “*Guardian readers*” who “*don’t like silver service, like authenticity and quality experiences, care about the environment and social issues*”; “*the type of people who would buy craft products such as knitwear because they dislike mass-produced products*”
- Proposition: a rich, rare quality experience

(Corporate Edge 2003; Henderson 2010, personal com.).

The primary emphasis of this strategy is positioning of “Shetland as a special and specialised place, whether as a place to visit or a source of premium products” (Corporate Edge 2003: 3) – i.e. adding value to territorial resources and their uniqueness (*endogeneity*) by creatively marketing them (*market governance, novelty production*) with an effective branding mechanism (*institutional arrangements*). We observed in our initial study that this new branding vision (along with similar private sector initiatives) constituted the driving force behind the emergence of a more dynamic rural web. Our follow-up research shows, however, that the strategy has not made as much progress as initially anticipated. For instance, although it was initially recommended that the logo should be used as a country-of-origin device on products, produce or services (Corporate Edge 2009: 7), it is currently not available to individual businesses due to the difficulties of logo management and quality control. Consequently it functions *more as a destination brand than as a product brand*. The brand is also applied almost exclusively to tourism due to insufficient resources as well as state aid restrictions (Henderson 2010, personal com.; Hamilton 2010, personal com.). Consequently, there seems to be some general perception that SIC has stumbled over the implementation of this strategy (Henderson 2010, personal com.; Eunson 2010, personal com.).

A branding strategy ideally describes: 1) unique qualities, how the region sees itself and how it distinguishes itself from others (i.e. unique selling points); 2) the perception of the region by outsiders (i.e. the image); and 3) what the region wants to be, including quality guidelines and new product-market combinations (i.e. ambition). In the case of Shetland, the third aspect, *new product development* coherent with the story-line, has not been fully explored to date. Similarly, while Shetland’s focal customer is the “successful idealists,” it is unclear what kind of (new) products, experiences and services are provided to attract this customer.

Apart from technical and organisational factors, a key obstacle seems to be a *lack of local ownership* of the brand. SIC acknowledges that it has not been able to facilitate Shetlanders to connect sufficiently with the brand (Henderson 2010, personal com.). The perception of the brand as a Council-led initiative appears to constrain private sector

participation and ownership, especially in light of the ambivalent resident attitude towards SIC (see Section 4.2).

It should be noted, however, that there has also been some progress in the last few years, the foremost of which is the Food Festival. SIC started organising this event in 2008, in which restaurants promote local produce and a food event is held at a local facility (Henderson 2010, personal com.). As other development leaders agree (Eunson 2010, personal com.; Simpson 2010, personal com.), there is today a greater tendency for tourist institutions, restaurants and hotels to promote local produce, which is attributed at least in part to SIC's efforts. The Council also took a decisive step in 2009 to break away from Visit Scotland, a national tourism promotion body, to establish its own Promote Shetland to pursue promotional activities tailor-made to suit the specific needs of Shetland's tourism and other relevant sectors (see Section 4.2).

In sum, SIC continues to play a key role in shaping the *institutional arrangements* for the implementation of the strategy: it has demonstrated its leadership capacity with its latest initiatives of the Food Festival and Promote Shetland amongst others. Yet these institutional arrangements are also potentially fragile without appropriate support of *social capital*, hindering the strategy from fully enlisting local actors into its vision.

Whilst SIC's branding strategy is the most articulate expression of Shetland's emerging development strategy, we identified in the previous study similar initiatives in the private sectors which collectively suggested the emergence of cross-sectoral regional branding. In our follow-up research, we have identified both positive and negative developments relating to these. Below is a brief stock-take of each sector.

Tourism

As noted above, SIC's branding strategy is yet to be fully embraced by the sector as its own. In addition to the public-sector-led nature of the strategy, a lack of motivation may partly explain this. Shetland's tourism has historically depended on oil-industry-related demands: the oil industry, unlike the conventional tourism market which is seasonal (from April to September), provides accommodation business throughout the year (Ratter 2010, personal com.; D. Irvine 2010, personal com.). The latest statistics show that the number of business travellers in 2008 (31,558) continued to double that of holiday makers (15,736) (SIC 2009: 25). In this context, major hotels can continue to rely on oil workers for consistent occupancy, feeling little urgency to make a drastic change to their business approach. This hampers also the development of novelties and cross-sector co-operation. Consequently there may be a considerable gap between SIC's new marketing vision and the mainstream tourism industry that is content with the current oil-industry-oriented approach.

However, there are some developments indicative of slow yet significant progress towards repositioning of Shetland as an upmarket destination for "successful idealists." The greater presence and promotion of local food within the sector is a good example: "15 years ago, any fresh fish available at local restaurants were from Aberdeen or frozen fish from England" (Simpson 2010, personal com.). Today, major hotels and restaurants

(e.g. the Scalloway Hotel, the Museum,¹² and Monty Bistro restaurant) regularly highlight the availability of local produce on their menu. A few incoming entrepreneurs also appear to be planning small-scale food businesses (Cammer 2010, personal com.). In addition, some individual entrepreneurs are moving in the direction of niche-oriented, eco/adventure/cultural tourism. Busta House Hotel in Busta Voe, for instance, is a 16th-century laird's house turned into a boutique hotel. Along with its individually decorated rooms, the hotel features a large variety of local food such as "Shetland Hill Lamb, Free Range Pork from Unst, Fresh Seafood from... all around our islands – Muckle Roe Mussells, Hallibut from Bressay, Yell Sound Scallops, Organic Salmon from Unst ... Even our milk and butter are locally produced, along with cream" (Busta Hotel, no date). Thus a momentum for branding may be slowly emerging from small-scale entrepreneurial initiatives rather than larger, conventional hotels and businesses.

Agriculture

Our previous study highlighted the processing/branding initiative by SLMG as a notable example of producer initiative. In 2004, the cooperative began slaughtering and processing Shetland lambs, which are conventionally exported as stores to the mainland and sold as Scottish lamb. Slaughtering/processing allowed SLMG to give a territorial identity to the meat and to create three quality brands (Seaweed Lamb, Hill Lamb, and Island Lamb) to market it as a high quality niche product, creatively capitalising on the uniqueness of the taste/flavour of the meat as well as the territory that produces it. Our follow-up research has found that these award-winning brands are no longer functional today. This is due to a number of factors including:

- A constant lack of marketing resources;
- The absence of well established distribution chain for chilled meat in the UK;
- A lack of product visibility: in comparison to Welsh, Cornish or Cumbrian lamb, Shetland is "*an unknown supplier*" and customer confidence takes longer to build;
- The small size of Shetland lambs: mainland buyers are reluctant to work with smaller portions (e.g. smaller joints, chops);
- Legislative and regulatory contexts: the construction of an abattoir is costly due to a range of health and safety legislation that must be complied with; and
- Apathy and a lack of collaboration amongst producers (Simpson 2010, personal com.)

We noted many of these in our initial study and highlighted the lack of producer participation and collaboration (i.e. lack of cultivation/mobilisation of *social capital*) as the greatest threat to the institutional functioning of the cooperative. Today it seems to have almost completely halted the branding initiative. While this is perhaps most evident in agriculture, local actor collaboration is a challenge shared by many other sectors and hence will be discussed more closely in the next section (see Section 4.1).

But this by no means suggests that SLMG has failed to make progress. The cooperative, together with the Shetland Abattoir Cooperative Ltd., successfully applied for a European

¹² The Museum's canteen, for instance, showcases traditional local recipes such as "sassermaet (sausagemeat) burger, based on a 19th-century recipe, local salt beef, Shetland lamb bannocks and potted rabbit" (Fort 2008).

funding of €500,000 for the construction of a new abattoir, which had long been its ambition. Slaughtering in Shetland is currently carried out in a small facility in Tingwall and is limited to lambs (Simpson 2010, personal com.). The new facility will accommodate all species – not only lamb processing, which is seasonal, but also the processing of cattle and pigs, which will allow processing activities throughout the year. With increased processing, SLMG hopes to resume its branding initiative in the future (Eunson 2010, personal com.). But curiously, under the leadership of the chairperson Ronnie Eunson, the present emphasis of the organisation is on local markets. In 2009, half of SLMG's 5,000 processed lambs were sold to local markets. Indeed, SLMG supplies all of the local butchers and most of the local hotels and restaurants today (with the other half consumed privately, and only a few hundred animals exported out of Shetland) (Ibid.). The cooperative wishes to explore the potential of public food procurement by supplying schools and other public institutions (such as SIC) so these institutions could purchase local produce "*instead of spending millions of pounds each year on food from the other side of the world*" (Eunson 2010, personal com), although at the time of writing of this report SIC's policy on local food procurement is not clear. Shifting the emphasis from export to re-localisation of food chains holds out the potential of combining economic and ecological benefits and of renewing the linkages between sectors, producers and consumers, which is a significant eco-economical step given the very high food miles and the complete detachment that has conventionally existed between Shetland producers and consumers.

Knitwear

The key challenges identified in our initial study, namely, labour shortage and absence of a protected brand, continue to constrain the knitwear sector today. Knitwear is predominantly an ageing sector with the average knitter estimated to be above 70 years of age, earning about £200 a week, working 8 hours a day, and consequently offers little attraction to younger Shetlanders (L. Irvine 2010, personal com.).¹³ In addition, although the Shetland Knitwear Trades Association was established previously to protect and promote genuine Shetland knitwear with its own "Shetland Lady" trademark, neither the association nor the trademark is in existence today. There is a new producer group, Shetland Arts and Crafts Association, which encompasses the wider arts and crafts sector. It remains to be seen to what extent this new grouping of producers can contribute to regional branding. Within the knitwear sector, our follow-up study suggests that there is a divergence of approach to the positioning of the product – traditional and modern (Hamilton 2010, personal com.). An ideal approach in line with the cross-sectoral branding strategy would be to market the product as an exclusive brand with a special quality arising from the uniqueness of local wool and from a mix of old and new elements (i.e. traditional patterns and modern modifications). Whilst there is evidence that there is today a greater focus on higher quality markets, it is unclear whether a link has been successfully made between the traditional (associated with older and conventional knitters) and the modern (represented by young designers studying textile at

¹³ Those employed and self-employed in the knitwear sector fell by 33% between 1999 and 2004, from 128 to 86, while the number of home knitters fell from 960 to 750 (SIC 2008: 65).

Shetland College) approaches (Ibid.; L. Irvine 2010, personal com.). The lack of protection of Shetland knitwear as a territorially-bound quality label also continues to pose a threat, indicative of an absence of *institutional* support for any attempt for quality branding.

Fisheries

Fish farming:

As reported in our previous study, the world's first attempt at organic cod farming (by the local business Johnson Sustainable Seafood), which was also arguably one of the first major branding attempts in fisheries (with the highly publicised "No Catch" brand), collapsed in 2008 – "*a spectacular rise and fall*" (Isbister and Black 2010, personal com.) – due to high costs and pressures from supermarket buyers. Organic salmon farming continues to exist on a smaller scale, but much of Shetland's fish farming sector is non-organic. The greatest difficulty in bringing this sector into cross-sectoral regional branding lies in its ownership and control: fish farming in Shetland is dominated by Norwegian investments operating mostly on commodity food production principles (Hamilton 2010, personal com.). The sector is thus practically outside the parameter of Shetland's new development strategy, which presents a formidable obstacle to its integration into a cross-sectoral marketing vision.

Fish catching:

Unlike fish farming, fish catching is an indigenous sector with the producers represented by two complementary bodies, the Shetland Fishermen's Association (henceforth SFA) and the Shetland Fish Producers' Organisation (henceforth SFPO). Yet there has been little move towards branding in this sector. For instance, 90% of the whitefish catch is exported fresh with no added value and processed mostly in Aberdeen, with the remaining 10% going into local consumption (Isbister and Black 2010, personal com.). The absence of branding in this sector is due to specific difficulties involved in branding fresh fish. One of the key issues is the definition of "Shetland fish": fish landed in Shetland could have been caught and landed by any northern European country vessel (Ibid.; Simpson 2010, personal com.). Whilst narrowing it down to fish caught and landed by local fishermen may resolve the issue, there is a further question of whether they supply enough fish for mainland processors to develop a Shetland label. For mainland operators, Shetland fish constitutes only a component of their production, and hence there is no strong motivation for branding it separately. This confines the possibility of branding to the control of the processing process. But enhanced processing within Shetland, the success of which depends on low costs, is difficult to achieve due to the rather lucrative employment opportunities provided by the public sector (Isbister and Black 2010, personal com.).

Moreover, the sector may not feel the need to branch into branding under the current circumstances. Shetland fish commands relatively high prices and fishermen receive a higher premium for their catches in Shetland than in other ports because of the reputation of freshness and high quality, making Shetland "*the Harrods of the fresh fish world*" (Simpson 2010, personal com.). Consequently, despite concerns over the Common Fisheries Policy reform and quota allocation, the producers are "*doing as well as they*

possibly can” (Ibid.) without the added value offered by branding. The production value of all major fish species (especially whitefish and mackerel) has been increasing more or less steadily for the past decade (SIC 2009: 14).

But there are also indications that branding of Shetland fish as a small-scale niche may be feasible. For instance, the Hand-Made Fish Company (see Figures 10 and 11) is a prominent smoked fish business in Lerwick, a two-person operation where the owners David and Tricia Parham process high quality, high price fresh fish for mainly local consumption. They source their own wood, make their own sawdust, and carry out all filleting, smoking and packaging of their produce. Salmon, for instance, is smoked over local fuel with plum wood, whisky barrel, Hawthorn, Juniper, Beech and Olive wood. The innovative and sustainable approach of their business has seen them being listed among Rick Stein’s Food Heroes (The List, no date; HAVRA, no date; Shetland Food Directory, no date).

Figures 10 and 11. The Hand-Made Fish Company



(Source: HAVRA, no date)

There is also a major collective achievement to demonstrate the producer’s marketing initiative within existing constraints. SFPO was instrumental in the establishment in 2003 of the Shetland Seafood Auctions, a new electronic auction system which sells and promotes Shetland fish to customers in the processing sector in a way that reflects the high quality of the fish in the price (see Figures 12 and 13). It is an online bidding system and the only one in the UK to operate the Dutch auction system.¹⁴ Recently the organisers have begun to explore niche market possibilities, whereby fresh fish is processed, packaged, and put on the auction for sale. While this is unlikely to cover 100% of the production, it is hoped that a growing proportion will be sold in this manner in premium markets, supplying hotels with discerning chefs and other exclusive buyers. Notably, this is not intended to operate at a large supermarket level in order to avoid the

¹⁴ In a Dutch auction, a seller offers up an item for bid at a very high price, which is lowered in increments until a bidder chooses to accept the current price (EPIQ no date).

associated price pressures (Isbister and Black 2010, personal com.). This is virtually a branding exercise without a formal label or logo: i.e. value added production through creative marketing of high quality products. The auction system itself seems to have had a notable impact on the landings and values of Shetland fish since its opening in 2003 (see Figure 14)

Figures 12 and 13. Shetland Seafood Auctions: an electronic auction system



(Source: Shetland Seafood Auctions, no date)

Figure 14. White fish landings and values in Shetland since the introduction of the electronic auction

Year	Value Landed	Tonnage Landed
2008	£24.5m	15,445
2007	£19.5m	12,969
2006	£16.5m	11,344
2005	£11.6m	9,850
2004	£8.9m	8,965

(Source: Shetland Seafood Auctions, no date)

Both of these initiatives may be seen as significant steps towards quality branding, that is, marketing of Shetland fish as coveted *novelties*. As SFPO chief executive Brian Isbister states: “*Branding initiatives should start from the local level. There has to be a belief in it, and there has to be a need for it. From the fisheries perspective, we are getting nearer to believing in it*” (Isbister 2010, personal com.).

Challenges and achievements

What emerges from this sectoral overview is that regional branding poses some specific challenges to Shetland. In addition to the questions of marketing resources and expertise, there is also a relative lack of entrepreneurial collaboration and a collective marketing vision within sectors (perhaps except fisheries), suggesting an absence of effective *institutional arrangements* supported by *social capital* necessary for successful marketing of Shetland products. Related to this is the relative absence of urgency for branding, especially in the sectors where the status quo is perceived to be “good enough” – that is,

where *market governance* is not sufficiently linked to *novelty production*. Our research also suggests that the lack of market intelligence and confidence impedes branding initiatives: extreme remoteness poses more challenges than just high transportation costs. In the words of Alastair Hamilton, former senior adviser to the SIC's Economic Development Unit:

"If you are 200 miles from Aberdeen and 300 miles from Edinburgh and 700 miles from London, it is quite hard to visualise the market. ... If you are, for example, in the west end of Glasgow, south side of Edinburgh, west end of London, Oxford, Cambridge, York, where the successful idealists tend to congregate, you get a much different impression of the scale of opportunities. ... We are talking endlessly about transport costs and it is an issue, but not knowing that the market is there is a far bigger issue. You can't feel confident that the market is there" (Hamilton 2010, personal com.).

Historically Shetland producers have been detached from those at the end of consumption chains – chains that are stretched by physical distance, limited processing undertaken in Shetland, and the conventional commodity production strategy. This makes it a considerable *market governance* challenge for isolated producers to effectively identify, connect with, and respond to the needs of niche markets and consumers.

At the same time, the foregoing discussion has also identified some important small-scale initiatives that demonstrate the entrepreneurship of innovative development leaders – i.e. re-localisation of food chains, promotion of local food in niche tourism, small-scale but high-quality fish processing and marketing. If cultivated into successful clusterings of value adding activities, these small initiatives can collectively facilitate cross-sectoral regional branding with greater coherence with eco-economic principles. For this to happen, these must be expanded beyond isolated success stories and woven into a coherent web of collective initiatives. The most urgent task is therefore to cultivate rural networks of entrepreneurial cooperation which will facilitate the development of new (cross-sectoral) products.

4. Rural networks

4.1 Entrepreneurial cooperation

In our previous study, we highlighted the relative lack of (mobilisation of) *social capital* as a key missing link in the emerging rural web. This should not be taken to mean that Shetland is lacking in social capital or a sense of community. On the contrary, Shetland boasts a high level of third sector activity¹⁵ and has a strong territorial identity rooted in its distinctive cultural and historical heritage,¹⁶ proudly displayed in beacon events such as Up Helly Aa (Viking-themed fire festival) and the Folk Festival, both of which are organised by volunteers (Henderson 2010, personal com.). Nevertheless, development actors in many sectors do seem to encounter considerable difficulties in mobilising this

¹⁵ According to an official survey, 36% of the respondents are involved in voluntary work and 46% in a community group in their area. Shetland has over 600 community groups that received 309 grants from SIC in 2007/8 (SIC 2007, 2008).

¹⁶ As observed by *The Guardian* writer Matthew Fort (2008), "Not only is Scotland quite a long way away, geographically speaking, it's almost treated as a foreign country by Shetlanders themselves. You don't often see the Saltire on display. Tartans are nowhere to be seen."

asset.

Agriculture

Shetland's crofting communities have a strong historical tradition of communal working (Ratter 2010, personal com.). Yet the realities of the sector today suggest that this tradition may have been significantly eroded. We have already noted the lack of producer participation and collaboration as one of the key obstacles experienced by SLMG's branding initiative. The cooperative currently has 300 paying members out of the total of 900 livestock farmers in Shetland. Most of the members are small farmers with only 10% being large businesses.

The fissure seems to exist mainly between SLMG and non-members, a minority of about 20 individuals who regard SLMG's activities as a threat to their own businesses. The construction of a new abattoir, for instance, was delayed partly because of such farmers who believed that there was no need for local facilities as they could continue to use those in Aberdeen. These tend to be large farmers who are able to operate adequately without cooperation with others (Eunson 2010, personal com.; Simpson 2010, personal com.). For large farmers who are able to compete in the conventional commodity market and/or to count on Scottish Government and EU grants for survival,¹⁷ the current situation "*keeps them afloat. Say, there is this large farmer, he gets his money, and his wife also works for the Council, and she's getting maybe £30,000 per year ... So why change anything to do with the situation?*" (Simpson 2010, personal com.). There is, then, a divergence of interests and development agendas between the mostly small farmers who are organised under SLMG's vision of value added production and larger farmers who are in favour of the existing structure of the sector and sceptical of any potential change to the status quo. Indeed, there seems to exist some "*acrimony*" (Eunson 2010, personal com.) between these conflicting groups and agendas.

But "*apathy*" (Simpson 2010, personal com.) also exists within the cooperative. Perhaps partly due to the failure of the marketing initiatives in the past, members are generally reluctant to participate in collective activities, with only 30 attending a recent AGM. SLMG is consequently an organisation driven by, and dependent on, the leadership and entrepreneurship of a few visionary individuals, such as Karl Simpson, the former Marketing Officer who left the organisation in 2009, and Ronnie Eunson, the current chairperson. Reliance on a few individuals meant that upon Simpson's departure, "*trust and confidence went with Karl*" (Eunson 2010, personal com.). The organisation has subsequently been constrained by a lack of human as well as financial resources. After experiencing a financial crisis in 2009, SLMG has not been able to communicate sufficiently with its members via newsletters or to expand its membership.

As we noted elsewhere, rural development "cannot be reduced to an individual feat: it takes more than a visionary individual" (Kanemasu *et al.* 2008). When initiatives rely entirely on the commitment of visionary individuals, the pressure of "going it alone" can

¹⁷ The total value of such assistance in 2008 was £8.86m, a little over the total production value of £7.11m (SIC 2009: 22).

exhaust their enthusiasm, making these initiatives extremely precarious. Simpson, who now runs a private fish trading business, observes that his feelings of frustration have even intensified since the departure:

“The more I work in a private field, the more I realise how much I was hampered by people trying to stop me. ... Just disappointing. It’s like going on a run on a track and you are trying to achieve your personal best in 10,000 meters. But in the grandstand there is someone with a gun trying to shoot you or someone with a piece of wood trying to trip you over. ... Just constant criticisms [from those outside SLMG]. You are just putting everything you possibly could into the business, but you aren’t getting any help.” (Simpson 2010, personal com.)

This appears to be a typical case where the missing link of *social capital* has destabilised fragile *institutional arrangements*, which has in turn seriously weakened their links with other RD domains of market governance, novelty and endogeneity, resulting in the (temporary) cessation of an innovative branding initiative.

Tourism:

Tourism seems to similarly suffer from a lack of collaborative working. The Shetland Tourism Association, which was established in 2005, has not been able to mobilise a critical mass of tourism operators, with some prominent entrepreneurs missing from its membership (Henderson 2010, personal com.). The reliance on the oil industry once again surfaces here as an important context. With relatively stable occupancy rates and steadily increasing visitor expenditure (£16.4m in 2008, a 26% increase from 2007) (SIC 2009: 24), there may be a degree of complacency, especially among established, larger hotels, resulting in a general lack of interest in collaborative working. The ownership structure of the sector may also play a part. In Lerwick, one company owns 3 major hotels, while another owns 2 hotels, a large wholesale business and a number of bars. Given the small scale of the accommodation sector (with only 312 hotel bed spaces in Lerwick) (SIC 2009: 23), this suggests the dominance of Shetland tourism by a relatively small number of powerful large businesses. With these industry leaders seeming less inclined towards entrepreneurial innovation and collaboration, smaller businesses may find it difficult to cultivate effective networks, unless visionary individuals surface to lead the way, as in the case of agriculture. In short, despite the existence of the Association and the statutory organisation Promote Shetland, the sector’s *institutional arrangements* and stock of *social capital* may be limited in their capacity to stimulate local actor collaboration.

Knitwear

We have already noted above that the Shetland Knitwear Trades Association is no longer in existence, and although there is now a wider umbrella body of the Shetland Arts and Crafts Association, it is unclear at this stage whether this new body will be able to function as an effective medium of producer collaboration. Knitwear is a small sector with only 86 employees and 750 “home knitters,” mostly employed by a few established knitwear companies (SIC 2008: 65; L. Irvine 2010, personal com.). These knitters do collaborate at an interpersonal level (L. Irvine 2010, personal com.), but this has not developed into more effective *institutional arrangements*. The gap between the traditional and the modern approaches may be both a cause and an effect of such absence of an

overarching producer body and the lack of SIC's capacity to mobilise the *social capital* of the knitters' community to forge a strategic link between the "old" and the "new" approaches.

Fisheries

Unlike much of the rest of the Shetland economy, the fisheries sector, and especially the fish catching sector, has been a notable success in facilitating producer cooperation. Shetland fishermen have a long history of unity and collaborative working: an association representing local fishermen has existed since the early 20th century (Shetland Fishermen, no date). More recently, fisheries has diversified into subsectors represented by a range of complementary producer bodies, such as the Shetland Fish Producers' Organisation, the Shetland Fishermen's Association, Seafood Shetland (an amalgamation of the Shetland Fish Processors' Association and the Shetland Shellfish Growers' Association), and Shetland Aquaculture. Here we focus on the activities of the Shetland Fish Producers' Organisation and the Shetland Fishermen's Association.

SFPO was established in 1982 and represents all larger fishing vessels (35 commercial pelagic and whitefish vessels). In common with other Fish Producer Organisations, SFPO is concerned primarily with the administration of the EEC market support system, fisheries management through the operation of the sectoral quota system, and general promotion of the market prospects for the membership (Isbister 2010, personal com.; Shetland Fishermen, no date). SFA represents all full-time fishermen. The current membership is 120 vessels consisting of all larger commercial pelagic and whitefish vessels and 40-50 larger shellfish vessels. SFA is primarily a pressure group that represents the views of its members on fisheries matters at local/national/UK government and European levels (Black 2010, personal com.; Shetland Fishermen, no date).

These organisations, in contrast to those in agriculture, tourism and knitwear, represent all or most of the local producers (100% of pelagic and whitefish producers and a large proportion of aquaculture producers) and have a long history of collective economic and political activities. They depend generally on consensus-based decision making: although the executive committees are made up of "*alpha males*," who are strong-minded business owners, they have been able to work together effectively. As noted by Hansen Black (2010, personal com.), the chief executive of SFA, entrepreneurship has never transformed into "*predatory*" behaviour in his organisation, unlike fisheries PO's in other parts of Scotland that are known to be affected by such tendencies.

This may be due in large measure to the collective ownership of the vessels and the community spirit of the fishing community (Black 2010, personal com.). Shetland fisheries has a unique ownership structure whereby all vessels are owned by fishermen themselves rather than large companies: each vessel is an individual economic unit and fishermen are business owners rather than employees (Isbister and Black 2010, personal com.). This is likely to have engendered a strong sense of ownership of the sector, less likelihood of disparity and conflict of interests (as seen in agriculture and tourism), and an incentive for entrepreneurship. Furthermore, fisheries has been regarded by local communities as an important sector due to Shetland's strong historical links with the sea

(“*something that is in our blood*”), which encourages a sense of unity (Isbister 2010, personal com.).

It should not be forgotten that, perhaps as a result of its socio-cultural and economic significance, fisheries has received a far greater share of public funding than any other sector. A brief look at the breakdown of the Shetland Development Trust investment for 2007 attests to this – whitefish (42.9% of the total investment), Fishing (14.8%), Finfish Farming (12.1%), Fish Processing (2.4%) and Shellfish Farming (1.6%), in comparison with Agriculture (0.2%), Tourism (0.4%) and Knitwear (2.0%) (Shetland Development Trust 2007). In short, fisheries has enjoyed one notable advantage that the other sectors have been struggling to secure: i.e. material resources to stimulate and sustain entrepreneurial collaboration.

The end result of all of these is an effective interrelation between long-established *institutional arrangements*, strong bonding and linking *social capital*, and an *endogenous* nature of the sector, combined to achieve *market governance* goals.

Crucial weakness: contributing factors

The overview above indicates that with a notable exception of fisheries, Shetland’s emerging development strategy faces a difficult task of cultivating entrepreneurial collaboration and networking. Our research suggests that there is a range of contributing factors to this. First, some previous researchers as well as many of our interviewees believe that the lack of cooperative working is inherent in Shetland culture. Shetland’s basic economic unit was historically the family (Primrose 2004), and economic strategies centred on self-reliance and separateness (Simpson and Stalker 2004). In such a socio-cultural milieu, “*any innovation or doing something differently to try and better your lot was frowned upon*” (Simpson 2010, personal com.) with “*suspicion of anyone who wants to stand up and be counted*” (Hay 2010, personal com.). It is also useful to reflect on Shetland’s distinctive political history: it was controlled by external rulers for centuries, under Norwegian control from the 9th century to the 15th century, and Scottish rule thereafter until it became part of Britain in 1707 (Saxa Vord 2008). Today Shetland remains under strong influence of the Scottish and UK governments. It is a history whereby “*Shetlanders didn’t have to do thinking for themselves and were told what to do*” (Simpson 2010, personal com.), a legacy perhaps not conducive to creative and innovative collaboration amongst subjugated people. Although this is a sociological and anthropological question well beyond the scope of this study, it seems to be a valid proposition that the lack of local actor collaboration has some socio-cultural and socio-historical grounding.

Second, collaboration presupposes convergence of interests and values of collaborators, yet this is not applicable to some sectors in Shetland. Especially in agriculture and tourism, there is a polarisation between smaller and larger businesses, with the former inclining more towards branding and other value adding strategies for survival, and the latter more or less content with conventional market approaches. Thus there may not be a common cause for these two types of businesses to collaborate for. Moreover, the small size of the sectors may easily turn the divergence of interests into conflictual situations,

rendering collaboration amongst smaller businesses difficult, as evidenced by the case of agriculture.

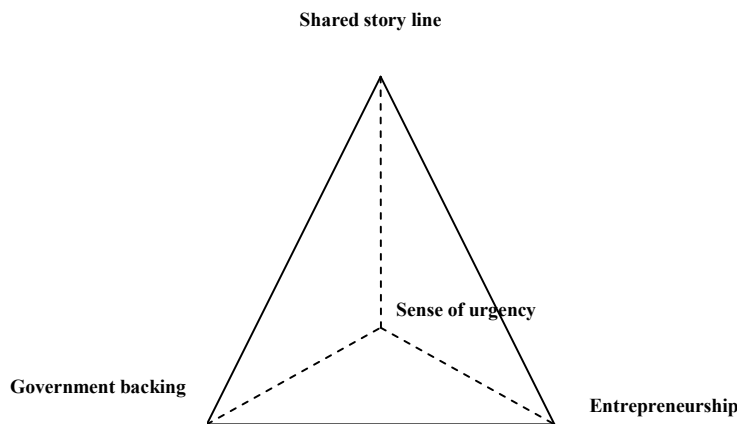
Third, as we noted in our previous study, competition for public funding and perceived disparity in the distribution of funding may deter collaboration amongst individual businesses. There is a common perception and some resentment that large local businesses receive a larger share of public money (Hamilton 2010, personal com.; Primrose 2004). In an economy where public funding supports much of development action, this could create deep fissures in local actor networks.

Fourth, the lack of confidence discussed earlier may also contribute to less willingness for collaboration. Engaging and working with other entrepreneurs entails being subjected to peer scrutiny. Many Shetlanders operating in isolation (such as farmers and tourism operators) may find this challenging (Simpson 2010, personal com.), especially if they feel that they are lacking in relevant market intelligence (Hamilton 2010, personal com.).

Fifth, private leadership, which could potentially align entrepreneurs around a joint agenda, seems to be underdeveloped in sectors such as agriculture, knitwear and tourism. There are some strong, visionary individuals attempting to strengthen business networks, but they face a variety of hindrances as noted above in the case of agriculture.

Sixth, we note the relative absence of statutory or other institutional frameworks to actively cultivate sectoral and cross-sectoral collaboration. SIC promotes sectoral collaboration by organising “Industry Panels,” industry-specific forums for participants to deliberate on technical issues of interest to their businesses. The public-sector-led nature of these bodies may however impact on the level of participation and engagement by local actors. As for cross-sectoral collaboration, SIC previously organised a cross-sectoral Local Economic Forum, but this was discontinued on the grounds that its remit was too broad to be effective. As shown in Figure 15, the development of vital coalitions requires careful manoeuvring and balancing on the lines that connect a sense of urgency, a shared story line, entrepreneurship and leadership, and government backing (van Ostaaijen et al, 2010, p.166). In the case of Shetland, we may say that SIC has taken some measures to link these conditions, yet perhaps not with sufficient efficacy. In addition, there does not seem to be any private-sector-led institutional mechanism for cross-sectoral collaboration, given that Shetland has no chamber of commerce, unlike most other areas of the UK

Figure 15. Conditions for vital coalitions



Finally, related to some of the factors discussed above is the possibility that there may not exist sufficient need for local actor collaboration in the first place. As discussed in our initial study, Shetland's economic prosperity for the last three decades has been shaped and effected to a great extent by strong public sector leadership and intervention. If the current situation is "good enough" and this is (perceived to be) maintained by a public sector equipped with political will and financial capacity to do so, there may not be sufficient reasons from the point of view of local actors to resort to collective action. It should not be forgotten, as pointed out by Drew Ratter (2010, personal com.), the Chair of the Crofters Commission Shetland and the former Chair of SIC's Development Committee, that this is a perfectly rational choice on the part of local actors: they are making a rational decision to rely on the public sector as it is likely to lead to optimal outcomes.

In sum, the absence of effective entrepreneurial collaboration may be linked to a combination of socio-cultural, historical, economic, political and institutional factors, which makes it an extremely complex development challenge. What makes this situation even more challenging is that the public sector, which might be expected to make positive interventions under different circumstances, plays a rather contradictory role, as examined more closely in the next section.

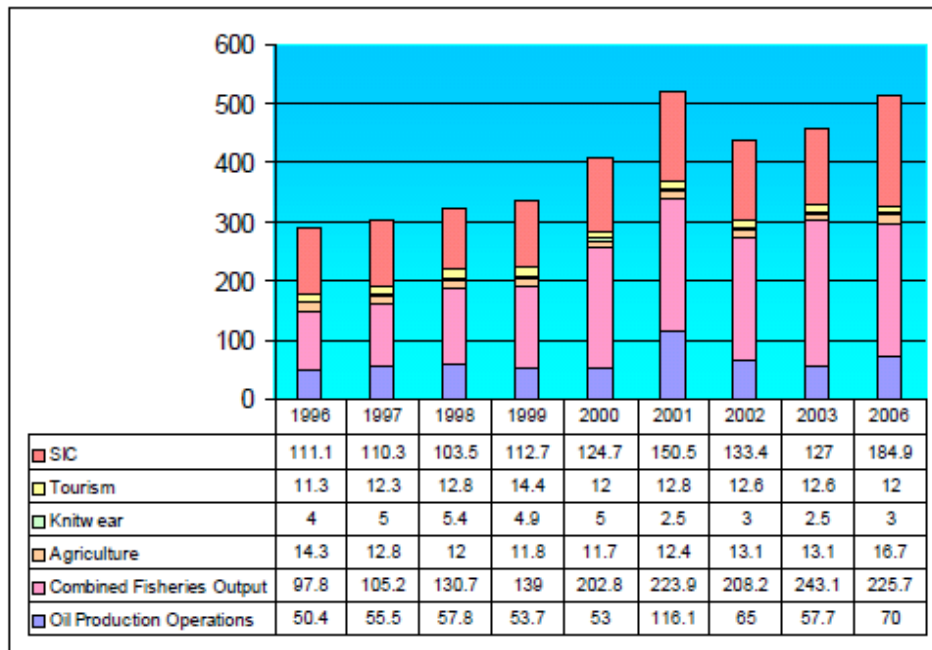
4.2 Policy and public-sector leadership

In our previous study we observed that Shetland is a typical "clientelist countryside" where the public sector plays a key role in shaping the development trajectory of a rural community. In particular, SIC has served as the core of the state-led *institutional arrangements* that have overseen Shetland's economic development for over three decades. This has however also led to some notable unintended consequences. We will have a closer examination below of the implications of such strong public sector leadership in the context of Shetland's new development strategy and the emerging rural web.

SIC as a key economic sector

SIC is a powerful economic sector in itself, currently worth £184.9m (SIC 2008: 59), and combined with the local trusts, accounts for as much as one third of the local economy (SE/SIC/HIE 2005: 35). The scale of its economic prominence over the years is shown in Figure 16.

Figure 16. Value of key sectors of the Shetland Economy (£m), 1996-2006



(Source: SIC 2008: 60)

The pervasive presence and power of SIC and the public sector in Shetland can be seen in vast infrastructural monuments, such as nine swimming pools for the population of 21,980, an award-winning £11.6m museum and archive complex (e-architect 2008), a new £9.3m cinema and music complex to open in 2011 (*The Shetland News* 2008), inter-island ferry and air services, ports and airports. Shetland also has as many as 291 charities with a total income of £5.4m (SIC 2009: 83) – the greatest number of, and greatest income from, charities per 10,000 resident population in Scotland.

SIC as a key development driver

SIC has also acted as the primary driving force behind Shetland's economic development. The Economic Development Unit of the Council offers, amongst other things, Ventures Service to invest in a variety of local business projects. These activities are complemented by a number of local trusts, such as the Shetland Development Trust, which also invests in local businesses at current total cost value of £40.9 m (Shetland Development Trust 2007), and the Shetland Charitable Trust, which funds charitable activities in social, leisure, cultural, heritage and environmental areas and now intends to make a vast investment in the wind farm project. The Trustees of these trusts are selected

by or the councillors of SIC. Scottish statutory organisations such as HIE Shetland also play a role in providing funding, training and advice to community enterprises. As we discussed in our previous study, issues of EU state aid regulations have come to mediate SIC's funding activities in recent years, becoming an "*ever-present*" concern (Hamilton 2010, personal com.). Although this may distort the Council's focus in the long run, in that it is easier to make financial interventions in certain areas (such as tourism) than in others under the regulations, SIC remains the key development financier in Shetland today.

SIC has recently demonstrated its political prowess when it successfully broke away from the national tourism promotional body Visit Scotland and established its own, Promote Shetland. Previously the Council provided funding directly to Visit Scotland for the purposes of visitor promotion. However, due to local concern that the national body did not reflect the differences between Shetland and Scotland ("much Scottish promotion is built around tartan, shortbread and whisky, while Shetland offers an altogether different Scandinavian dimension"), SIC successfully engaged the Scottish Government in talks to establish its own local body in 2009, to secure greater management direction and control over visitor promotion and also "to strengthen the promotion of other things that Shetland has to offer, for example distinctive textiles and excellent food" (MOVE.SHETLAND.org 2009; SIC no date).

It should be noted that the significance of SIC's role lies not only in its funding capacity but in its leadership capacity to shape and vigorously pursue an innovative development strategy: not only financing, but strategically directing, economic development. Over the past decades, SIC has successfully controlled Shetland's relationship with the oil industry, putting in place stringent environmental monitoring¹⁸ and a secure financial compensation mechanism. In view of the industry's eventual end and the crises in the other conventional sectors, SIC is now actively developing an ambitious and innovative strategy to move away from the dependency on oil and low-value mass products to a more dynamic development model that maximises the potential of a range of territorial resources. In this sense, SIC is undoubtedly the key architect of Shetland's emerging eco-economical development vision. Indeed, we may say that the Council has acted as something of an institutional visionary leader in Shetland, a role usually taken by individual actors in other rural communities.

We have attempted an analysis of SIC's leadership role based on the model shown in Figure 17. The motivations (the I-dimension) and visions of SIC's development actors are focused upon distinguishing Shetland as an interesting place for visitors and maintaining Shetland's economic prosperity by securing new income sources (such as the wind farm project). As for the IT-dimension (which concerns roles), SIC takes on a visionary, strategic, market-oriented and facilitating role, investing in businesses and managing

¹⁸ The Sullom Voe Terminal is "one of the world's cleanest oil ports, due in part to the strict regulations enforced by the oil companies and the SIC... Scientific monitoring since 1972 shows little or no effect on the islands' abundant and varied marine life" (European Geoparks Network, no date).

financial reserves. The ITS/THEY dimension concerns social systems, institutions and regimes. Here Shetland represents an administration-driven form of regional management, which tends to create a certain dependency of local actors. At the same time, SIC has sought to establish a degree of autonomy from external influences by breaking away from the Scottish tourism body and developing its own. In the WE-dimension (concerning cultural values and co-operation), SIC appears to face challenges, in that Shetland's identity as a Place of Pride is marketed but yet to be internalised in the actions and decisions of the community and entrepreneurs. Similarly, while SIC stimulates public-private co-operation, the potential of cross-sectoral collaboration is not fully explored.

Figure 17. Leadership of the Shetland Islands Council

<p>I-dimension</p> <p>Guarantee Shetland's way of life by securing income sources</p> <p>'Putting Shetland on the map'</p>	<p>IT-dimension</p> <p>Invest in new business projects</p> <p>Managing local trusts</p>
<p>WE-dimension</p> <p>Enhance private-sector ownership and collaboration</p> <p>Communicate Shetland's shared identity (branding)</p>	<p>ITS/THEY-dimension</p> <p>Public sector driven regional management</p> <p>Establish own organisations (e.g. Promote Shetland)</p>

SIC as a development constraint

Whilst SIC's leadership has clearly played an enabling role, paradoxically it has also had some constraining effects. Most importantly, it may have inadvertently aggravated the crucial weakness of Shetland's emerging rural web: the lack of local ownership and collaboration. As noted above, the strong public sector leadership may have precluded the need for local actors to take control of development processes. Maree Hay (2010, personal com.) of the Northmavine Community Development Company observes that although SIC should be "*the last port of call*" for those seeking to start businesses or development initiatives, it has historically been "*the first port of call*," creating a "*lethargy for development*", as people tend to give up their ideas when SIC funding is not available. Simpson (2010, personal com.) compares this to the situation of the Orkney Islands where the local authority does not possess the same level of funding capacity and yet "*there is far more of a natural entrepreneurial spirit.*"

In addition, the public sector tends to draw workforce away from the other sectors such as farming and fisheries as it offers higher wages and better working conditions (D. Irvine 2010, personal com.; Hay 2010, personal com.; Isbister and Black 2010, personal com.:

Simpson 2010, personal com.). Today public administration provides 4,196 full- and part-time jobs out of the total of 12,244: almost 1 in every 3 jobs (SIC 2008: 13). Any attempt to increase processing in Shetland, which is crucial to the branding of meat and fish products, for instance, faces the challenge of competing with this powerful employer in the labour market.

Aware of the need to enhance private-sector ownership and collaboration, SIC has sought to play a facilitating/mediating role to bring businesses and development stakeholders together. The Food Festival and Industry Panels are prime examples. Given its resources and leadership, SIC may be seen to be in the best position to tackle this formidable task. Yet, as in the case of regional branding, efforts to stimulate local initiatives may need to emerge from local actors themselves, as state-led efforts tend to be regarded with a degree of scepticism. Shetlanders' attitudes to SIC have recently been marked by varying degrees of "mistrust" (Hay 2010, personal com.), especially since the widely publicised controversy involving the previous Chief Executive David Clark who was paid £306,000 to leave his post after a contentious eight months in office. The incident seems to have caused considerable damage to Shetlanders' often-ambivalent view of the Council.¹⁹

It is important, however, that such critique should not be equated with a neoliberal endorsement of laissez faire economy. The public sector could play a vital role in facilitating local actors to come together to collectively negotiate and pursue a common development vision. In other words, the public sector could make crucial contributions to the creation of a public sphere in the Habermasian sense which constitutes a realm of dialogue, consensus and collective action (Habermas 1987). The challenge here is the lack of such a public sphere. As we have discussed elsewhere (see van der Ploeg and Marsden 2008), policy is simultaneously a potential instrument for carving a collective development actor-space and a site of struggle between competing interests and agendas. Policy as a mechanism of distribution of state power and resources is necessarily implicated in the question of access to such power and resources. By reflecting or buttressing the interests of selected segments of society, state intervention could replicate existing local socio-economic disparities. Indeed, previous studies of state interventions such as the LEADER programmes in Germany and the UK have pointed out that these were prone to being captured by local elite groups or those groups and individuals who already possessed knowledge, influence and power (Bruckmeier 2000; Shucksmith; see also Ray 2000; McAreavey 2006). We have noted the perception that exists amongst some Shetlanders that public funding is not evenly distributed. This absence of a Habermasian public sphere is indeed at the core of the present controversy over the wind farm project: SIC is seen as a partial player and thus unable to facilitate genuinely open collective discussion of the project. We have also noted that SIC tends to be seen as a powerful economic sector in itself, exercising power over the other sectors and over local

¹⁹ Clark faced an allegation that he threatened a councillor with violence during his term (of which he was later cleared) and other allegations about his personal life in a tabloid newspaper (*The Scotsman* 2010a). In February 2010, 150 residents staged a march from the Market Cross to the Town Hall in Lerwick to protest against the pay-off (*The Scotsman* 2010b).

communities: SIC policies are at times perceived to be “wrong-headed, high-handed and immovable” (Primrose’s 2004: 8) rather than a medium of collective exploration and pursuit. Hence our study suggests that what is required for the success of Shetland’s new development vision is not anti-state-interventionism but cultivation of a genuine public sphere. The key question here is not whether to denounce public funding and leadership altogether but *how* to use these valuable resources. For Shetland to successfully negotiate the “post peak oil” future by exploring the potentials of an eco-economic/bio-economic/intermediate development strategy, the privileged assets of the public sector should be used in a manner that fosters development as a process of collective exploration, owned and claimed not by an assumed monolithic local “community” but by many “communities of interest,” with an acknowledgement of their “highly unequal capacities to act” (Shucksmith 2000:208).

5. Domains of the rural web

5.1 Socio-economical conditions and trends

The general socio-economic landscape of Shetland does not seem to have undergone significant change since our initial study. 2008/9 figures are not available for some sectors such as fish processing, public administration, tourism and knitwear, and therefore the exact sectoral breakdown of the current Shetland economy does not exist. But the available data point towards the continuing significance of combined fisheries as the largest sector. Fisheries was also the third largest employer accounting for 1,067 jobs in 2007 (SIC 2009: 13). Public administration is the second largest sector and the largest employer, employing 1 out of every 3 workers in Shetland. There have been new developments in the oil industry, the third largest sector. In March 2010, SIC reached an agreement with the French oil company Total, allowing it to build a £500m gas terminal at Sullom Voe, which is expected to generate lease and spin-off incomes worth £200m over the years (*The Shetland Times* 2010b). This is likely to expand the life of the industry and may reduce the sense of urgency for new business approaches amongst some development actors (such as those in tourism). Agriculture, as in the previous years, appears to be stable yet stagnating (SIC 2009). Faced with the cost-price squeeze coupled with geographical remoteness, some farmers are choosing to shift towards self-sufficiency (Eunson 2010, pers.com). In short, as far as the existing statistics suggest, Shetland today remains dependent on the three key conventional sectors of fisheries, public administration and oil, and is yet to make a notable shift towards a dynamic, multi-sectoral and multi-functional economy of its new development vision.

5.2 Institutional arrangements

Our follow-up research suggests that this domain continues to be of central importance. SIC and the wider public sector provide the strategic, political and financial RD framework through the provision of funding for local business and through the formulation and implementation of state-led, multi-stakeholder and public-private partnership projects such as the Food Festival and the branding strategy. Thus this remains a predominantly state-led institutional alignment. In the private sector, the domain has uneven significance. Fisheries appears to be supported by a well-established institutional framework with an effective synergy with the bonding social capital of the producer community. By contrast, in agriculture, SLMG, Shetland’s only agricultural

cooperative, has experienced financial and management crises since the departure of a visionary leader, which has halted its ambitious branding initiative. Tourism and knitwear also appear to lack effective institutional frameworks that are capable of engaging all industry players for the purposes of branding or other types of entrepreneurial collaboration. Weak linkages with social capital seem to be the key constraint here. In short, although this has been the core RD domain in Shetland, it also contains internal weaknesses that could potentially threaten the durability of the wider rural web.

5.3 Endogeneity

Like institutional arrangements, endogeneity is a key RD domain in Shetland: the Shetland economy has historically relied on the mobilisation of its natural (particularly oil and marine) resources. The emerging development vision seeks to place an even greater emphasis on this domain by renewing and exploring the potentials of other resources in agriculture, tourism and knitwear with a central focus on their territorial embeddedness. This domain is currently undergoing some crucial developments. The wind farm project represents an attempt to exploit on a vast industrial scale an ecological resource more or less untouched to date. This could have different implications for the unfolding of the web. On the one hand, the project advances Shetland's endogenous development agenda to a new level, creating an ever greater scope for economic and environmental self-sufficiency of local communities. On the other hand, it is not clear whether the project, in its current form and structure, entails genuine local autonomy and control over these resources. As we noted in our initial study, the oil/gas resource mobilisation has been under the control of international capital such as BP, Shell, and now Total, and its profit for local communities is managed by SIC. Some Shetlanders regard the wind farm project in the same light despite the 45% ownership by SCT, doubtful that this public sector organisation truly represents the interests of wider local communities. In sum, the prospects of this domain are mixed, with much to be determined by the outcome of the wind farm project.

5.4 Governance of markets and novelty

These two domains are of emerging importance in the unfolding of Shetland's rural web. The new development vision rests on an innovative market governance strategy that redefines Shetland products as novelties, that is, high quality niche products with a scarcity value. The recent developments in these domains are uneven. SLMG's attempt to turn Shetland lamb from an anonymous mass product into an exclusive brand has failed to gather momentum; but the cooperative is pursuing another innovative market governance strategy to explore the potential of local markets. Knitwear seems to have made a substantial move towards high quality markets, but it is yet to fully explore the potential of novelty production in making a creative link between traditional and modern knitting. The progress in tourism appears to be generally slow, with many businesses continuing to rely on its conventional markets, although the increased attention to local food implies that a change in direction may be starting to take place, especially with the support from SIC and its branding strategy. Fisheries has been managing its market position with relative success despite the constraints of the CFP reform and quota allocation, with its focus on quality in general and the establishment of the new auction system in particular. Whilst formal branding may not have the same level of significance

to this sector, the introduction of an electronic auction system and the innovative attempt to use this as a medium of capturing exclusive markets indicates a step towards repositioning of Shetland fish as a coveted novelty. There are, then, both positive and negative developments in these domains. There are (often isolated) elements of innovation and entrepreneurship across the sectors, and the primary challenge is to sustain and align them into coherent and strategic networks within individual sectors and ultimately across the sectors to facilitate overarching regional branding.

5.6 Social capital

This domain continues to be the key missing link in Shetland's emerging rural web. Although the powerful public-sector-led institutional framework with its vast financial and political resources has long acted as a stand-alone development driver, to which much of today's Shetland's economic prosperity is owed, the relative absence of local ownership and cooperation renders the functioning of institutional arrangements precarious in the context of locally-led initiatives. This is evidenced most clearly by the case of SLMG, but also knitwear and tourism to some extent. We have already noted that the absence of local actor participation should not be equated with the absence of social capital as such. Shetland has a wealth of *bonding* social capital grounded in strong territorial identity and community spirit. What seems to be missing is the effective mobilisation of this asset: as we have seen, the private leadership of visionary entrepreneurs is nested in social capital but not powerful enough to make a substantial difference. As well, the conflict (and at times animosity) that exists between those of opposing development visions and interests, as in the cases of agriculture and the wind farm project, implies that *bridging* social capital may be crucially lacking. Finally, our analysis of the public sector leadership (see above) suggests that, despite the prominence of public-private partnerships in Shetland, *linking* social capital may be unevenly cultivated or mobilised. Overall, social capital as a RD domain remains notably underdeveloped, the greatest threat to the successful unfolding of the rural web.

5.7 Sustainability

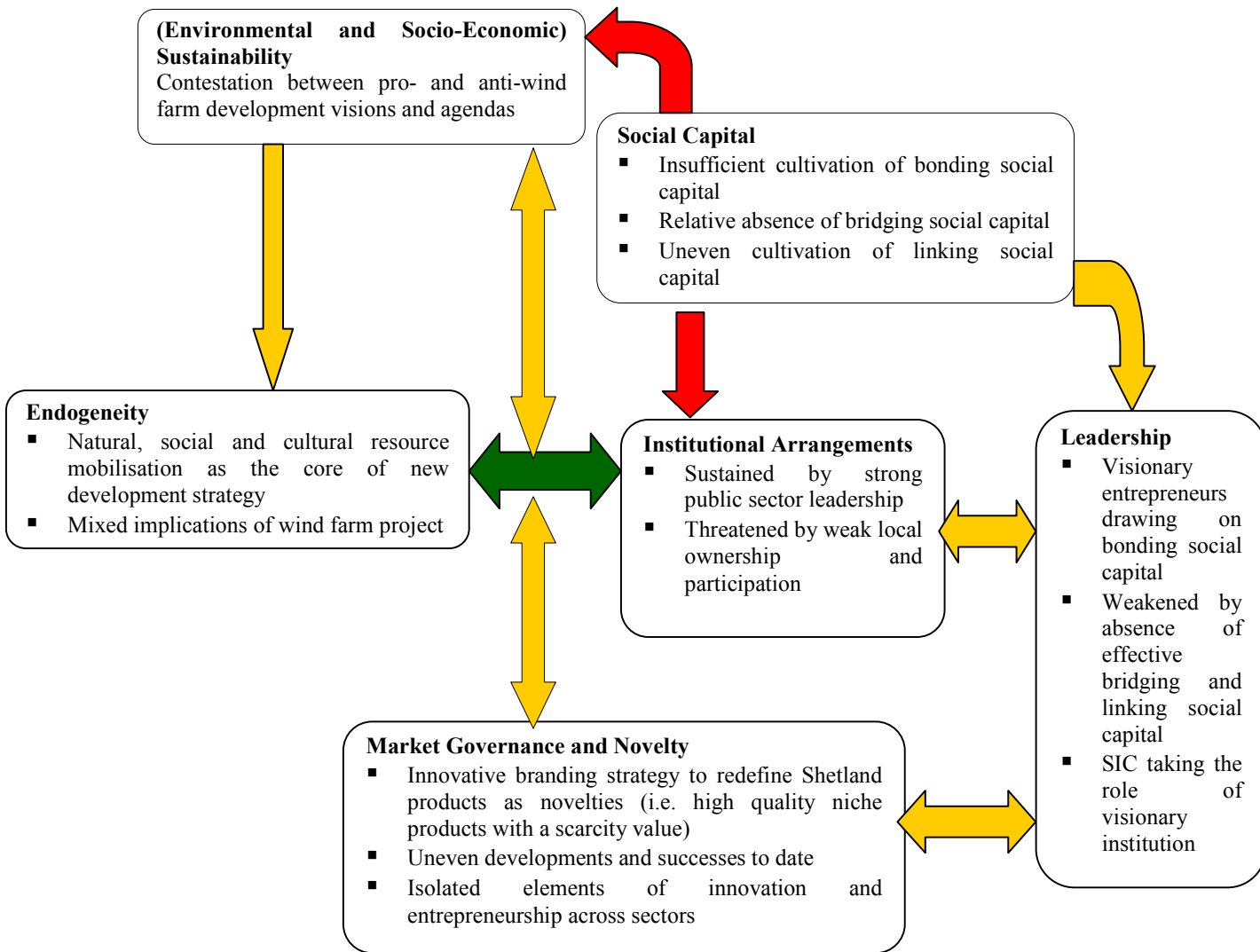
In our initial study, we observed that this domain had the potential to rise to the primary importance in Shetland's rural web and highlighted the wind farm project as a key crossroads that needed to be negotiated successfully. Today Shetland is yet to determine the direction to take. Our follow-up research suggests that there is a considerable amount of conflict and confrontation between the two opposing interpretations of the project. Sustainable Shetland opposes the project as a bio-economical one removed from and contradictory with smaller-scale, community-led eco-economical initiatives and practices, in contrast to Viking Energy and supporters who see a strategic synergy between the two. Combined with the problematic role played by the public sector, the contestation between the two groups and agendas does not seem to show any sign of resolution in the near future. Both the environmental and the socio-economic sustainability implications of this project are debated, and their linkages with the other RD domains are also ambiguous: an emphasis on renewable energy is clearly in agreement with the logic of the emerging eco-economical development agenda, yet other elements of this project (e.g. the scale, ownership structure, political intervention) make its relationship to the eco-economical vision rather uncertain. Consequently this domain remains fragmented and contested.

5.9 The rural web, vital coalitions and the quality of life

The foregoing discussion shows that Shetland's rural web is still in its formative stage, with its outlines emerging in parts yet also fragmented and threatened with fissures. The domains of endogeneity and institutional arrangements remain the core, but our follow-up study suggests that these are also potentially weakened especially by the missing "cement" of social capital. The domains of market governance and novelty, the successful development of which is essential to a more dynamic web, are showing both significant potentials and considerable challenges. Sustainability, despite its potential to make a decisive impact on the advancement of the eco-economical agenda, is yet to fulfil this potential, and its future prospects are uncertain. Two inter-related factors seem to mediate this domain configuration: the lack of entrepreneurial coalitions and the contradictory role of the public sector. Statistically Shetland already enjoys a privileged quality of life; but this is under threat today, not only because of the eventual end of the oil money, but more importantly because Shetland is struggling to draw these RD domains together under a common development vision. Collective exploration of and consensus on the wind farm project in particular and wider eco-/bio-economical development agendas in general is the most urgent task. The diagram below summarises the current state of the web (see Figure 18.).

Figure 18. Current State of Shetland's Rural Web

Green arrow: Strong link
 Red arrow: Weak link
 Yellow arrow: Mixed links (potentials and threats)



6. Recommendations

Based on the preceding discussion and analysis, as well as the views expressed by our key informants, we present the following recommendations for Shetland's development stakeholders to consider:

- Wind farm project:

There is an urgent need for a “public sphere,” distinct from the “public sector,” to facilitate an open and sustained forum for Shetlanders to debate and reach a consensus on the future of the project. Whilst a social scientific survey or a political referendum may be an effective tool of measuring resident views, a process of meaningful and participatory discussion is vital to the future of renewable energy production and eco-economical development in Shetland. Community groups and grassroots initiatives for local democracy may play an important role in facilitating this process.

- Sectoral collaboration

Collaboration between entrepreneurs in agriculture, knitwear and tourism should be strengthened. SIC may consider financing temporary staff positions to facilitate cooperation without taking over private responsibilities or providing financial support to locally-led projects and initiatives to facilitate collaboration.

- Cross-sectoral collaboration

A new institutional mechanism for the promotion of cross-sectoral collaboration should be developed, taking into account the limitations of the former Local Economic Forum. SIC may take a facilitating role, but private-sector leadership is vital for the success of such a mechanism.

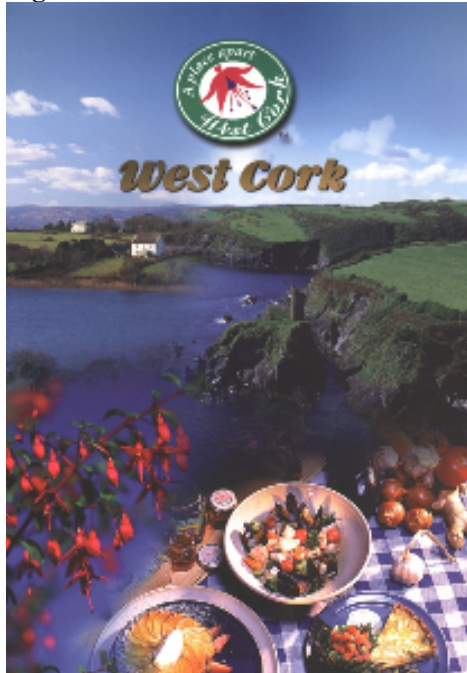
- Cross-sectoral branding via local food promotion:

Whilst progress has been made to link the food and drink and tourism sectors, with tourist institutions and restaurants such as the Museum, the Scalloway Hotel, and Monty's Bistro leading the way, there is scope for Shetland meat and seafood to be linked more strongly with tourism. Formulation of a generic food promotion strategy, combined with measures to enhance ‘market intelligence’ amongst entrepreneurs, may be useful. Insights may be drawn from a number of European regions. Some prominent examples are listed below:

The Fuchsia initiative in Cork

The Fuchsia brand (see Figure 19) is a quality regional brand for products from West Cork Ireland. Not only food but also craft and tourism products such as four-star hotels are marketed under the same brand and are required to meet high standards of quality and services. Almost 200 local businesses are currently permitted to use the logo and take part in a West Cork LEADER marketing and development programme, which also includes the training of entrepreneurs. Fuchsia Brands Ltd is a development initiative of the West Cork LEADER Co-operative Society Ltd (A Place Apart – West Cork, no date).

Figure 19. The Fuchsia brand in Cork



The South Downs initiative

The South Downs is located in Sussex and Hampshire, south of London (Figures 20 and 21). The goal of the South Downs Joint Committee, which joins 15 local councils, is to restore 10% of the calcium-rich meadows with high biodiversity by grazing with a high quality South Down sheep breed, which also generates added income for local farmers. A marketing organisation facilitates the marketing of lambs produced by 28 entrepreneurs under the South Downs logo. The meat is processed in a newly-built local slaughterhouse and sold in by 15 butchers in the region at a premium price. As the price is determined by production costs, logistics and processing rather than the buyer, the farmers receive an extra £8-9 per kilo.²⁰ The South Down Lamb Pledge is underpinned by a set of protocols to which all members adhere and which are enforced by a system of random spot checks (The Southdown Sheep Society, no date).

²⁰ Information based on a knowledge-exchange excursion organised by the Dutch region Green Forest and South Downs under the European project Lifescape - Your Landscape, 2006. For more information, see the branding guide for European quality products (<http://www.lifescapeyourlandscape.org/images/files/products/Branding%20the%20Landscape.pdf>).

Figure 20. The coastline of the South Downs



Figure 21. South Down lambs



- **Public food procurement:**

Initiatives for the relocalisation of food chains such as those demonstrated by SLMG may be further stimulated by linking the food and drink sectors with public food procurement. The public sector, being the largest employer in Shetland, has the potential to make significant contributions in this area. The use of local produce in SIC and statutory organisations such as local schools, hospitals, care homes, and leisure facilities should be looked into.

- **Agricultural research:**

Agriculture in Shetland is in a specific position due to its high transportation and production costs and local production circumstances (related to its soil, climate, landscape, etc.). Given this specificity, policies should be based on accurate local data, which are not currently available. More empirical research should be conducted to shed light on the current status of the sector.

- Promotion of entrepreneurship:

Mechanisms should be put in place to support and develop entrepreneurship, for instance, a mentoring programme to allow sectoral and cross-sectoral actors to share experiences and knowledge.

7. Conclusions

The present study has been an attempt to further our understanding of the dynamics, achievements and challenges of Shetland's development trajectory. In doing so, we have employed the rural web theory as an overall analytical framework, complemented by other relevant rural/regional development theories and concepts. Our discussions have been guided by the three key questions identified at the outset of this study. Below is a brief summary of our findings in relation to these questions.

Will new activities and initiatives such as the branding strategy and the wind farm project be part of an eco- or bio-economical development strategy in Shetland?

We have identified eco-economical tendencies in Shetland's emerging rural web, crystallised in the new development strategy of shift from mass commodity production to branded, value added production. This strategy envisions Shetland's "initial endowments" of endogenous resources to be mobilised in an innovative manner, capitalising on the territorially specific qualities of Shetland meat, tourism, knitwear and other products. In other words, the rural web, consisting of positive interrelations between *endogenous* resources, effective *institutional arrangements* for their mobilisation, creative *market governance* strategies and *novelty* production, is expected to culminate in a multi-sectoral rural economy resting on a diverse set of socio-ecological goods and services. The progress to date has been mixed. On the one hand, we have noted the slow developments within tourism, the cessation of SLMG's processing/marketing initiative in agriculture, the labour shortage and absence of an overarching and protected brand in knitwear, and the limited relevance of such a strategy in fisheries. On the other hand, we have also highlighted some positive developments, such as SLMG's focus on local markets, fisheries' successful operation of an electronic auction system, and the strategic connections that are being made between tourism and local food.

The relevance of a bio-economical development agenda is less clear. Here the most significant recent development is the intensifying controversy over Viking Energy's wind farm proposal. There is a considerable amount of conflict and contestation between two opposing interpretations of the project – i.e. one that defines the wind farm as a bio-economical enterprise inherently contradictory with the principles and values of eco-economical development, and the other that sees the project as containing some bio-economical elements but also checked by local community ownership and therefore capable of facilitating a strategic interface between bio-economical and eco-economical agendas. Given the magnitude of its environmental, economic and social sustainability implications, the project has the potential to make a critical impact on Shetland's future development trajectory.

Hence it is not clear at this stage whether Shetland's "post peak oil" future will be shaped

by an eco-economical or bio-economical development agenda (or by both). This will depend largely upon Shetlander's collective development vision and the future of the wind farm project – whether or not it actually goes ahead, and if it does, what form and structure it takes in the end.

What is the role of the public sector leadership in advancing a bio/eco-economical development agenda in Shetland? Does SIC as a primary development actor harness or constrain local actor collaboration and entrepreneurship?

Shetland's key eco-economical tendencies are located in and around regional branding initiatives, the most clearly articulated of which is SIC's 2003 branding strategy. In this regard, the public sector, especially SIC, has played a crucial role in shaping and promoting a possibly eco-economical development agenda in Shetland. However, SIC's branding strategy has faced a number of challenges since its launching. In addition to financial, technical and organisational difficulties which have hampered its full implementation, the relative lack of local ownership seems to have undermined its effectiveness. Similarly, SIC's leadership appears to have had double-edged effects on the entrepreneurial collaboration and networking amongst local actors. SIC previously promoted cross-sectoral collaboration through the Local Economic Forum (which has since been discontinued) and currently focuses on sectoral collaboration, which it promotes through the establishment of the "Industry Panels." But as in the case of regional branding, SIC's conspicuous role as a development driver may have inadvertently diminished the need and the space for local actors to take full control of development processes.

We have stressed that such observations should not be equated with a neoliberal endorsement of laissez faire economy. The public sector could play a vital role in cultivating a public sphere for local actors to come together to collectively negotiate and pursue a common development agenda. The challenge here is the lack of such a public sphere – a challenge that is compounded by some perception of impartiality in SIC's funding and policy-making activities. In addition, Shetlanders' current attitudes towards SIC seem to be affected considerably by the recent controversy involving the former Chief Executive. Hence for Shetland to successfully negotiate the "post peak oil" future by exploring the potentials of an eco-economic/ bio-economic/intermediate development strategy, the privileged assets of the public sector should be employed in a manner that fosters a genuinely inclusive public sphere as a space for collective reflection, debate and action.

What are the existing constraints and support for new vital (private-private, public-private) coalitions rooted in social capital and leadership aimed at a new overarching future (bio-/eco-economic) agenda?

With a notable exception of fisheries, Shetland's emerging development strategy faces a difficult task of cultivating entrepreneurial collaboration and networking. This should not be taken to mean that Shetland is lacking in social capital or a sense of community; on the contrary, Shetland has a wealth of bonding social capital grounded in strong territorial identity and community spirit. Effective mobilisation of this asset, however, seems to be lacking. In addition, bridging and linking social capital appears to be unevenly cultivated,

as evidenced by the conflict between opposing development visions and interests in agriculture and the wind farm project. We have noted that this lack of collaboration may be due to a combination of socio-cultural, historical, economic, political and institutional factors, which makes it an extremely complex development challenge.

Currently there seems to be an absence of statutory or private-sector-led frameworks to address this issue. The public sector, as noted above, plays an ambivalent role, whilst there are no private-sector-led institutional arrangements such as a chamber of commerce. However, inspiration may be drawn from the progress made by the ongoing efforts of some locally-led initiatives such as SLMG. We believe that the most urgent task today is to facilitate a forum for Shetlanders to debate and reach a consensus on Shetland's future development agenda in general and the future of the wind farm project in particular.

In conclusion, Shetland's rural web is yet to take its full shape; its future dynamics and the direction of its unfolding are largely indeterminate. Shetland stands at a crossroads today and needs to make some critical collective decisions – whether its future should be guided by an eco-economical/ bio-economical/hybrid development agenda, whether and how Shetland food, knitwear, tourism, and/or seafood can be repositioned as high quality niche products, whether and how the wind farm project will fit into an overarching development vision. The public sector leadership, despite its crucial contributions in the past, is not sufficient to answer these vital questions. Hence it has never been more important for Shetlanders to make creative use of their unique assets – not only their natural, socio-cultural and ecological heritage to pursue a new development strategy, but also their unique bond as an island community bound by its common history and future to collectively negotiate and formulate such a strategy. In this critical task, the public sector and local actors and communities have equal significance and contributions to make.

8. References

Advertising Standards Authority (2009) *ASA Adjudication on Viking Energy Partnership*. [Available Online] http://www.asa.org.uk/Complaints-and-ASA-action/Adjudications/2009/11/Viking-Energy-Partnership/TF_ADJ_47582.aspx.

Anex, R (2004) Something new under the sun? The industrial ecology of biobased products. *Journal of Industrial Ecology*, 7,3-4,1-4.

Bruckmeier, K. (2000) LEADER in Germany and the Discourse of Autonomous Regional Development. *Sociologia Ruralis* 40 (2) 219-227.

Busta House Hotel (no date) *Food*. [Available Online] <http://www.bustahouse.com/features/62/food>.

Corporate Edge (2003) *Project Selkie: the Recommended Brand Strategy for Shetland Report*.

e-architect (2008) *BDP's Shetland Museum Wins Top Prize At Wood Awards*. [Available Online] http://www.e-architect.co.uk/scotland/shetland_museum.htm.

EPIQ (no date) *Dutch Auction*. [Available Online] http://www.epiqtech.com/auction_software-Dutch-Auction.htm.

European Geoparks Network (no date) *Appendix A1 : Shetland's Economy* [Available Online] http://www.europeangeoparks.org/repository/photos/135_Sheland_A1_Sheland's_Economy.pdf. Accessed 30 June 2010.

A Place Apart – West Cork (no date) *Welcome to West Cork - A Place Apart* [Available Online] <http://www.fuchsiabrands.com/>. Accessed 28 July 2010.

Fort, M. (2008) Shetland on a Plate: the inaugural Shetland Food Festival took place this month. About time, says Matthew Fort - the islands' culinary heritage is well worth celebrating. *The Guardian*. 25 October 2008. [Available Online] <http://www.guardian.co.uk/travel/2008/oct/25/shetland-food-festival?page=2>.

The Guardian (2010) Oil Companies Welcome Tax Breaks for Development of Shetland Fields. 27 January 2010. [Available Online] <http://www.guardian.co.uk/business/2010/jan/27/oil-firms-shetland-tax-breaks>.

Guba, E. G. and Lincoln, Y. S. (1981) *Effective Evaluation: Improving the Usefulness of Evaluation Results through Responsive and Naturalistic Approaches*, San Francisco: Jossey-Bass Publications.

Highlands and Islands Enterprise (HIE). (2007) *Economic Update: Highlands and Islands*. April 2007.

Habermas, J. (1987b) *The Theory of Communicative Action, Vol. 2, Lifeworld and System: A Critique of Functionalist Reason*, Boston: Beacon Press.

HAVRA (no date) *The Hand-Made Fish Company*. [Available Online] <http://www.havra.co.uk/handmadefish.shtml>.

Horlings, I. (2010) *Vital Coalitions; partnerships for rural regional development*, Wageningen Academic Publishers, Wageningen.

Horlings, I. and Marsden, T. (2010) *Pathways for Sustainable Development of European Rural Regions: Eco-Economical Strategies and New Rural-Urban Relations*. Working paper, published on the BRASS website, <http://www.brass.cf.ac.uk/>

Juma, C and Konde, V (2001) *The new bio-economy: industrial and environmental biotechnology in developing countries*. New York: United Nations Conference on Trade and Development.

Kanemasu, Y., Sonnino, R. Marsden, T. K. and Schneider, S. (2008) Testing the Web: A Comparative Analysis. Pp.175-208, in J. van der Ploeg and T. K. Marsden (eds) *Unfolding Webs: The Dynamics of Regional Rural Development*. Assen: Van Gorcum.

Kitchen, L and Marsden, T.K (2009) Creating Sustainable Rural Development through Stimulating the Eco-Economy: Beyond the Eco-Economic Paradox? *Sociologia Ruralis*, 49: 273-295.

Lather, P. A. (1991) *Getting Smart: Feminist Research and Pedagogy With/in the Postmodern*, New York: Routledge.

Lincoln, Y. S. and Guba, E. G. (1985) *Naturalistic Inquiry*, Beverly Hills: Sage Publications.

The List (no date) *Hand-Made Fish Co.* [Available Online] <http://www.list.co.uk/place/25021-hand-made-fish-co/>.

Marsden, T., Murdoch J., Lowe, P., Munton, R. and Flynn, A. (1993) *Constructing the Countryside*. London: UCL Press.

Marsden, T. (2010) *Mobilising the regional eco-economy: evolving webs of agri-food and rural development in the UK* Cambridge Journal of Regions, Economy and Society, in press.

McMichael, P (2009) Banking on Agriculture: A Review of the World Development Report 2008. *Journal of Agrarian Change*, 9 (2): 235-246.

Mol, A (2007) Boundless Biofuels? Between Environmental Sustainability and Vulnerability. *Sociologia Ruralis*, 47 (4): 297-316.

Morgan, K. and Morley, A. (2007) *Cultivating Provenance: The Local Food Challenge in Shetland*. The Regeneration Institute, Cardiff University.

MOVE.SHETLAND.org (2009) *New Body Will Promote Shetland*. [Available Online] <http://move.shetland.org/april-2009-newsletter>.

Murdoch, J., Lowe, P., Ward, N. and Marsden, T. (2003) *The Differentiated Countryside*. London: Routledge.

NOMIS Official Labour Market Statistics (2009) Available Online.
< <https://www.nomisweb.co.uk/> >

Primrose, D. (2004) *Skills Survey Hospitality, Tourism and Service Sector Service Delivery and Skills Gaps*.

Saxa Vord. 2004. *Shetland's Culture*. [Available Online] <http://www.saxavord.com/shetland-culture.php>. Accessed 30 December 2008.

Simpson, J. and Stalker, M. (2004) *Shetland's Food & Drink Sector: Workforce Development Plan and PESTLE Analysis*. Report to Shetland Local Economic Forum Skills and Learning Subgroup September 2004.

The Scotsman (2010a) "Council Slammed over £300k Payoff for Controversial Chief." 7 May 2010. [Available Online] <http://thescotsman.scotsman.com/news/Council-slammed-over-300k-payoff.6279256.jp>.

The Scotsman (2010b) "Islanders Demand Council Stands Down in March on Offices." 23 February 2010. [Available Online] <http://thescotsman.scotsman.com/scotland/Islanders-demand-council-stands-down.6094601.jp>

Shetland Charitable Trust (2009) *Trustees' Report and Consolidated Financial Statements*, 31 March 2009.

Shetland Development Trust (2007) *Activity Report 2007*.

Shetland Enterprise, Shetland Islands Council and Highlands and Islands Enterprise. (2005) *Opportunities for the Future of the Shetland Economy*.

Shetland Fishermen (no date) *Shetland Fishermen*. [Available Online] <http://www.users.zetnet.co.uk/sfa/>. Accessed 25 June 2010.

The Shetland Food Directory (no date) *The Hand-Made Fish Company*. [Available Online] <http://www.foodshetland.com/listing.php?cat=7&p=350>. Accessed 1 July.

Shetland Islands Council (2000) *The Shetland Structure Plan 2001-2016*. Infrastructure Services, Grantfield, Lerwick, Shetland.

Shetland Islands Council (2007a) *Shetland in Statistics*, Economic Development Unit, Shetland Islands Council, 34th Edition.

Shetland Islands Council (2007b) *Sustaining Shetland: Annual Monitoring of Social, Economic, Environmental and Cultural Trends*.

Shetland Islands Council (2008) *Sustaining Shetland: Annual Monitoring of Social, Economic, Environmental and Cultural Trends*.

Shetland Islands Council (2009) *Shetland in Statistics*. Lerwick, Shetland.

Shetland Islands Council (no date) *News Bulletin: Promote Shetland*. [Available Online] <http://www.shetland.gov.uk/news-advice/prdev0528.asp>.

The Shetland News (2008) Go Ahead and Build Mareel! *The Shetland News* 26 June 2008. [Available Online] <http://www.shetland-news.co.uk/features/Go%20ahead%20and%20build%20Mareel.htm>.

The Shetland Times (2010a) Windfarm Developer Given Permission to Keep Test Mast Despite Conflict of Interest Dispute. 25 June 2010. [Available Online] <http://www.shetlandtimes.co.uk/2010/06/02/windfarm-developer-given-permission-to-keep-test-mast-despite-conflict-of-interest-dispute>.

The Shetland Times (2010b) Shetland Islands Council and Total Seal Deal for £500 Million Gas Terminal. 19 March 2010. [Available Online] <http://www.shetlandtimes.co.uk/2010/03/19/shetland-islands-council-and-total-seal-deal-for-500-million-gas-terminal>.

Shucksmith, M. (2000) Endogenous Development, Social Capital and Social Inclusion: Perspectives from LEADER in the UK. *Sociologia Ruralis* 40 (29), 208-219.

Sotarauta, M. (2002) Leadership, Power and Influence in Regional Development. A Tentative Typology of Leaders and their Ways of Influencing. In: M. Sotarauta and H. Bruun Nordic (eds.), *Perspectives on Process-Based Regional Development Policy*. Stockholm: Nordregio, 182-207.

Sotarauta, M. (2005) Shared Leadership and Dynamic Capabilities in Regional Development. In: I. Sagan & H. Halkier (eds.), *Regionalism Contested; Institution, Society, Governance*, Ashgate: Aldershot, 53-72.

The Southdown Sheep Society (no date) The Southdown Sheep Society. [Available Online] <http://www.southdownsheepsociety.co.uk>.

Sustainable Shetland (no date) Sustainable Shetland [Available Online] <http://www.sustainableshetland.org/index.htm>.

van der Ploeg and Marsden, T. (eds) (2008) *Unfolding "Webs": Enlarging Theoretical Understanding of Rural Development*. Assen, the Netherlands: Van Gorcum.

Van Ostaaijen, J., Horlings, I. And H. Van der Stoep (2010). In: Horlings, I. (Ed.) *Vital Coalitions, vital regions; partnerships in sustainable regional development*. Wageningen Academic Publishers, Wageningen, 157-174.

Viking Energy (no date) *News* [Available Online] <http://www.vikingenergy.co.uk/news-detail.asp?item=20>

Wang, M.Q. (2004) A product-nonspecific framework for evaluating the potential of biomass-based products to displace fossil fuels. *Journal of Industrial Ecology* 7 (3-4) 17-32.

WRR (1998). *Staat zonder land. Een verkenning van bestuurlijke gevolgen van*

informatie- en communicatietechnologie. WRR, Den Haag: the Netherlands.