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Sustaining supply chain relationships for co-operative success: the case of South Devon Organic Producers Co-operative (UK)

CASE STUDY

Adrian R. Bailey[Ⓐ], Jia Fu[Ⓑ], Hao Dong[Ⓒ] and Tomas Sparano Martins[Ⓓ]

[Ⓐ]*Senior Lecturer in Management, The University of Exeter, Department of Science, Innovation, Technology, Innovation, and Entrepreneurship (SITE), Streatham Court, Rennes Drive, Exeter, EX4 4PU, United Kingdom*

[Ⓑ]*Professor of Supply Chain Management, University of York, York Management School, Freboys Lane, York, YO10 5GD, United Kingdom*

[Ⓒ]*Research Fellow, The University of Southampton, Centre for Applied Science in Project Management, Department of Decision Analytics and Risk, Highfield Campus, Southampton, SO17 1BJ, United Kingdom*

[Ⓓ]*Professor of Marketing, Univesidade Federal do Paraná, Department of Business Administration, Av. Prefeito Lothário Meissner, 632 – 2º andar – Jardim Botânico, Curitiba, PR 80210-170, Brazil*

Abstract

Co-operatives play a vital role in supplying various goods and services in the UK, as well as in other parts of the world. In the past twenty years co-operatives have become important players in modern organic food supply chains, providing small-scale farmers with access to knowledge and markets, alongside opportunities to scale up their production. This teaching case is developed from qualitative interviews with current and former members and employees from the South Devon Organic Producers (SDOP) Co-operative, an award-winning organic vegetable grower co-operative based in South Devon (UK). The case is supplemented with interviews with key managerial personnel at the SDOP's main stakeholder Riverford Organic Farms Limited. The case explores how the relationship between SDOP and Riverford is the key to understanding SDOP's participation in the organic food chain.

Keywords: agriculture, co-operative, farmer, organic, supply chain

JEL code: Q12, Q13, Q15

[Ⓐ]Corresponding author: a.r.bailey@exeter.ac.uk

1. Introduction

This case study explores the challenges and opportunities facing co-operatives that are anchored in a supply chain relationship with a dominant focal customer. The case begins by exploring the context of organic production in the UK and the challenges for small scale organic farms. The proceeding section presents a creative fiction, blending data from farmer interviews to explain the origins of the South Devon Organic Producers (SDOP) co-operative. The case then explores the development of a buyer supplier relationship through the historical development of Riverford Organic Farms Limited and SDOP. The case concludes by exploring the supply chain relations and challenges faced by SDOP.

1.1 Organic production in the UK

Converting to organic production can be a value-added strategy for small farms, even though some of the economic benefits are offset by higher labour costs than conventional agriculture. At the end of 1996, there were approximately 50,000 hectares of organic land in the UK, with fruit and vegetables accounting for 5% of this total (House of Commons, 2001). In 2016 the amount of organic land and land in conversion to organic had risen to 507,900 hectares, of which just 2.38% was under fruit, nut and vegetable production (DEFRA, 2016). In April 1997, there were just 828 organic farms in the UK, rising to 3,695 agricultural producers in 2016 (DEFRA, 2016). The current trend, in line with all commercial farms in the UK, is for organic farms to increase in size (Soil Association, 2016). The trend is most pronounced in fruit and vegetable production, with supermarket retailers preferring to deal with fewer, larger suppliers. In 2014-15, vegetables constituted one of the most popular organic categories, accounting for 7.9% of the total UK organic market (Lobley *et al.*, 2005; Soil Association, 2016). The challenge for small producers is to remain competitive by finding ways to scale up to serve this market.

Scaling is a very important yet daunting task for small producers. Scaling up requires that local produce is sold through regional, national and even global markets. The challenge for small organic producers is that, in serving non-local markets, they find it difficult to replicate the advantages generated through direct sales to local consumers. Local food has become synonymous with alternative food discourses that champion short supply chains for their reduced environmental impacts and positive social and economic contributions to local communities. In contexts where there is popular consumer support for organic local food, demonstrating the economic, environmental and social benefits of non-local supply is an important consideration for farmers seeking to scale up. In addition to the challenges of maintaining a meaningful connection with distant consumers and demonstrating the sustainability of supply, farmers seeking to scale up are faced with high costs. What follows is the story of how one group of farmers attempted to meet these challenges.

2. The birth of a co-operative¹

You are the proud owner of 40 hectares of land in the South West region of the United Kingdom. Over several years of producing beef cattle, sheep and a few fodder crops, you have come to realise that you cannot maintain your preferred lifestyle of working full-time on your farm. Since purchasing the farm, you have had to undertake undesirable off-farm employment to supplement your meagre farm earnings. The options for diversification and adding value to your existing farm outputs are limited. There are high entry costs associated with alternative activities, such as diversification into food processing or developing local markets for your produce. When you are not worrying about how to pay your bills, you often reflect that conventional farming damages the environment. You would like to farm in a way that is healthier and more sustainable. As you approach your fortieth birthday you are looking to provide for your retirement so that you can continue living in an area that you have grown to love since a child.

¹ The following fictive narrative is a composite of several interviews with different farmers.

You are reasonably well educated with a diploma in agriculture, although your agricultural skills and wisdom far exceeds your ability to articulate what you know. You would like to be considered as a success by farmers in your locality, but you realise that profitability is not the only way to gain respect and social approval. A number of different motivations have now led you to look for opportunities to combine environmental and economic sustainability.

One evening you attend a meeting of local farmers in a traditional English public house. You gaze through the smoke-filled lounge and view a gathering of farmers, some of whom you recognise as small-scale livestock farmers. Over the far side of the room are some farmers who seem to know each other, you later find out that they come from large-scale farms. Some of the farmers are tenants leasing land, others own their land and quite a few both own and rent land. You recognise a few faces from your school days, but most of the farmers are strangers. Taking a seat, you listen to an entrepreneur named Guy Watson from Riverford Organic Farms, who invites you to join a co-operative to grow organic vegetables to supply his growing business. Guy is a neighbour whom you have known from your school days. You have grown a few vegetables on your farm in the past, but not on a large scale. Listening to Guy you are not convinced that your land is suitable and no-one in living memory has commercially grown vegetables in this region.

The whole proposal feels quite risky, yet a neighbouring farmer says that he has had success growing cabbages and swedes for Riverford and that he is going to give it a go. You have little understanding about how co-operatives work and you have never heard of the International Co-operative Alliance (ICA) values and principles (ICA, 2015), but you decide to take a chance. To supply vegetables, you will need specialist machinery, cold storage, transportation, knowledge, labour and access to markets; none of which you have. Guy promises that the co-operative will provide all these necessary resources. You need to buy share capital in the new co-operative, so your next call is to your bank to arrange a loan. You calculate that you might need around £15,000, which feels like a large risk for your small farm.

The case now goes on to describe the supply chain relationship that was created between Riverford and SDOP (Figure 1). This relationship has existed for over 20 years and exists as a success story of how a co-operative can help farmers add value to their outputs and sustain ways of life that they value. Co-ops nurtured by focal companies embody challenges, compromises and contradictions, but can be mutually beneficial for both parties.

3. Riverford Organic Farms Limited

John Watson took a lease on the Riverford Farm in 1951 to start his life as a dairyman. He married shortly afterwards and raised a family of five children who were nurtured in the culture of home produce and family meals around the kitchen table. The youngest son, Guy Watson, was educated at Oxford University with a first-class degree in Agriculture and Forestry Sciences and subsequently acted for a short time as a management consultant in New York. He returned to Riverford in the mid-1980s to grow organic vegetables for a burgeoning local market. Nearby is Totnes, the town famous for the Dartington Hall Trust, an institute established in the 1920s to educate people in the relationship between ecology and economy. Since 1990, the Trust has been the home of Schumacher College, which attracts people seeking alternatives to mainstream capitalist production and consumption. In this context Guy found a ready market for his produce. In 1987 the land was certified as organic and vegetable sales amounted to £6,000.

The Riverford business grew rapidly through the early 1990s supplying supermarkets, wholesalers and local customers. Supermarket buying practices, however, resulted in high levels of rejected produce, lots of waste and little or no relationship with the end-consumer. In 1993, dissatisfied with buyers' unethical practices, Guy transformed the Riverford business model into a doorstep box delivery scheme, imitating neighbours Tim and Jan Deane who had pioneered this method of direct supply two years previously.

Riverford	
1986	Guy Watson rents organic certified land from John Watson
1987	Land certified as organic by the Soil Association. First year sales of £6,000 through direct supply
1993	Riverford converts to doorstep delivery of vegetable boxes
SDOP	
Public meeting to recruit farmers	1997
Registered as an Industrial and Provident Society on 15 th July	1998
First application to EU Fresh Fruit and Vegetable (FFV) grant scheme	2005
Second application to EU FFV	2010
Third application to EU FFV	2015
Vegetable grower of the year: Horticulture Week Business Awards	2017

Figure 1. Timeline showing the development of South Devon Organic Producers and Riverford.

With direct supply proving successful, Riverford was unable to meet demand from its own farm. There were few local organic vegetable growers and very little certified organic land to rent or buy. The alternative of importing organic produce would leave Riverford overly exposed to fluctuating exchange rates; international imports would also be a bad fit for a brand that championed environmental sustainability. The problem of how to scale up local production was solved by setting up a co-operative of local farmers in 1997. According to Guy Watson, government incentives and self-interest were important drivers in establishing SDOP:

‘I think the truth of it is, because somewhere along the line I heard that there was this European money available [...] and I wanted to get my hands on some of it [...] If it hadn’t fitted in with what I wanted to do, I don’t think it would have got very far, but that was, I think that was the kind of seed that kind of [...] gave me a bit of momentum to move initially.’

The co-operative would supply Riverford with the organic produce it required and the story of local farmers would create an attractive marketing proposition to environmentally conscious customers.

To serve wider markets using the doorstep delivery model, Riverford needed to create economies of scale. This was achieved in 2002 with the creation of a delivery franchise model. In 2015, the initial investment for a 5-year franchise cost £12,000, and a £5,500 training fee plus taxation, which would cover the essentials including branded clothing, personalised stationery, display equipment, an accounting package, access to

Riverford's bespoke extranet system, marketing materials, and demographic data relating to the contracted territory. The management service fee for the franchisees was 3% of sales. Table 1 indicates the financial returns expected for franchisees.

By 2015, Riverford operated a total of four farms in the West, East and the North of England, and one in France. However, Riverford's strategy of developing regional farms and packhouses (i.e. distribution centre with light processing facility) resulted in limited success. The duplication of costs across the sites coincided with the suppression of consumer demand for organic produce as a result of the 2008 financial crash. The downturn in UK organic sales was mirrored at Riverford (Figure 2).

The volatile profitability of Riverford (Figure 3) reflects high levels of investment into the business, which has produced remarkable growth in turnover over the past 15 years. In 2017, Riverford delivered approximately 47,000 boxes of vegetables/fruit every week across the UK, to around 60,000 households across the country. Many of these customers also purchase meat and dairy products as additions to their boxes.

Table 1. Expected net profits (£) for Riverford franchisees (cost of goods not shown).¹

Weekly box deliveries	n=250	n=500	n=750
Annual sales	274,125	548,250	822,375
Management service fee	-8,224	-16,448	-24,671
Vehicle costs	-11,983	-23,965	-35,948
Local marketing	-8,224	-16,448	-24,671
Wages	-8,800	-26,400	-44,000
Other overheads	-4,100	-5,850	-8,200
Total overheads	-41,330	-89,110	-137,490
Net profit	£23,089	£39,729	£55,768

¹ Retrieved from: <http://www.riverford.co.uk/aboutus/franchise-with-riverford/earnings-and-investment>

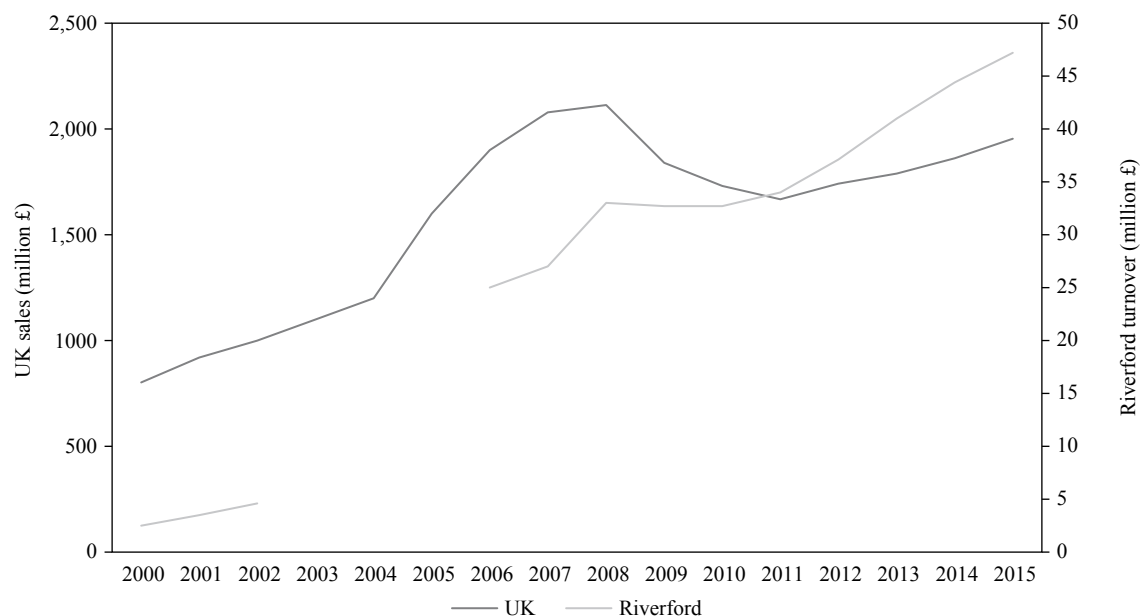


Figure 2. UK sales of organic products and annual turnover of Riverford 2000-2015. Obtained from: Riverford Annual Reports 1999-2015; Soil Association (2016). Please note that we do not have access to the accounts for the missing years.

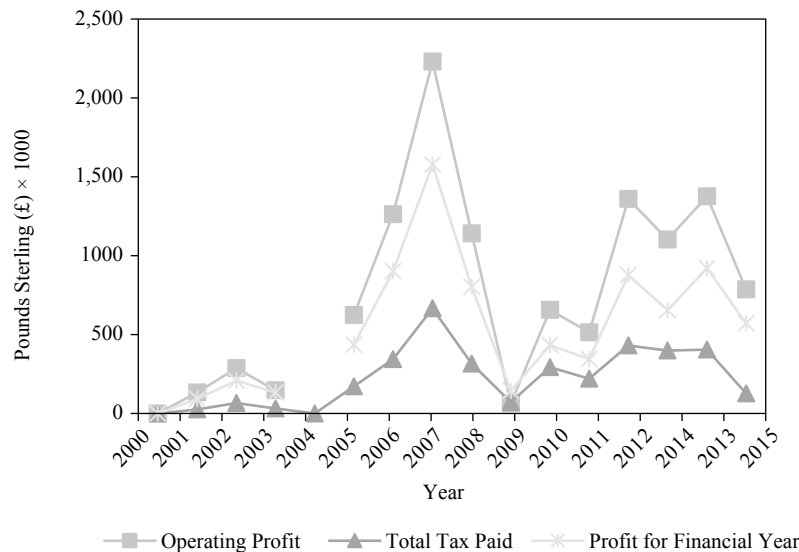


Figure 3. Riverford profit/loss 2000-2015. Obtained from: Riverford Annual Reports 1999-2015. We do not have access to the data for the missing years.

Riverford names SDOP as one of only a few co-operative suppliers. It sources pineapples from a Togolese co-operative consisting of 300 farmers, certified as Fair Trade through the organic trading organisation ProNatura. A previous supply relationship with an informal co-operative in Motril (Spain) broke down, because the co-operative was 'administratively incompetent' (Riverford Manager 1). The only other co-operative connection to Riverford is through its farm in France, which benefits from membership of a machinery ring and buying group operated by Cavac in France.²

4. South Devon Organic Producers Co-operative

SDOP is a well-established co-operative of farmers based in South Devon and South East Cornwall, growing organically and sustainably that has found a way to scale.³ The co-operative was registered on 15th July 1998 as an Industrial and Provident Society and it was recently awarded Vegetable Grower of the year (Figure 1).⁴ In 2015, the co-operative consisted of 12 farmer members, with 9 active farms, cultivating approximately 1,129 hectares of land to produce a wide range of organic vegetables and livestock (Table 2). SDOP is one of the largest organic producer co-operatives in the UK, growing over 40 types of vegetables (200 varieties) throughout the year. The rotation pattern followed by Riverford and SDOP was described by Riverford Manager 2:

'It is just a very simplistic rotation [...], which would be three years red clover grass lay. Then we would break that and grow vegetables for two years. Probably starting off the first year, preferably with a brassica or a crop that is more fertility hungry to make use of the nitrogen and then follow it with a less hungry crop. Ideally after two years it would then go back into lay for three years.'

Scaling up is challenging for organic vegetable producers in South Devon. Obtaining sufficient land, is difficult for a number of reasons. First, high land values (£17,000- £30,000 per hectare in 2016). Second, due to large land holdings by Crown Estates and Church Commissioners, land rarely comes onto the market for purchase. Third, very little rental land becomes available on long term leases. Fourth, little certified organic land is available on short term lease. In addition to land scarcity, small-scale farmers cannot afford to invest

² Available at: <http://www.coop-cavac.fr/>

³ SDOP homepage at: <http://www.southdevonorganic.co.uk/>

⁴ Available at: <https://www.hortweek.com/vegetable-grower-year-winner-south-devon-organic-producers/fresh-produce/article/1425650>

Table 2. South Devon Organic Producers (SDOP) farm overview 2015.

Farm	Farmers	Joined SDOP	SDOP status	Farm size (ha)	Organic land (ha)	Land owned (ha)	Land rented (ha)	Type of farm ¹	Main SDOP crops current and previous supply	Interview
A	A1	1997	retired	113	113	-	113	vegetable	brassicas; carrots; peas; potatoes; salad crops	✓
B	B2 and B3	2001	active	1,012	121	891	121	mixed	brassicas; beetroot; cucurbita; carrots; cauliflowers; leeks; parsnips; potatoes; sweetcorn	✓
C	C1	1997	active	40	40	40	1	mixed	beetroot; brassicas; broad beans; leeks; runner beans	✓
D	D1 and D2	1997	active	40	40	40	1	mixed	beetroot; carrots; leeks; cabbage; kale	✓
E	E1 and E2	2014	active	263	231	118	113	mixed	brassicas	✓
F	F1	2000	inactive	113	113	113	-	mixed	brassicas; carrots; leeks	✓
G	G1	2001	resigned	28	28	28	-	vegetable	brassicas; cucurbita; peas; runner beans; salad crops; sweetcorn	✓
H	H1	2000	resigned	142	142	142	-	mixed	not known	✓
I	I1	1999	active	162	162	162	-	mixed	brassicas; beans; leeks; potatoes	X
J	J1	2007	active	194	146	-	245	mixed	not known	X
K	K1	2005	active	142	142	-	142	mixed	brassicas; broad beans; potatoes	X
L	L1	2014	active		120	-	-	mixed	brassica; leeks	X

¹ Mixed farms combine vegetable production with livestock. The larger farms will also produce cereal crops. Data from: <http://www.southdevonorganic.co.uk/> and interviews with farmers.

in specialist equipment such as refrigerated transport and storage, which are essential if they are to supply large retailers or distributors.

SDOP provides advice about how to convert existing farm land to organic status and provides a wide range of supply chain services to its members, charging a 4.1% levy on all sales by farmer members to Riverford, which pays for the overheads of the co-operative. In a good year, the farmers will receive back their share remaining in the levy fund. There are seven main benefits that SDOP provides for member farmers (Table 3). The sales figures for SDOP are reported in Table 4 and reveal that turnover and sales have been much stronger in the past.

Table 3. Benefits provided by South Devon Organic Producers (SDOP) to member farmers.

Benefit	Explanation	Key quotes from SDOP managers (M) and SDOP farmers (F)
Sharing machinery	Small-scale farmers access specialist equipment that they cannot afford or access locally.	You know the smaller people can't afford the specialist machinery on their own, can't afford to run their own labour – perhaps the biggest member could. (M1)
Cold storage facilities	Farmers are less exposed to rents charged by processors for storage. SDOP pays for space in stores owned by two members.	[In future we would like to] put in a cold store parking bay [...]. If somebody hasn't got a cold store they can reverse a trailer in at night. (M4)
Lower costs for purchasing inputs	Purchasing seeds, plants and labour. SDOP has a labour pool of seven permanent members of staff, including specialised machinery operators. Initially SDOP maintained a large labour pool of migrant workers, but the overheads were considered a distraction. SDOP is now reliant on outsourced labour from neighbouring farmers who operate labour pools.	Before 2014, Riverford [purchased our seeds.] The first year [SDOP] did it was 2014. [Anon] was buying seeds from all over the world [and] we had no records of orders [...] it was very, very difficult to sort of keep accountability. [...] I said right we're going to [...] buy all of our seeds through [one company at the] same price as we'd been paying direct from the supplier and we'll have order numbers and we'll have a system [...] and it did start working to help our cash flow. (M4)
Access to grants and government funding.	Access to the EU Rural Payment Agency's Fresh Fruit and Vegetable Scheme (FFV) to subsidise machinery purchases. To qualify, Producer Organisations must have annual turnover Euro >1,000,000.	now we're on the third programme of five years [...] programme three, which took me all of last year to put together, the five-year plan is a nightmare. (M4)
Fixed annual price and supply contracts.	Farmers have stronger supplier power as a group. Riverford provides annual contacts to SDOP, which ensures a guaranteed market for the farmers.	The prices are generally quite good [the farmers are] given. [T]hey are [...] guaranteed that Riverford will take these crops at that price and sometimes they're lucky, [...] if we have a glut they'll take a bit more at that price. (M4)
Financial support	Limited credit arrangements. Credit is sometimes provided by Riverford to individual SDOP members who have encountered heavy losses due to adverse growing conditions.	we pay for [seeds] because we get a better price, but the farmers do not pay for them until they are in the ground [...] They have to pay a little for the credit. [...] we give them 60 days to pay for their seeds, but after that they have to pay a bit more. (M4)
Knowledge transfer	Farmers share best practice to boost productivity and profitability. Issues of pest control and disease are discussed on farm visits where the effects and results of interventions can be seen first-hand.	[...]you don't get things right every time and it's good to know that you know, sharing people's experiences [...] and obviously when [...] you have got problems and stuff [...] it's good to speak through things that other people have perhaps dealt with [...] you know in a previous year. (F2)

Table 4. South Devon Organic Producers sales figures.¹

Year	Total turnover (£)	Vegetable sales (£)	Non vegetable sales (£)
2018-19	1,674,638.00	1,158,978.00	515,660.00
2017-18	1,278,314.00	782,410.00	495,904.00
2016-17	1,871,328.00	1,344,646.00	526,682.00
2015-16	1,724,367.00	1,217,724.00	506,643.00
2014-15	2,209,001.00	1,638,470.00	570,531.00
2013-14	1,775,286.00	1,370,010.00	405,276.00
2012-13	1,313,416.00	939,665.00	373,751.00
2011-12	2,029,448.00	1,442,053.00	587,395.00
2010-11	2,239,153.00	1,654,555.00	584,598.00
2009-10	2,334,123.00	1,655,459.00	678,664.00
2008-09	2,245,904.00	1,537,812.00	708,092.00
2007-08	2,656,307.00	1,985,319.00	670,988.00
2006-07	709,216.00	not available	709,216.00
2005-06	623,307.00	not available	623,307.00

¹ The reported turnover of South Devon Organic Producers Co-operative to the Rural Payments Agency is augmented by the marginal sales of farmer members (i.e. that the farmer marketed themselves), which are calculated as 10% of the total marketable production of the producer organisation.

5. The supply chain relationship explored

Buyers and suppliers collaborate to achieve shared goals within supply chains. The type of collaboration can vary from case to case and can take weaker or stronger forms. Weak collaboration tends to exist where there is unequal power within the supply chain, with relationships characterised by compliance and coercion. Strong collaboration, in contrast, is characterised by partnerships built upon reciprocity and trust. So, the questions in this case relate to the type of collaboration that exists between SDOP and Riverford. To what extent are they collaborating? What benefits result from the collaboration? To explore these questions the case first explores the supply chain operations.

5.1 South Devon Organic Producers and Riverford operations

The supply chain relationship between SDOP and Riverford can be represented in a simple diagram (Figure 4), however this masks a complex set of operations and social relationships. Riverford signs an annual purchase contract with SDOP. Prices are negotiated, but SDOP is typically a price taker rather than a price maker. Collectively, SDOP is the largest supplier to Riverford, yet SDOP lacks supplier power, not only because it has been separated from the Riverford founder-owner (explained below), but because its only alternative markets are small (i.e. farm gate sales).

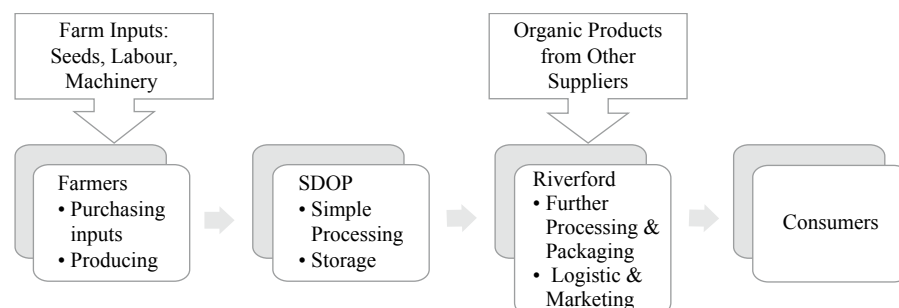


Figure 4. The supply chain of South Devon Organic Producers and Riverford.

The annual contract is converted into a weekly crop plan by Riverford listing the quantities of each vegetable required over a 12-month period. The crop plan is then utilised by the SDOP manager to create a crop programme for the farmer members of the co-operative, which tells them the amount, type and variety of each vegetable to plant. The crop programme uses average yields and growing times to produce the weekly deliveries required by the crop plan. The crop programme has to take account of the various organic crop rotations of the farmers that are required to maintain the fertility of the soil.

Generally, member farmers will supply Riverford directly with perishable produce on the same day as it is harvested, utilising the farmer's own transportation or that rented from the co-operative. Alternatively, perishable crops can be stored on some of the farms in cold storage and delivered to Riverford the next day, which allows for greater utilisation of labour and equipment on the day of harvest. For non-perishable crops (i.e. root vegetables), SDOP provides some basic processing (i.e. washing and grading) to prepare vegetables for cold storage. The main cold storage facilities are located at an SDOP member's farm near to the Riverford packhouse. Stored crops are delivered by farmers to Riverford, which makes up the contracted orders throughout the year.

On receiving deliveries from farmers, Riverford takes over any further processing, packaging, logistics and marketing. The contract between SDOP and Riverford obliges SDOP farmers to supply Riverford with volumes agreed in the previous year, whilst Riverford has the obligation to purchase those vegetables at the agreed price. If a market can be found for surplus produce, Riverford will purchase this and reward the farmers; although the farmer's share of the price will often be below that of the contracted produce. The supply contact between SDOP and Riverford protects farmers from price fluctuations in the organic vegetable market. Similar to all other pre-priced future goods agreements the contract reduces the supply risks for SDOP and Riverford, yet it prevents farmers gaining extra premiums when market conditions are favourable. On occasions when SDOP cannot meet the contacted volumes of produce, due to bad weather or other unexpected causes, Riverford will source from other organic growers to complete their orders; the SDOP farmers are not penalised in these situations, but Riverford takes a view about the reason for shortfalls and may opt to prevent certain SDOP farmers from growing certain crops, or even bar individual farmers from supplying them in the future. These decisions are agreed in negotiation with the co-operative, although in these circumstances the co-operative is in a weak bargaining position.

5.2 South Devon Organic Producers' separation from Riverford

In this case both buyer and supplier were pioneered by Guy Watson, which means that the relationship between the two entities is more complicated than a simple relationship between a principal and an agent. Guy Watson (Riverford) was the co-founder and chair of the newly formed SDOP. For a number of reasons, however, it was later decided by mutual consent to gradually sever the relationship between SDOP and Riverford.

First, SDOP members struggled to accommodate the individual 'entrepreneurial culture' that Guy Watson embodied within their democratic governance structure. Faced with strong leadership by a single member, on occasions the farmers needed to express to Guy: 'you can't do this, because we've all put our money into it and we need to have our say you know' (Farmer 4). SDOP members found their voice with support from a specialist Dutch organic grower, who was brought in shortly after start up to provide specialist field support for the novice growers. The manager at the time described the specialist as 'a very strong character' and 'he was the strongest voice for the members' (SDOP Manager 1).

Second, the 'imbalance in scale' between Riverford and SDOP meant that there were considerable differences in support for the co-operative. At the start, Riverford was growing the largest area of organic produce on its own farm and had provided proportionately more capital and administrative support than the other SDOP members. A former SDOP manager recalled the early days of Riverford's involvement in the co-operative from the Riverford perspective:

'you know it's one member one share, so you know Riverford would only have one vote whereas somebody who is only planting two acres has one vote as well. [...] Riverford [...] a huge organisation quite capable of running everything themselves if they wanted to, [would say] 'why should we pay as Riverford', you know, 'for these overhead costs for everybody else when we've got all these structures. We can do it!'

SDOP Manager 1

Third, the 'conflict between buyer and seller interests' created tensions within the co-operative. Riverford was seeking to improve standards of production at SDOP and impose quality controls to meet rising customer expectations of organic produce. It was thought to be less costly and more effective for Riverford to impose standards through the SDOP contract, rather than seeking to emphasise quality through membership of SDOP. Several farmers disliked the greater disciplines imposed upon their operations, which required increased costs; for example, increased labour costs associated with improved weed control.

To defuse the conflict of interests Guy Watson began a three-year process of withdrawing his membership from SDOP in 2013, severing the close connection between Riverford and the co-operative. The advantages and disadvantages of the decision to uncouple Riverford and SDOP are subject to varied interpretations. The SDOP Manager 4, argues that the separation was a mistake given that the two organisations need to work closely together. Even before the final separation in 2015, Farmer 4 argued that 'Riverford could do with having somebody to liaise a lot more with farmers and to see what farmers need.' From the Riverford perspective there was less scope for conflict in the relationship, with advantages of having a more clear-cut buyer-supplier relationship.

Regardless of the separation, SDOP is still considered by Riverford as their main supplier. According to Riverford Manager 3, 'they will still be one of our, if not our biggest supplier, even if we pretty much [...] doubled in size.' Nevertheless, Riverford also buys from other suppliers from overseas regions including Spain, Italy and France. The price, amount and type of vegetables that Riverford is accessing through other suppliers is impossible for SDOP to control, primarily for reasons of climate and soil conditions, which do not enable the SDOP farmers to compete on quality when growing similar crops. In addition, Riverford Manager 3 admitted, the main focus of Riverford is marketing over growing, which means Riverford and SDOP have different ideas around how to develop organic farm production. For example, SDOP may be able to maximise production by growing large cauliflower heads, but Riverford customers demand small heads in their boxes; one could argue that this is limiting the productivity of the land, but whether this is wasteful is debatable if fewer heads are wasted in consumer kitchens.

From Riverford's perspective, being supplied by a co-operative is a better way to sustain high-quality organic agricultural supplies than dealing with individual small-scale farmers. However, there are concerns. Discussing the failure of co-operatives, Riverford Manager 3 suggested, 'most of them in the UK failed because of greed and basically people not willing to really trust and work collaboratively with each other... but saying that, they [(i.e. the members of SDOP)] do still seem to hang together.'

5.3 South Devon Organic Producers' negotiations with Riverford

Riverford and SDOP have been working closely as supply chain partners, but they do not always agree on the way to achieve their mutual interests. By virtue of its relative size and monopoly over SDOP's route to market, Riverford has a much stronger negotiating position than SDOP in setting prices, delivery volumes and in many other decisions. Some farmers from SDOP claim that they could negotiate higher prices from other vegetable buyers from the East of England, although they admit that Riverford provides the most convenient and cost-effective route to market. One of the factors that both helps and hinders SDOP is the knowledge that Riverford obtains about the costs of production by growing vegetables on its own farms. Riverford's knowledge of the cost structure and estimated margins of SDOP farmers leaves the farmers with very limited space to negotiate the price. The price offered by Riverford is calculated by considering

the costs of production, but with more support SDOP farmers could improve their efficiency, the quality of their produce and profitability.

Due to the power imbalance, relations between individual SDOP farmers and Riverford have reached breaking point. Some farmers have resigned their membership of SDOP following disputes and have since accessed alternative markets. According to SDOP Manager 4, one member farmer is no longer allowed to supply Riverford because of issues with the timing and quality of produce arriving at the packhouse. In some other cases, farmers have found some of the Riverford personnel difficult to get on with because, they felt that the buyer-supplier relationship is too commercially driven and they were not being given enough credit. Issues of personal trust, consideration and recognition are important in sustaining the SDOP-Riverford relationships at the level of the individual farmer. For example, expressing disappointment, Farmer 1 commented that 'I've never ever been mentioned as a grower on Riverford website.' It is important to remember that supply chains are comprised of people with emotions and complex needs for belonging, recognition and acceptance by others.

The buyer power of Riverford is greater than SDOP, but it is not absolute. At certain times, particular farmer suppliers can exercise *countervailing power* due to the criticality of the resource at their disposal and the scarcity of that resource in the market. As an organisation with autonomy and independence (one of the seven ICA principles), SDOP are not controlled by their buyer entirely and farmer members seek to utilise their supplier power when it is greatest to negotiate with Riverford. For example, Farmer 1 noted that when there is a shortage of supply, Riverford is more likely to pay more in the absence of substitutes. For example, during a period of heavy snowfall Riverford was unable to source vegetables from other parts of the country. Farmer 5 described that '[w]e had to cut all our cabbages... which was all cut by Riverford workers, which I never paid for.' Riverford paid for the labour because it was the crucial Christmas period, when consumer expectations are at their height and failure to deliver can result in irreparable damage to the brand. The farmer made a high level of profit as a result of savings on labour costs and by virtue of being able to sell produce in excess of the agreed delivery volumes. Some SDOP farmers have greater power because of the service they provide, as one Riverford manager explained:

'there's one guy in particular [...] he's got an awful lot of cold storage, he's by far and away the biggest member in the co-op and actually it's important that he stays onside and we have a great relationship with him, but at times it's infuriating because actually the cold stores, they're twenty years old they're not potentially well maintained, so actually that's exposing us to a level of risk.'
Riverford Manager 3

It is beneficial that Riverford and SDOP find a balance of interests that keeps both parties within a relationship of trust, with each party anticipating the needs of the other over multiple growing seasons.

One response to SDOP calls for support since 2015, is Riverford's adoption of a crop walker (i.e. an agronomist). The crop walker provides advice to SDOP farmers on the quality of the growing crops throughout the season and advises farmers on when to harvest crops to fulfil their orders. This has greatly reduced the number of substitutions that Riverford needs to make to its advertised box contents, boosting consumer satisfaction. The relatively weak bargaining position of SDOP was nevertheless revealed in this mutually beneficial arrangement, because although SDOP were prepared to pay for this service from sources of grant funding, Riverford insisted on paying for the service and selecting the personnel for the role. Quality control is a key priority for Riverford as a market orientated retailer, which explains why they sought to control this critical resource. Therefore, collaboration often results in competition around the control over resources. When co-operatives collaborate it is important to maintain the fourth ICA Principle of 'autonomy and independence', as Co-operative Manager 4 stated: '[Riverford] kind of like to think that they have a bit of power over us, and we don't want them to have power over us really, we are quite happy being in our own company without them telling us what to do.'

As Riverford grows bigger and develops more complicated management structures and processes the concerns of SDOP farmers have changed. For example, a common perception is that it has become more challenging for farmers to negotiate on prices with Riverford:

‘The staff and the top management now are mostly recruited out of the supermarket supply system. And instead of having Guy’s high moral ethics, they are hardnosed businessmen, and they’re trying to squeeze the price down at our end to increase their margin, because if they put the price up to the customers that will reduce total sales. They want sales up and price down with supplies.’
Farmer 9

Another issue that is becoming more significant for some of the more environmentally conscientious SDOP farmers, is the perception that there is more waste being generated by Riverford’s policies. To meet customer demand for more convenient and aesthetically appealing vegetables, Riverford has adopted more strict processing standards in the picking and packing process. Washing root vegetables before packing, for example, reveals blemishes that leads to higher rates of rejection. Previously customers were involved in the co-creation of environmentally sustainable outcomes as they washed, peeled and chopped around soiled and blemished root vegetables to minimise waste in their own kitchens. In washing root vegetables, Riverford effectively relieved their customers of this labour, but created more waste in the supply chain as a result. The marketing orientation of Riverford makes it increasingly difficult for SDOP farmers to negotiate for their own vision of sustainable production.

6. Challenges faced by South Devon Organic Producers

6.1 Dynamics within the South Devon Organic Producers membership

It should come as no surprise that individual farmer members have different interests and ideas, which lead to personal irritations and even disputes on occasions. The challenges for SDOP are multiple (Table 5):

Further co-operation between SDOP staff and member could prove challenging given their different interests. SDOP Staff 1 argued: ‘I’m not normally backwards in coming forwards I mean that’s one of my faults, but erm a lot of people [(i.e. SDOP farmers)] don’t like to be told though do they?’ More promising, however, ‘there is farmers that’ll ask and say ‘oh what do you think about so and so’ and you know I just feel it’s quite good the fact that they’re not ignoring you, they will listen’ (SDOP Staff 1).

6.2 The integration of economic, social and environmental missions

Co-operatives have hybrid identities and missions, which are shaped by their adherence in full, or in part, to the ICA values and principles. The seventh principle, ‘concern for community’, is inclusive of environmental care. To evaluate the ethical performance of co-operatives, it is important to consider whether economic, social and environmental missions are operationalised as integrated, compartmentalised or even competing goals. In this case there is debate amongst farmers about how sustainable SDOP farms really are.

Looking back to the origin of SDOP, most farmers describe the economic goals as the main driver of the business. According to Farmer 5, SDOP was set up with the purpose of supporting Riverford to ‘expand the business’, ‘get more veg’ and to ‘access European funds’. However, Riverford’s market presence and reach, achieved through their powerful brand, means that farmers do not have to sacrifice profitability to achieve environmental objectives. In this case, profitability and environmental sustainability are both achieved through the organic method of cultivation. Therefore, SDOP makes a contribution towards the principle of ‘concern for community’ through adopting environmentally sustainable agriculture. For example, only one SDOP farmer irrigates their crops to boost yields. The majority of SDOP members, although not all, show strong and clear interests in environmental improvement through agriculture. Several farmers believe that

Table 5. Challenges experienced by South Devon Organic Producers.

Challenge	Explanation	Key quotes from SDOP managers (M) and SDOP farmers (F)
Buyer limitations	Riverford has an expanding, but limited market. It is not always able to buy surplus generated by SDOP, although it can sometimes sell surplus to wholesale markets.	[...] everyone wanted to grow more stuff and you know Riverford wouldn't take as much as you wanted and there was always internal frictions. (F10)
Variety of supplier demands	<ul style="list-style-type: none"> • Riverford requires many types and varieties of vegetables from SDOP. • SDOP farmers compete with each other to grow the more profitable crops. • SDOP managers do not use allocation as a lever to discipline farmers. • Farmer disputes around allocation are resolved through negotiation, prioritising those with the most suitable soil for a particular variety. 	Riverford would like [SDOP to use allocation to discipline farmers], because it is what happens with foreign co-ops apparently. [...] And they would like us to be more like that [...] one reason why it doesn't happen is that when it was first set up with Guy on the leadership team, they were friends, so they don't want that bully boy tactic, they just like to keep it friendly. (M4)
Divergent environmental values	Some SDOP members are more willing to invest in environmental improvements than others.	I want it to be a profitable farm [...] but also I want it to be, you know, a good farm environmentally as well. So it's trying to find the balance [...] for a long time this farm didn't earn enough money to make improvements to be able to make it better if you know what I mean. (F4)
Attitudes towards state subsidies	Some SDOP members look to the government to support the organic movement and argue there are insufficient incentives for farmers to become organic or remain organic. In 2015, the government provided a £30 per ha. premium to organic farmers.	[...] it's not a great amount of incentive for farmers to do very much. So, a lot of farms didn't join it (F5)
Efficiency	<ul style="list-style-type: none"> • Riverford provides few incentives for farmers. • Lifestyle entrepreneurs are willing to sacrifice profitability to achieve work-life balance. • SDOP managers find it difficult to incentivise farmers to work in a more 'professional way' (F5). Farmers that use labour, cold storage and machinery ad hoc, disrupt farmers who meticulously plan their resource usage, creating tensions. 	Becoming more professional would mean farmers planning their production with more attention to detail, improving the quality and the efficiency of the production, accepting new technologies (e.g. mobile cold storage) and having a greater focus on the profitability of each crop. (paraphrased M4) Unless you hit them in the pocket, you are not really going to make any difference (M1)

conventional farming damages the environment and they are convinced that through organic farming they have made a positive impact on the environment.

Being environmentally friendly and protecting bio-diversity, are important goals valued by many SDOP farmers. However, this creates some economic disadvantages for SDOP, especially when competing with its large-scale competitors, which for example, typically sacrifice greater biodiversity in the pursuit of greater intensification. For example, non-organic vegetable producers are not restricted by rotational farming methods and can target investment in machinery and labour to produce crops more 'efficiently'. In contrast, SDOP must grow a diverse range of vegetables in their organic system, which means that individual farms cannot compete through a strategy of specialisation. There are also farmers, mainly those who have failed to see economic returns from organic production, who have returned to conventional methods of farming. For example, one SDOP farmer operating a mixed farm has converted from organic milk production to conventional

dairy farming, arguing that the environmental benefits of organic milk production were insignificant given the low input method of production he adopts. Therefore, there is always the potential in the future for this logic, minimizing the benefits of organic production, to be extended to vegetable growing.

Another way in which the co-operative achieves 'concern for community' is through members caring for each other. For example, farmers have suffered illnesses of various kinds and in most cases they have protected the co-operative by withdrawing from production ahead of the annual contract negotiated with Riverford. In return, SDOP has kept these non-producing farmers in membership throughout their illness and helped them to return to production with crops that are easy to cultivate. Conversations with SDOP Managers 1 and 4 revealed a warm affection for the members and a desire to support them through times of personal crisis.

Relations between SDOP and their staff also reveal a 'concern for community'. One SDOP farmer member disclosed that the SDOP staff are:

'very good people. I mean when I was ill with cancer one of them they ran [the farm] for me, so you cannot argue with that. So you cannot say that they are poor staff, I don't care what people say, they are very good staff...'

Farmer anonymised

SDOP farmers treat SDOP staff with different degrees of kindness and with different degrees of inclusion within their family and home life. SDOP Manager 4 spoke about a farm where a farmer, in partnership with Farmer 7, took care of the SDOP workers: 'The staff love it there, because he brings out a picnic tea, and in the winter, jacket potatoes and cups of coffee, and really looks after them'. Not all farmers, however, extend this kind of hospitality.

Running in parallel to the differing expressions of care for SDOP staff by the member farmers, there are disagreements regarding the appropriate balance between the ICA values, principles and profits. SDOP Manager 4 described, '[s]ome people are naturally very co-operative minded. Some people aren't'. The same manager described that some farmers joined SDOP thinking it was merely a 'selling marketing group', instead of being motivated by a co-operative ideology. It appears that it can be very challenging to get all the individual member farmers to prioritise the collective interest for the co-operative and the wider community, as a component of farmers' own long-term self-interest.

In addition to the challenges listed above, SDOP has to deal with other potential threats. The most challenging is the fierce competition from rival agricultural producers. Small-scaled farmers must find innovative ways to compete with large-scaled, conventional farms, which normally can take advantage of better credit terms, economies of scale and stronger market positions. Farmer 4 suggested that one of the biggest challenges and opportunities of being co-operative is to keep 'the small family farm going', which is the basis of preserving the social fabric of rural life in South Devon. To achieve this social goal, it is important that SDOP recruits new members to sustain levels of supply to Riverford and to sustain its collective buying power that keeps the costs of production low. Like many other agricultural co-operatives, SDOP has an ageing member profile and has experienced difficulties in attracting new and younger generations into membership. Riverford Manager 3 suggested that 'there's one [SDOP] grower under fifty and there's only two of them with succession plans'. Farmer 4 explained that 'young farmers like tractors and like machinery and so on, but they don't want to get off and pull a vegetable out of the ground, down on the ground with your waterproofs on'. This suggests that the key to SDOP maintaining its membership is to invest in mechanisation. Farmer 1, however, blamed the lack of land available to young farmers, because '[t]he price of land is ludicrous' and 'how can you buy land at nine, ten [thousand pounds per acre]...and make any money?'

Another significant factor is related with the co-operative's lack of financial capacity. Some of this relates to the timing of the contract it negotiates with Riverford. Prices are agreed with Riverford in October taking into account current prices for seeds and plants. By the time the plants and seeds are required six months later,

inflation in the cost of inputs eats into SDOP profit margins. If SDOP operated at a larger scale it would be able to negotiate better deals with suppliers and mitigate the worst effects of price inflation. Compounding these dynamics, since the 2008 global economic recession fewer consumers are willing to pay premium prices for organic food. Markets, therefore, are a key limitation on the scale that SDOP can achieve and the social and environmental impacts it can generate.

Finally, on 24 June 2016, the British voted to leave the European Union. The 'success' of Brexit will result in significant changes in many aspects affecting the country and its residents, including farmers. An unstable economy after Brexit may discourage consumers buying high-premium organic food. Leaving the EU will also create greater costs and barriers to access the large European market. In previous years Riverford has sold SDOP produce into mainland Europe in periods where there is surplus production, but this may not be possible in future. With the possibility border restrictions, Brexit could also lead to a shortage of agricultural labour. Vegetable producers in the South West of England are highly dependent upon farm labour from the EU and Brexit is likely to raise issues of how to plant, weed and harvest crops. Last but not least, leaving the EU will prevent farmers from applying for EU subsidies for organic production and other grant funding for machinery. In February 2018, as an outcome of the consultation into extending the Groceries Code Adjudicator's remit, the UK government announced a £10 million fund for the development of farmer co-operation and the development of existing farm co-operatives. It remains to be seen whether SDOP will benefit under this arrangement and also what level of support will exist for environmentally responsible forms of agriculture within UK agricultural policies.

Ethical note

With permission, we name Guy Watson, the founder of Riverford as it would be challenging to anonymise his involvement in this case. To protect commercially sensitive data and to respect the terms of informed consent negotiated with SDOP and Riverford, we limit our case to the years leading up to 2016 and omit more recent data. The farms and farmers mentioned in the Teaching Note do not directly correspond to the citations made in the case, to further protect the identity of the SDOP respondents.

Supplementary material

Supplementary material can be found online at <https://doi.org/10.22434/IFAMR2020.0062>

Teaching Note.

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