



TEACHING NOTE

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

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1. Relevance

This case introduces students to South Devon Organic Producers Ltd (SDOP), a UK agricultural producer co-operative. The case explores the supply operations and management of SDOP and its relationship with Riverford Organic Farms Limited (Riverford), one of the UK's largest specialist online organic food retailers. Understanding the complex historical development of these interconnected cases is important preparation for students and researchers who wish to consider the factors that need to be taken into consideration by decision makers within agricultural supply co-operatives that are reliant upon a dominant anchored customer.

The first part of the case begins by narrating the origin of SDOP from a farmer's perspective through a creative fiction. The case then introduces the development of the Riverford and SDOP business models. In the second part, the supply chain relationships and production system are introduced. The events leading up to the de-coupling of Riverford from the co-operative are explored through the withdrawal of the pioneer entrepreneur Guy Watson from SDOP. It is important for students to understand the mismatch in scale between SDOP and Riverford and the effects that the unequal power relations have on negotiations between the two organisations. In the third and final part of the paper we consider the challenges faced by SDOP, with a focus on how the co-operative members regard the relationship between economic, social and environmental objectives.

Through the questions provided in this teaching note, we invite students to position themselves as consultants that have been hired to advise the co-operative manager and board of directors on how to overcome a number of challenges – most notably the decline in SDOP turnover over several years. The case concludes by arguing that co-operative managers need to think not just about profitability and competitiveness, but also about the values that facilitate successful co-operation between the members of the co-operative.

2. Target audience and position of the case

The case deliberately avoids utilising complex theories, so that a wide variety of learners can access the case. Some threshold knowledge would help students to access the case, chiefly: a basic understanding of environmental sustainability; a definition of organic agriculture with a basic understanding of organic cultivation practices; supply chains; environmental impacts of food supply; and the International Co-operative Alliance (ICA) Co-operative Identity Statement, and the ICA Values and Principles. The case can be used as a way of introducing

students to co-operatives as a specific supply chain actor, but also cooperation more generally irrespective of organisational type within a supply chain context. The case is particularly suited to postgraduate and executive education where more in-depth exploration of the questions can be undertaken.

The case explores two perspectives. The upstream co-operative case has a heterogeneous membership of farmers that creates challenges for the manager of the co-operative. The downstream retailer is creating value with consumers, which creates challenges for managing relationships with the co-operative. The case clearly demonstrates how a network perspective is required to understand how the strategy of the co-operative has developed in the past and might develop in the future.

The network presented in the case allows students to consider the perspectives of different supply organisations and actors within those organisations. This makes the case particularly suitable to classroom roleplay where different students can be allocated to specific roles and asked to consider particular scenarios.

In regard to summative assessment, the case lends itself to coursework assignments that require students to explore the empirical case through the lens of the theories that have been introduced by the tutor: for example - business models (Mazzarol *et al.*, 2018); co-operative learning pedagogies (Johnson and Johnson, 2009); embeddedness (Wu and Pullman, 2015); social capital (Herbel *et al.*, 2015); stakeholder management (Mitchell *et al.*, 1997). There is scope to focus attention on specific aspects of the case that would need further support from relevant literature. For example, assessment of the environmental sustainability of organic production compared to conventional food supply chains (Coley *et al.*, 2009), or a focus on co-operative networks and innovation (Novkovic and Holm, 2012). There is scope for marketing students to explore future scenarios for SDOP and the likelihood of success associated with different strategies. The case can also be used by students to explore the TOWS method of strategic analysis (Wehrich, 1982).

3. Teaching objectives

The intended learning objective is to enable students to develop their co-operative management skills by exploring how a co-operative functions in a consumer driven agricultural supply chain. The SDOP business model could be analysed from perspectives of supply chain relations

(Bijman and Hendrikse, 2003), contract farming (Prowse, 2012) and co-opetition (Pathak *et al.*, 2014).

4. Questions for class discussion

The following questions are listed in order of increasing complexity.

1. What benefits has SDOP created for farmers?
2. What are the main challenges facing the SDOP manager? Consider the relations between: (a) individual farmer members; (b) individual farmers and Riverford; (c) SDOP and Riverford.
3. To what extent do you agree that SDOP and Riverford are collaborating as supply chain partners? Which areas of collaboration are the most important to sustain their future relationship?
4. Riverford has scaled up its business to move away from a local model of supply, to a nationwide supply structure. To what extent do you believe that scaling up is more or less environmentally sustainable in this case?
5. Why might some farmers resist a strategy of scaling up SDOP? Think about how different farmers might respond to proposals to: (a) increase the number of members; (b) invest in new technology associated with precision agriculture (e.g. satellite guided tractors) or improved cold storage; (c) developing their brand; (d) diversifying their customer base.
6. Put yourself in the position of the SDOP manager role. (a) Which customers and stakeholders demands are the most critical to respond to? (b) Why might your farmer members find it challenging to respond to these demands? (c) In what areas do you want to support the interests of Riverford and why might this create tensions with the members of SDOP? (d) How will you manage the tensions created by your collaboration with Riverford?
7. If you were advising SDOP on its future strategy, what are the top three objectives you would establish?

5. Provisional answers

1. Seven main advantages are listed in the case study. There are a number of direct benefits including: sharing machinery buying power on farm inputs; access to market – i.e. the collective contract with a major buyer Riverford; lower costs from economies of scale – i.e.

sharing of machinery, simple processing, hiring skilled labour and cold storage facilities; professional management dealing with cross-farm issues and with the buyer; branding and marketing advantages. Students may also wish to consider the potential indirect benefits to farmers. For example, the SDOP contract with Riverford addresses two predictors of psychological distress in farmers (Fraser *et al.*, 2005). First, it reduces *fluctuating and uncertain economic projections*. Second, the solidarity involved in co-operative working could be argued to reduce *self-reliant cultures*.

2. (a) Farmer members are heterogeneous and have different farm businesses, which means they seek different benefits from SDOP and their demands upon SDOP may be more or less urgent. For example, for some farmers the SDOP supply contract only represents a third of their annual turnover, which means that their own farm resources can be switched to other productive activities if SDOP machinery or labour is not available. For other farmers, growing for Riverford is one hundred per cent of their activity, which means that the availability of SDOP resources are always critical. The urgency of different farmer's demands on SDOP may be related to a lack of planning due to competing activities, or it may be related to the consequences for the farmer if a request for assistance is not met. When co-operative members seek different benefits, they often have a different vision for the strategy of the co-operative, which means that co-operative managers have to be fair, but also ambidextrous in dealing with the unique concerns of each member.

(b) Individual farmers have dyadic relations with Riverford through their delivery of produce and receipt of payments. SDOP may not be aware of communications between individual farmers and Riverford, which create tensions within the co-operative, especially if these result in changes to agreed schedules or a change in Riverford's relationship to SDOP. For example, a farmer may deliver his/her weekly production to Riverford on a single day, rather than staging this delivery over five days as was agreed in the crop plan. Maintaining the discipline of farmer members is a major challenge for the SDOP manager, because farmers are accustomed to high levels of autonomy.

(c) SDOP has to seek to benefit all its members. Riverford would like to develop a special relationship with specific members that it values for the quality and quantity of their produce. Therefore, it is important for the co-operative to encourage Riverford to treat SDOP members equally, even though they are sometimes viewed unequally by Riverford on the basis of the value of their supply. For example, Riverford may wish to have one farmer to meet all of its

demand for a highly profitable vegetable, based upon a consistent record of delivering high quality produce. Conversely, SDOP will wish to spread the planting across several farms to satisfy the demands of their farmers for higher profits. There are good horticultural reasons for spreading planting across different soil types and micro-climates within an organic system. Some farms have capacity to rotate within their landholding and can produce similar volumes of the same vegetable every year, but other farmers have insufficient landholding to achieve this.

3. SDOP and Riverford are collaborating in the following areas: agronomy; production planning; pricing (although Riverford has the main say); storage; some limited processing (i.e. washing root vegetables); marketing (e.g. Riverford use SDOP farmers on their website and although overshadowed by Riverford, SDOP do benefit from Riverford's media presence); ad hoc credit provision; Riverford leases office space to SDOP; education (e.g. Riverford organise packhouse tours for SDOP members). SDOP and Riverford are competing around pricing, crop allocation (e.g. Riverford grows many higher value crops on its own farms and will express views about which SDOP farmers ought to grow certain crops), quality (e.g. some SDOP farmers would like Riverford consumers to accept soiled produce).

4. Research has demonstrated that the distribution of vegetables to the end-consumer is the most carbon intensive part of the Riverford supply chain. Riverford acknowledges that national distribution is more carbon intensive than the short-supply chains associated with local veg box schemes, but research at the University of Exeter has demonstrated that the local supply of certain crops is more carbon intensive (Coley *et al.*, 2009). For example, it is less carbon intensive to import fruit and vegetables grown in unheated glasshouses in warmer EU countries than to source fruit and vegetables grown locally in heated greenhouses in the UK. Non-local sourcing appears to be less carbon intensive in terms of on-farm carbon emissions for many crops, but this needs to be balanced against the carbon emissions incurred in national distribution. Riverford argue that if customers purchased all their food through their box scheme, it would be more carbon efficient than purchasing their requirements from several different retailers (i.e. more retailers means multiplying transportation emissions). In terms of cultivation, it would appear that organic production is less carbon intensive than conventional production, however, students will need to consider that organic production typically excludes herbicides and therefore requires more mechanical weeding than conventional farming, with the potential for higher tractor utilisation and fossil fuel consumption. Comprehensive research

to establish the carbon emissions of organic versus non-organic vegetable production has yet to be conducted. One way to decarbonise organic vegetable production would be to introduce electric vehicles charged by renewable energy for cultivation and distribution.

5. (a) More members are welcomed by SDOP because they: provide for the future supply base; bring new ideas on how to develop the co-operative; spread the administrative burden; diversify the growing base (e.g. different soils will grow different crops); improve the quality of crops; spread costs; utilise underused resources (e.g. labour and machinery); and provide longer periods between rotations leading to less pests and pathogens and greater yields. Taking on new members may create problems for individual farmers, such as: creating competition between members for crop allocation, machinery, labour and admin support; introducing more heterogeneity means potentially longer decision making periods. If the membership becomes too heterogeneous, individual members may perceive fewer benefits and their engagement with the co-operative will diminish. Therefore, the type of members being introduced will be a key consideration.

(b) Some members on larger farms would welcome further SDOP investment in technology, but others prefer to invest independently of the co-operative so that they are not obliged to share this resource. SDOP staff would welcome investment in technology to make their work less physically and mentally demanding. However, some small farms, especially those required to harvest their main crops by hand (e.g. in the case of runner beans), would benefit less from investment in technology. At the SDOP Annual General Meeting in 2015, some farmers expressed concerns about the marginal gains associated with precision agriculture when compared to traditional methods. In relation to the utilisation of machinery, SDOP could improve their productivity if they controlled all aspects of cultivation. For example, currently individual farmers prepare the soil for cultivation, but it would be more efficient for SDOP to perform this work to advance consistency and quality. Finally, investment in sunk costs, e.g. cold storage, creates issues around the location of the resource. Host farms are perceived to control these resources, which is a potential source of tension (e.g. host farms tend to have preferential access).

(c) SDOP has not invested significantly in developing a brand. It relies upon the power of the Riverford brand and while it is not seeking to serve another customer there is no incentive to develop the SDOP brand. The main incentive to strengthen their existing brand is to attract new farmer members.

(d) Taking on new customers would require SDOP to invest in refrigerated transport, new storage and processing facilities, and add to its administrative costs in the form of taking on a marketing manager. Taking on a new customer may enable SDOP to negotiate better prices with Riverford. This strategy does entail risks. Developing new customers might alienate Riverford and damage the close partnership that exists. It is unknown how Riverford would respond to SDOP supplying its competitors. In taking on a new customer SDOP would need to expand production significantly to continue to supply Riverford. Although Riverford has been diversifying its supplier base, it has remained loyal to SDOP due to the marketing advantages of having a unique supply base that is local to its main packhouse.

6. (a) First, the needs of vegetable consumers ought to be a key consideration for SDOP as it seeks to provide high levels of service to Riverford. Becoming more market orientated will lead to less freedom for individual farmer members and will require increased control by the manager and the executive in directing their farm activities (Bijman *et al.*, 2011). It will be important that the membership is committed to a strategy of becoming more market orientated (Chechin *et al.*, 2013). Consumer needs are communicated by Riverford to SDOP, but SDOP could anticipate future consumer demand by conducting its own market research with consumers. SDOP currently experiments with new types and varieties of crop and asks Riverford to adopt these. Second, Riverford is a key customer that needs to be given a high priority to protect SDOP against competition from organic vegetable producers in other parts of the UK. If SDOP fails to fulfil its crop plan, Riverford will be unlikely to commit to similar volumes in future plans. Third, SDOP has been heavily reliant on agricultural subsidies for its existence since start-up, which means that it needs to stay informed about government policies and sources of funding associated with a variety of grant schemes. Fourth, local residents are key stakeholders that need to be assured of the benefits of organic vegetable production. For example, if SDOP adopted irrigation, then the impact on local water users would need to be considered. Attention to local residents is always going to be a key consideration for farmers.

(b) Becoming more market orientated would present SDOP with several challenges. First, individual farmers find it sufficiently challenging to keep on top of their daily tasks and typically do not have the resources or motivation to invest in the research and development (e.g. crop trials). This is true for small farms and also for large mixed farms where the large variety and volume of activities mean that organic vegetable growing has to share priority with other tasks. Second, making a business case for further investment in marketing is a challenge

for the SDOP manager, when farmers already indirectly benefit from Riverford's investment in consumer feedback and research. Third, farmers can find it emotionally challenging to engage with Riverford. As a farmer, often working in isolation, it can be psychologically challenging to receive criticism or demands for improvements (Hounsome *et al.*, 2012).

(c) The SDOP manager understands the advantages of delivering the crop plan as specified by Riverford. This means delivering the correct quantity and quality of vegetables on each day of the year. The manager will seek to impose discipline upon SDOP farmers in relation to when they can utilise SDOP staff, machinery, transportation and cold storage. Therefore, activities that benefit SDOP as a whole may not always be perceived by individual farmers to be beneficial at a farm level. For example, a specific farmer may have a free day to plant crops, but it is more important for SDOP staff to support another farmer to plant in order to fulfil the crop programme.

(d) Farmer members may perceive that the SDOP manager may be serving the interests of Riverford more than their own interests when collaborating closely. Collaboration creates tensions between farmers when they perceive that some farmers are benefitting unequally from collaboration. The SDOP manager needs to communicate the mutual benefits that arise from fulfilling the Riverford crop plan to the members. Staying in close contact with all the farmers is essential. This removes any suspicion that the interests of the SDOP board members are those that are being given the highest priority. To create legitimacy as a loyal staff of the co-operative, the SDOP manager must innovate new initiatives with Riverford that benefit the farmer members equally.

7. There are no right or wrong answers, but each objective will have consequences that students will need to justify. A number of options could be considered:

(a) Re-launch the labour pool and utilise profits from this activity to cross-subsidise investment in new machinery. Vegetable producers in the UK have been reliant upon migrant workers from Eastern Europe and it is not known how the UK exit from the EU will impact the availability of labour. In a post-Brexit context subsidies may not be available and new income streams will be welcomed by the farmers. The profits will need to cover the costs of administration of the labour pool.

(b) Partner with other organic vegetable producers in the UK to increase the buying power of SDOP. It will not be feasible to provide benefits to non-local vegetable producers (e.g. sharing

machinery and labour), but there could be opportunities to purchase other farm inputs together (e.g. seeds, plants and administration costs). If other vegetable producers are delivering to the Riverford packhouse and their vehicles are leaving empty, it may be possible to distribute SDOP produce elsewhere utilising the capacity of those vehicles.

(c) Bring Riverford into membership of SDOP. Multi-stakeholder co-operatives are more common in mainland Europe as a way of negotiating fair prices and addressing the negative externalities associated with operating in a capitalist market (Gonzalez, 2017). Bringing Riverford into membership presents various opportunities. For example, it is becoming more common for agricultural co-operatives to include investor members to help them scale up and meet suppliers' demands. Students would need to consider the pros and cons of sacrificing some control rights to Riverford in order to achieve greater investment (Chaddad and Cook, 2004).

(d) Bringing SDOP staff into membership could result in increased motivation to work, especially if profits are shared with staff. Having staff represented at SDOP board meetings may result in improved efficiency. It will be challenging to incentivise staff members to join the SDOP board. Differences of opinion between farmers and staff could also create new tensions in the board room.

(e) SDOP could offer a whole service to local farmers with organically certified land. When farmer members become ill, SDOP has proved that it can run their entire vegetable production for them. Therefore, it is conceivable that SDOP could expand their staff and utilise their assets more effectively by taking on contracts with non-member farmers.

6. Teaching aids

<http://www.southdevonorganic.co.uk/> (SDOP webpage)

<http://www.riverford.co.uk/exe/aboutus/> (Riverford webpage)

<https://www.youtube.com/watch?v=SKEyBSGeq5M> (Video introduction to Riverford where employees talk about the company ethos and vision)

<https://player.vimeo.com/video/38979983> (Video of the Riverford business explained by the Executive Chairman, Guy Watson)

<https://www.youtube.com/watch?v=Ldx2HhwT8cs> (John Watson, the father of Guy Watson, talks about the history of Riverford Farm and how he came to realise the benefits of organic farming)

<https://www.thenews.coop/129339/sector/riverford-organic-farmers-switches-employee-ownership/> (An article explaining the transition of Riverford to employee ownership in 2018)

7. Follow up statement

Due to ethically imposed restrictions, the case employs primary data collected between June 2015 and April 2016 augmented with some more recent secondary data. In the period from 2016-2018 there have been a number of developments that will be of interest to students.

Riverford ownership transfer

On 8th June 2018, majority ownership of Riverford was passed to the employees of the company, now renamed Riverford Organic Farmers Limited. Guy Watson (now Guy Singh-Watson) retains a 26% share and maintains an active role in the business. The remaining 74% of the company is owned by the Riverford Employee Ownership Trust. The United Kingdom Financial Act (2014) provides for various tax benefits for owners who want to transfer their property to an Employee Ownership Trust (EOT). Sales of shares into an EOT are exempt from capital gains tax when the EOT is given a controlling interest and has rights to the majority of profits. Students may wish to debate how employee ownership will impact the relationship with SDOP.

SDOP cold storage innovations

In 2017-2018 Riverford adopted a pick-by-light system, investing upwards of £750,000 to transform their packing operation. This innovation enables Riverford to efficiently add the extra items that customers purchase into their vegetable boxes by moving the boxes to the pickers; previously the pickers had to walk great distances to retrieve the items for each order. One outcome of this change was the recycling of the previous Riverford cold store by SDOP members, leading to the creation of their own cold storage facilities on their farms. The innovation allows farmers to pick crops and delay delivery into the Riverford packhouse until the following day. It enables SDOP to use labour more efficiently and reduces the number of journeys that farmers make to the Riverford packhouse. Students may wish to discuss what other co-specialised investments could benefit Riverford and SDOP.

Improving pollination

In 2017, SDOP took delivery of six hives of bees to pollinate crops of courgettes and runner beans. This was a trial and the benefits of the bees will be evaluated by considering the impact on yields.

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