

## The role of social capital in Tasmanian cherry industry value chain

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**Abstract.** Social capital refers to relationships and networks that exist between people. It involves trust, regular exchanges, norms, networks, groups, proactivity and co-operation. The Tasmanian cherry industry value chain was examined as a case study to investigate the role of social capital in value chain effectiveness. The study found social capital to be very important in the value chain. Participants noted the success of the value chain is due to effective relationships leading to social and financial benefits. Development and maintenance of social capital takes effort and time by all value chain members. Social capital issues related to the operation of the value chain included a lack of connection between growers and retailers, a need for timely and effective communication and a need for better understanding of technical constraints. Social capital can be fostered by facilitating the development of relationships, education to address value chain issues and improving the effectiveness of communication.

**Keywords:** networks, trust, relationships, communication, value chain, cherry

### Introduction

The Tasmanian cherry industry is a relatively young industry with a focus on the production of high quality, large cherries for export and domestic markets. Relationships and networks within the Tasmanian cherry value chain have been important in the establishment and growth of the industry. Many growers have come from an apple production background and draw on historical personal linkages and networks in developing cherry value chains.

The importance of these relationships and networks has raised the question of the role of social capital in fostering value chains for the cherry industry. Social capital is the relationships that link individuals, groups, organisations and communities. The concept of social capital in a value chain is no longer just about procurement and logistics; it is now very much about managing relationships, communication and the performance of alliances.

Gooch (2012, p. 5) describes value chain management as 'the purposeful decision by businesses that comprise a value chain to improve their profitability through developing the processes and capabilities required to create consumer-recognized value'. Gooch stresses that this is 'achieved through developing close, mutually compatible relationships, which enables the opportunity to combine resources to achieve objectives that would otherwise not be possible', (p. 5). Boehlje (1999) explains the need for agribusiness firms to invest in 'soft assets' and to focus on the human and interpersonal dimensions of transactions including relationships, communication and information flows. Lee and Billington cited in Spekman, Kamauff Jr and Myhr (1998, p. 56) state that 'Supply chain management is built on the foundation of trust and commitment'.

Min, Kim and Chen (2008, p. 286) investigated social capital within supply chains and described social capital as 'a set of social resources embedded in the relationships within a supply chain network, including not only the relationships but also interactions between different actors and processes derived from those relationships within a supply chain'. They suggest social capital derives from all of the social ties among participating firms and that the magnitude of social capital affects supply chain management.

Much of the literature relating social capital to value chains is focused on large interconnected firms. Little is known about the role of social capital in value chains in relatively small industries in an Australian context, and at the producer end of value chains. It's unclear how individual growers may create social capital along an industry value chain. This research investigated these issues using the Tasmanian cherry industry value chain as a case study.

### **Social capital**

The World Bank (n.d) describe on their website social capital as 'the institutions, relationships, and norms that shape the quality and quantity of a society's social interactions. Social capital is not just the sum of the institutions which underpin a society – it is the glue that holds them together'. Putnam (1995, p. 664) defines social capital as 'features of social life—networks, norms, and trust—that enable participants to act together more effectively to pursue shared objectives'.

Cavaye (2004) explains that social capital can occur at different levels including individual, group, community, institutional and state or national levels and that social capital within communities often involves the culmination of relationships at lower levels. Brunie (2009) describes social capital as the quality of relationships among people that social capital is based on the density of interrelations. Mutual trust is a key factor in facilitating voluntary cooperation and arises from norms of reciprocity in networks (Ostrom 2000, Ostrom and Ahn 2001, 2003 & 2008).

### ***Benefits of social capital***

Social capital has considerable benefits. It contributes to the resilience of communities. People are able to draw on their networks to embrace change or deal with adversity (Berkes and Ross 2013). Social capital can contribute to economic outcomes including, reduction of costs, the development of business opportunities, increased efficiency and the transfer of information and knowledge (Gourdy and Ryan 1982). In a developing country context, Lyon (2000) showed collective social capital allowed farmers to enter into new markets and increase income.

### ***The components of social capital***

Pretty (2002) describes four features of social capital as relations of trust; reciprocity and exchanges; common rules, norms and sanctions; and connectedness, networks and groups. Cavaye (2004) supports these groupings and suggests the two additional components of proactivity and co-operation.

Trust Successful collective action relies on trust between actors (Ostrom and Ahn 2003). Pretty (2002, p. 152), states that 'Trust lubricates cooperation, and therefore reduces transaction costs between people'. He describes two types of trust: 'Trust in individuals who we know and the trust we have in those whom we do not know, but which arises because of our confidence in a known social structure'.

Reciprocity and exchanges Relationships are built on regular exchanges and Pretty (2002) found that regular exchanges and reciprocity can build trust and social capital between individuals and organizations.

Social norms, common rules and sanctions Norms are people's expectations about other people's behavior and actions. Sanctions include reward for positive action toward norms or punishment for behavior outside norms. An example in a value chain context would be a 'preferred supplier' status for loyal suppliers who consistently meet expectations or loss of business for those who supply an inconsistent product. Coleman (1987) found that norms which depend on external sanctions rely on people believing that the sanctions will be applied. Hence, people obey norms when there is the greatest benefit or disadvantage for them.

Connectedness, networks and groups Social capital relies on networks and groups as a means for the building of relationships between people. Pretty (2002, p. 153) describes connectedness as 'the trading of goods, exchange of information, mutual help, the provision of loans and celebrations or rituals'. Pretty emphasized that high social capital is likely to increase the likelihood of multiple membership of groups and strong links between groups.

Proactivity and co-operation Proactivity is an individual's attitude towards anticipating and implementing change. Individuals work together to prepare for and implement change.

### **Methodology**

A case study was conducted of the Tasmanian cherry industry value chain in 2013 to investigate the role that social capital plays in value chain effectiveness with a focus on the grower end of the value chain. The study aimed to understand how social capital operated in the cherry value chain, the extent to which social capital supported the value chain, and how the industry can foster social capital in value chains. The research aimed to understand the views and experiences of value chain participants. The study focused on the collective approach to social capital described by Brunie (2009) to explore the value of individual relationships that collectively constitute social capital within the value chain.

Twelve value chain members participated in semi structured interviews. Five members were involved in a focus group discussion. All participants filled out a Likert scale score questionnaire that asked participants to rate the importance and effectiveness of indicators of social capital. The value chain sectors represented in the study included: growers, integrated value chain representatives (that grow, market and export), marketers, freight forwarders, wholesalers, and organisations and groups supporting the value chain. Retailers and consumers were not included in the study because key retailers are integrated into the value chain and the small scale and resources of the research did not allow for consumer feedback.

Criteria and indicators relating to aspects of social capital in value chains were identified. Interview and focus group questions were developed for each criterion, such as the types and extent of relationships, the effectiveness of communication, levels of trust and the nature of norms. Interview and focus group questions were trialled and validated. Interview and focus group participants were selected through purposive sampling. They were identified as key informants with good knowledge of the industry and value chains.

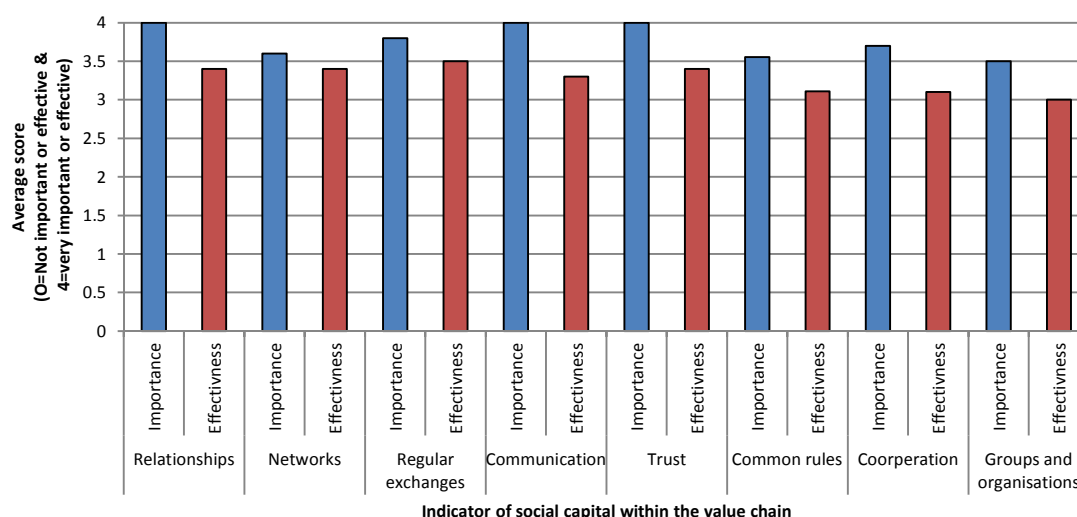
Interviews and the group discussion were digitally recorded and transcribed. Likert scale scores used a rating from 0-4 (0 being not important / effective and 4 being very important / effective) and were recorded on a spreadsheet. Transcripts were analysed using thematic analysis. Transcripts were coded openly and codes were collated into subthemes and themes.

## Results

### *Social capital within the value chain*

Average Likert scale scores are shown in Figure 1. All indicators of social capital were considered to be important in the cherry value chain with scores from 3.5 to 4 out of 4. Relationships, communication and trust were seen as most important with each having a score of 4 out of 4. Regular exchanges, relationships, networks, trust and communication were the highest rating indicators in terms of effectiveness in the value chain with scores between 3.3 and 3.5 out of 4. For every indicator, effectiveness was rated less than importance. This suggests that while participants saw elements of social capital as important, there were limitations to the effectiveness of social capital in the value chain.

**Figure 1. Average Likert scale scores from interview and focus group participants for the effectiveness and importance of indicators of social capital in the Tasmanian cherry value chain**



n=12

Interviewees consistently emphasised the importance of personal relationships in the value chain.

“This industry is built on personalities and dealing with people.... Both locally and internationally” – Freight Forwarder

“When it comes to marketing you are in the people business. You are into communication and building relationships. What it is about is that you need to know who’s who in the zoo when it comes to selling stuff...” – Grower

The aspects of social capital that interviewees identified as most important in the success of the value chain were relationships (4), trust (3), communication and information sharing (3). Product quality (3), efficiency (2), performance (1) and volume (1) were also raised as important. The number of respondents is shown in brackets.

“Professionalism - I like people that give me honest information in a form that I can use, people that will tell me something and then back it up with action and inter reliance. Barrier to me is people who have all the talk and promising more than they can deliver.” – Grower

"Trust – I trust the grower to have good quality fruit. He trusts me to get a good price suitable for the fruit and a net return to him that is better or equal to the return from the market." – Wholesaler

"Communication with everybody and everyone in the supply chain understanding what their role is and everyone knowing what each other's needs in the supply chain are whether they are someone after or before them." - Marketer

The factors that most contributed to good value chain performance were communication (11), relationships (6), good quality product (5), efficiency (4) and volume of product (3). Communication and relationships relate directly to social capital.

"[We had a] major communication issue. We couldn't ever get feedback on pack outs that was timely, would get it a month later. We need to know whether we should keep picking or not." – Grower

"[Agent 1] I feel that I trust him, he gives me good feedback and doesn't give me bullshit. Other guy [Agent 2] will just tell me anything, but he gets good prices and they pay us. I'd go out of my way for [Agent 1] but not for the other guy" – Grower

"Good fruit makes everything work well, no problems, no issues and adds value to the chain" – Wholesaler

### **Relationships**

Interviewees perceived relationships as very important. Personal relationships appear to be encouraged by the small close knit nature of the industry and value chain.

"Relationships with the growers is the first and single biggest thing with our game." - Wholesaler

"Cherry industry is a close knit community and we all support each other" - Grower

Relationships are fostered by the provision of services (e.g. supply, packing, selling, transport or input supply). They are also supported by personal connections across the value chain such as between retailers, importers, airlines and growers.

Many relationships have continued on from previous linkages between people from former apple production (5) or through the purchase of an existing business (1). Other relationships have developed from introductions from others in the value chain (5), networking (such as at conferences) (4) and by word of mouth (1).

"We have been involved in the industry for a long time, we used to carry apples and were involved with these guys when they were apple growers" – Freight Forwarder

"Contract grower we got through [Agent], it is a good example of him adding value to our business and also adding value to himself as he has now picked up some of their business also" – Grower & packing shed operator

The Tasmanian Cherry industry benefits from relationships that are developed from year round interactions. For example freight forwarders, exporters and importers are involved with other commodity products e.g. seafood, other fruits and therefore the relationships and connections they have with their value chain partners e.g. airlines, retailers are built through regular transactions over a 12 month period. This is particularly important for the cherry industry as the harvest and marketing season is relatively short, lasting only six to eight weeks.

"Relationships I build are 12 months of the year because of the other products we carry. The industry is lucky in that relationships are pre-existing and are ongoing. And that's why the industry does so well out of us and other forwarders." – Freight Forwarder

Relationships are strongest where interactions are regular and long term and where there is a high need for a relationship. In these instances, trust is high, communication is effective and honesty is crucial. Weak relationships result from poor communication, lack of understanding of mutual needs, personality differences or lack of trust from bad experiences between people.

"The guy there is ideal within that particular market it just that he's not the sort of guy that is compatible with me... I trust him to a degree" - Grower

"I have no problem with what they do, it's just that sometimes we don't understand what they are on about and sometimes they don't understand what we are on about, it's all about communication and working with them" – Marketer

Relationships are generally strong between "neighbouring" elements of the value chain such as between a grower and wholesaler or between a freight forwarder and airline. Interviewees stressed a disconnection between growers and retailers. An exception was where growers had direct supply agreements with retailers such as supermarkets.

"Once fruit leaves your orchard you don't have control of it. What appalled me last year was quality of local fruit in supermarkets that should not have been sold. That damages our image as the grower not the seller. I don't know what answer is as I have sold my fruit on and what can you do." - Grower

Themes that emerged relating to the maintenance of relationships included performance (11), communication (8), adding value to each other's business (2), compatibility & personality (2) and supporting each other in times of need (1).

"As far as these guys go it's their performance and the fact that they are interested in my business that works." - Grower

"This is the thing with perishables, it is the reputation that you have and you don't want to tarnish it." - Freight Forwarder

### **Networks**

Participants felt that networks built relationships, information sharing and new knowledge. There were ample opportunities for networking within the value chain. Networks are built by attending conferences, study tours, tradeshows, extension programs, by partnering with others, through introductions, getting to know other growers, word of mouth, and by visiting others in the value chain.

"I'm not a particularly good networker, I tend to get on and do my own thing, but someone like [my agent] is an excellent networker, I can utilize his networks." - Grower

"Networking or meet and greet is important. I've been going to conferences now for 15 years and have met growers along the way who I don't do business with." - Wholesaler

When a network is limited, personal relationships, trust and reputation become very important.

### **Reciprocity and regular exchanges**

Regular exchanges with members of the value chain benefited the individual businesses involved. Exchanges included information (8), development of trust and reliance (4), financial reward (e.g. price and payment arrangements) (3), development of mutual understanding (2) and opportunities for continuous improvement (2).

"Information - pick up on things I haven't thought of e.g. new developments, other people's problems and how they have tackled them." - Grower

"It's all about understanding each other, that's what regular contact does." - Marketer

"Mutual understanding is important. By regular exchanges and contact you develop a confidence in each other or you should do if you have a good relationship, which then means that you can trust someone." - Grower

### **Trust**

Trust in the value chain occurred at two levels, personal trust between individual and organisational trust. Factors that participants indicated built trust were performance and service (delivering on promises) (9), honesty and transparency (8), communication and information flow (8), building and maturing of the relationship (3), knowledge (2) and equality (1).

"Comes back to service, what you say is what you deliver." - Freight Forwarder

"Sharing of information and not hiding things. Some growers will ring and say that one half of that pallet x, the grader had a problem and size may be a problem for 40 boxes. It is a trust thing that some guys will be honest to tell me that. Honesty builds trust." - Wholesaler

Participants indicated trust diminished when there were personal differences, a bad experience or poor performance. Factors that developed trust included: effective communication (6), interaction (3), performance (e.g. product quality and cool chain management) (3), continuous improvement and innovation (3), honesty (1) and loyalty (1).

"Delivering on expectations every time" - Grower

"Meeting, catching up and doing the things that need to be done" - Wholesaler

### **Norms and common rules**

The value chain has effective industry norms and common rules. These norms include the importance of cool chain management (5), trust in that everyone is doing the best they can (4) and the need for product quality (3).

"The freight company we use know cherries are a perishable commodity and therefore common understanding that it gets to where it is going as quickly as possible and needs to be kept at temperature." - Grower

"I am trusting the guy selling my fruit to do a decent job and the buyer is also trusting him. There is also trust in that they are confident that we are grading all our cherries the same way and that they can open a box and there is going to be no surprises. The retailer trusts the wholesaler and wholesaler trusts us." – Grower

### **Cooperation**

There is a general feeling of openness and sharing between growers which led to cooperation. This included sharing of production information, provision of advice and the sharing of equipment and supplies.

"More like a family than a competitive business and we are all there for the same reasons" - Grower

"Times where growers might have run out of long life bags and we have sold them to them and vice versa. Everyone knows that all of this working is important to everybody's business as well as your own business." – Grower

Apart from one marketing alliance, there was limited cooperation between growers at the consumer end of the chain where growers openly compete. Growers and retailers rarely cooperated except where a grower may have a direct supply relationship with a retailer. Wholesalers and retailers generally cooperated well in coordinating product quality and supply to meet consumer requirements.

"There are people out there cooperating with me to get the volume of fruit that they want and the price we negotiate after we have delivered the fruit. There are others out there with zero cooperation that are predatory and just want to buy the best fruit on the day." - Wholesaler

There was minimal cooperation between wholesalers due to requirements of the Horticultural Produce Code to avoid collusion. Participants felt that communication and information sharing (5), growth of the industry (especially within export markets) (1) and need (1) could encourage cooperation in the value chain.

"[We] don't have eyes and ears on ground in export markets – when the industry gets to a certain mass we are going to need somebody that can talk on our behalf in these markets." - Grower

### **Groups**

Participants identified several groups that support the Tasmanian Cherry industry including industry membership organisations such as Fruit Growers Tasmania (FGT) (7), levy funded industry bodies including Cherry Growers Australia (CGA) (5) and Horticulture Australia Limited (HAL) (1). These organisations provide training, export market development and funding of industry research programs. Commercial networks such as a cherry marketing alliance (3) and input suppliers, such as agronomy firms, were also mentioned as organisations that support the value chain.

Interviewees had a strong connection with FGT and value its role in facilitating networking through training events, seminars and an annual conference. FGT also coordinate export registrations for packing sheds, host trade delegations, promote Tasmanian cherries and lobby government such as on biosecurity and market access issues.

Non-grower value chain participants, such as freight forwarders, indicated that their industries were supported by industry membership organisations (2). Federal and state governments (2) were mentioned for their roles in negotiations for new market access, policy development in relation to biosecurity and for the provision of quarantine services.

### **Communication**

The primary communication method used in the value chain is verbal (phone and face to face) and writing (email, fax or text message). Communication is frequent during the growing and harvest season, often occurring 2-3 times a day between key contacts such as between growers and packers. In-season communication is focussed on production, logistics, sales, procurement and marketing. Out of season communication involves more face to face meetings focused on review of the previous season and planning for the coming season.

"Growers – regular visits leading up to season, moving up to daily communication getting close to the season and sometimes multiple times a day when they are delivering product to the shed." - Marketer

"The more information the grower shares with me the more information I share back with the grower." - Wholesaler

Feedback mostly occurred if there were problems with a shipment of cherries such as poor quality or delays.

"[If there was a problem] you would be informed about it and the agent would be on the phone. We had an issue when the floods hit Brisbane and our cherries sat for a few days. We were sent photographs and a written report. When it is negative feedback it is a more disciplined sort of thing." - Grower

Participants indicated that they receive little positive feedback during the harvest season.

"When positive feedback it is verbal e.g. 'cherries look good'" - Grower

"[We] don't get a lot of positive feedback. May do later [after the season] if there have been no issues e.g. quality was good for the season." - Marketer

Participants suggested that communication could be improved by the use of real time electronic information (2), use of more electronic information (2) and more timely information (2).

"I saw big packing sheds in USA where information was going straight through electronically and back to the growers... A grower having sent fruit in is able to fire up their computer, look at the information, if it is consistent and decide if they should keep picking." - Grower

Participants noted that changes to communication were difficult to implement due to the short harvest season and inconsistencies in systems used in different export countries.

## Discussion

### ***Role and operation of social capital in supporting the value chain***

Social capital is very important to the Tasmanian cherry industry value chain and effective relationships are the basis of the success of the value chain. Key elements of social capital highlighted in the literature, were evident within the cherry value chain. These elements included networks, trust, regular exchanges, norms, cooperation, collaboration and groups. The element of norms and common rules were not as prominent as trust, regular exchange and networks.

The study identified several issues in the on the operation of social capital within the value chain. These included a disconnection between growers and retailers, the need for more timely, immediate and effective communication and feedback, and the need for a better understanding of the impact of technical constraints.

Communication Communication is a key enabler of social capital within the value chain. This concurs with the established role of communication as a component of value chain management. Mohr and Nevin (1990, p. 36) describe communication as 'the glue that holds together a channel of distribution'. They stress importance of communication and that communication difficulties are a key cause of marketing problems. Lack of communication between parties in the Tasmanian cherry value chain led to weak relationships.

Opportunities exist to improve communication. The reliance on paper-based documentation is a communication constraint. Difficulties with delays and poor performance from physical documentation can affect reputations and relationships; this was particularly evident in export markets where phytosanitary certificates may have been lost in transit.

Trust The direct link between trust and a relationships' effectiveness, supports the emphasis placed on trust in social capital literature. Leat et al. (2010, p. 91), describes the importance of trust as a 'relationship-based concept, which is created, reinforced, or decreased by bilateral, relational activities in a series of economic and social exchanges'.

The factors that build trust in the Tasmanian cherry value chain such as performance and service, honesty and transparency are supported by Batt (2010) in his review of trust in agrifood chain relationships. Batt describes trust building behaviours as satisfaction, communication and information exchange, personal relationships, reputation, relationship specific investments, power and dependence and forbearance. These concur closely with the results of this study.

Trust between value chain participants was greatest when there was mutual compatibility, effective communication and good understanding of each other's needs. This concurs with Kumar (1996, p. 105) who found that 'companies that want to develop trust pay greater attention to partner selection and select those that bring distinctive competencies and similar values'.

Norms, performance and reputation The study showed that individual performance within the value chain influenced reputations, trust and relationships. Whilst the importance of performance is well known in value chain literature (Boehje 1999, Leat et al. 2010, Gooch 2012), very little is detailed a social capital context. Performance and reputation could be considered as norms and sanctions in a social capital context. While, the role of performance

and reputation in a business sense in a value chain is well established, this study has confirmed the importance of these elements in the cherry industry value chain from a social capital perspective as well.

Technical constraints in the value chain influence performance against industry norms and expectations and therefore the quality of relationships. For example, inconsistencies in what is perceived as 'good fruit', inconsistent or poor quality fruit, and poor cold chain management affected relationships and trust. By addressing technical issues, there is scope for value chain participants to not only improve efficiency but to also build relationships that can, in turn, support performance.

Regular exchanges The finding that regular exchanges strengthened relationships within the Tasmanian cherry value chain concurs with Kumar (1996) who found that effective relationships require both parties to make contributions. Many value chain participants commented that whilst regular exchanges happened frequently during the harvest period, it was also important to maintain contact over the non-harvest season. This emphasised the importance of ongoing exchange.

In the absence of direct supply agreements with retailers, the general disconnection between cherry growers and retailers, prevented regular exchanges. This contributed to a lack of mutual understanding. Many value chain participants felt that growers lacked an understanding of retailers needs, and that many retailers lacked an understanding of how to maintain fruit quality in-store.

This disconnection means that a lack of networking and interaction limits relationships, trust, and mutual understanding and subsequent market opportunities.

Networks Networks are important for establishing relationships within the value chain. Access to networks led to many relationships. For example, growers partnered with wholesalers, third party exporters or importers to gain access to their networks. Industry-run events were highly regarded among value chain participants for the opportunities they provided to access networks. These findings support that of Kumar (1996) who found that effective companies built networks based on interdependence. Ostrom and Ahn (2003) also found that access to networks built cooperation.

Cooperation, collaboration and groups Boehlje et al. (1995) suggests that agribusiness firms seek alliances and partnerships at numerous levels in response to changes in the market. This was evident in the Tasmanian Cherry industry as cooperation, collaboration and alliances occurred. This happened where two parties informally collaborate through information and resource sharing. There were formal collaborative agreements on freight and logistics and marketing alliances between major growers. Industry groups were another example of collaboration particularly between small scale growers. They were a focus for the development of social capital and played a key role in facilitating networking.

### ***Fostering social capital***

The results show social capital can be fostered at two levels – at the individual level and through broader industry initiatives to enhance an individual's ability to benefit from social structures.

For individual value chain members Individuals need to build relationships across the value chain and understand how they influence others in the chain. Effective relationships required value chain participants to invest in them. They achieve this through their performance in meeting expectations and effective communication. Visiting other participants in the chain would also be an important way to build mutual understanding and relationships.

Value chain members who recognised networking was not their skill, indicated that they consciously partner with those in the value chain who had established networks. This enabled them to access networks, ideas and to build relationships.

Those in long term committed relationships within their value chains expressed the importance of delivering on promises made to other value chain members. This can be in the form of supplying consistent fruit that meets market specifications for size and quality, delivering fruit on time, through to timely payment of accounts. Delivering on promises builds individual reputations, reliability as a supplier and trust in the relationship. The 'personal brand' or reputation of individuals was expressed by the cherry value chain members as one of the most important assets to their business.

Broader industry role Organisations that support industry could support social capital through relationships, education, communication and effective extension. Industry organisations can facilitate networking and contact between value chain participants particularly retailers and



growers. A well-known approach would be to support 'walking the chain' activities which involves a value chain case study from retailers to growers (Collins and Sun 2012). Industry could also assist in facilitating dialogue with retailers to identify needs, such as consumer trends, and convey this information across the chain.

Networking opportunities provide an avenue for information sharing, knowledge generation and for establishing relationships. Outside agriculture, Kumar (1996) explains that top retailers are collaborating with manufacturers in joint education programs for executives in value chain management. A similar approach could be useful for building relationships between value chain members in agricultural value chains, especially in areas where relationships may be weak. This may be less feasible in the cherry industry where there are many small growers.

Communication weaknesses may be addressed by training in effective communication and by increasing the timeliness of communication during the harvest season, such as with real time electronic feedback systems.

Effective industry extension can assist in addressing constraints to value chain effectiveness. Extension activities should seek to draw on existing social capital and networks to increase the impact of extension and industry initiatives, as well as acting to enhance relationships between members. Value chain members working together to address technical constraints is likely to increase the effectiveness of relationships, as suggested by Kumar (1996).

Cooperatives The importance and effectiveness of social capital in this study raises the question of the role of a cooperative structure for the Tasmanian cherry industry. Cooperatives structures are an example of not just joint marketing and collective input supply. They also foster, and indeed rely on, social capital.

Fulton et al. (1996) found success factors in US based grain cooperatives were based trust, commitment and open communication as well as financial and operational considerations. Evans and Meade (2006) suggest cooperatives are strong in industries where there is homogeneity of interest among cooperative owners, product homogeneity, as well as the cultural homogeneity and stability of the cooperative owners. This explains why cooperatives are strong agricultural industries such as milk and grain (where product is very homogeneous) and those that involve downstream processing.

Cooperatives have a mixed history of success in Australia. Many failed because of industry change, lack of sustained profitability, inability to meet the expectations of members and internal conflict. While cherry value chain members highlighted positive aspects of cooperative organisations elsewhere (e.g. packing sheds in the USA) although felt similar operations would not be successful in Tasmania. Despite the positive aspects of social capital identified in the cherry value chain, respondents were influenced by past failings of cooperatives in other horticultural industries, concern that conflict may arise from different views of product quality, and conflicts that may arise within a cooperative arrangement.

## **Conclusions**

Social capital is very important to the Tasmanian cherry value chain. Social capital is built through networking and relationships between value chain members. In most instances, it is effective and leads to social and financial benefits for value chain members. As the Tasmanian cherry industry increases in scale these opportunities for networking and trust-building need to be maintained.

By identifying aspects of social capital that are most important in the value chain, and key ways in which social capital develops, the research allows individuals operating within the cherry value chain to enhance these aspects. The development to relationships through delivering on expectations and communicating effectively are clear priorities not only building social capital but also in fostering value chain performance. Industry personal involved in extension and research activities should seek to draw on existing social capital and networks to increase the impact of industry initiatives, as well as acting to enhance relationships between value chain participants.

Further research can build on these findings by involving a greater number of value chain participants and by including retailers and consumers. This would add to further understanding and provide a more comprehensive view of social capital in the downstream components of the value chain. It would also allow insights into the identified lack of connection between growers and retailers.

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