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The Fair Trade and Fair Trade Organic Chains for Small Honey Producers in the Tucumán and Santiago del Estero Provinces of Northwest Argentina

A thesis submitted in partial fulfilment of the requirements for the Degree of Master of Commerce (Agricultural)

at Lincoln University

by

Agustin Nervi

Lincoln University
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Argentina plays a major role in the global honey market as the world’s second largest exporter behind China. About 70% of Argentine beekeepers are small to medium-sized. Consumers from affluent markets are increasingly aware of the processes involved in the production of the food they purchase. These consumers are willing to pay premiums for goods that have socially and environmentally sustainable production methods. Certification protocols such as Fair Trade and Organic give consumers confidence that these requirements are met. However, smallholders find it difficult to access these premiums as they produce small volumes and consequently face high unit compliance, transaction and marketing costs. This qualitative study aims to understand how the Fair Trade and Fair Trade Organic honey supply chains operate in the Tucumán and Santiago del Estero provinces of Northwest Argentina. A case study method and semi-structured interviews is utilised to collect data from key respondents. The analysis follows a pattern matching logic in order to compare patterns identified in the data with those predicted by the literature. A within-case analysis is performed for each case, followed by cross-case comparisons in order to recognise the advantages, disadvantages and constraints for increased smallholder participation in the study chains. The analysis suggests that despite benefits brought by collective action and market access, the Fair Trade and Fair Trade Organic chains did not provide substantial premiums to cover small beekeepers’ compliance, transaction and marketing costs. Information and power asymmetry, biophysical risk, geographical dispersion and institutional problems raised transaction and agency costs within organisations and between producers and buyers preventing long-term, sustainable relationships. This research provides solutions to reduce these costs and improve small beekeepers’ welfare.

Keywords: Fair Trade, Organic, honey, small beekeepers, transaction costs, supply chain, cooperatives
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Chapter 1
Introduction

This chapter provides an overview of the setting in which this research is located. The areas of investigation will be introduced, as well as the objectives of the research. Finally, the structure of the thesis will be presented in order to provide the reader with an outline of each chapter.

1.1 Context of the research

Argentina plays a major role in the global honey market, being the world’s second largest exporter behind China (FAO, 2011). However, production of honey in Argentina has not increased in the last 20 years, unlike other honey producing countries (MinAgri, 2014). The advance of genetically modified (GM) crops in honey producing areas and adverse weather have been identified by some authors as constraints to the development of beekeeping in Argentina (Marin & Vila Seoane, 2012; Napolitano, Ordóñez, Tresoldi, & Mogni, 2006). Other issues such as maintaining traceability along the Argentine honey supply chain and the lack of differentiation of the final product have also been documented in the literature as reasons for static production (Fundación Fortalecer, 2011; Mogni, Tresoldi, Palau, & Vilella, 2007; Napolitano et al., 2006).

In Argentina, honey is commonly produced as a part-time activity by small beekeepers. About 70% of Argentine honey producers are small to medium sized (Napolitano, Vilella, & Mogni, 2007). Due to the advance of GM agriculture, beekeeping has been forced to move to less productive areas (Marin & Vila Seoane, 2012). In these areas where there is lower use of herbicides, bees can feed from native flora. Honey produced in these areas can be differentiated and therefore can earn price premiums for Organic and Fair Trade credence attributes.

Consumers from affluent markets are increasingly demanding higher quality as well as higher safety standards for the food they purchase. Moreover, they are becoming more aware of the processes involved in the food’s production (Van Der Meer, 2006). These consumers are willing to pay a price premium for goods that have socially and/or environmentally sustainable production methods. Certification protocols such as Fair Trade and Organic have become essential in order to ensure that these requirements are met. However, meeting these requirements is costly for producers, especially those on a small scale.

Fair Trade certification can provide an alternative marketing channel for small producers in developing countries (Ferrer, Skinner, & Lyne, 2008). Empirical studies have attributed smallholder benefits to Fair Trade (Bacon, 2005; Raynolds & Ngcwangu, 2010; Ronchi, 2002) and to a
combination of Fair Trade and Organic certification (Ruben, Fort, & Zúñiga-Arias, 2009). Others contend that Fair Trade benefits are not significant (Johannessen & Wilhite, 2010).

One objective of this research is to understand how the Fair Trade and Fair Trade Organic honey supply chains have developed in the Northwest Argentine provinces of Tucumán and Santiago del Estero. In particular, this research seeks to identify the main actors, and how they interact with each other. A second objective is to assess the effects on small beekeepers of supplying honey to these chains.

1.2 Research objectives

The literature reviewed leads to three key areas of investigation in order to understand the Fair Trade and Fair Trade Organic honey supply chains in Argentina and the advantages and disadvantages that small honey producers face. The findings from these areas allow recommendations to be made to participants at various levels of the supply chain. These recommendations for policymakers, government officials, cooperative managers, buyers, producers and consumers are aimed at improving the conditions of Argentine small honey producers. The areas of investigation are:

1. Description of the Fair Trade and Fair Trade Organic honey supply chains operation in Tucumán and Santiago del Estero provinces of Northwest Argentina
   a. How did these supply chains develop?
   b. How are these supply chains structured?
   c. Who are the main participants of these supply chains?
   d. How do they interact?

2. For small honey producers, what are the advantages and disadvantages of delivering to the Fair Trade supply chain?
   a. Do small producers intend to continue supplying this chain?
   b. What are the main constraints to increased small producers’ participation in this chain?

3. For small honey producers, what are the advantages and disadvantages of delivering to the Fair Trade Organic supply chain?
   a. Do small producers intend to continue supplying this chain?
   b. What are the main constraints to increased small producers’ participation in this chain?
1.3 Thesis outline

This research thesis has eight chapters. In Chapter 1 a brief background and research objectives are put forward. Chapter 2 reviews literature about the exclusion of smallholders from markets, Fair Trade goals, and Fair Trade and Organic certification outcomes. An overview of honey production in Argentina and studies related to Fair Trade and Fair Trade Organic honey is also provided in this chapter, to highlight the gap in the literature. Theories are then introduced against which the findings are compared. Chapter 3 outlines the method utilised for data collection and analysis. In Chapters 4 and 5, Case 1 and Case 2 respectively are described. Chapter 6 provides “within-case” and “cross-case” comparisons of both cases. Chapter 7 discusses the findings, compares them with the empirical literature and theories from Chapter 2, and provides a summary of key findings. Finally, Chapter 8 concludes the thesis, provides recommendations and makes suggestions for further research.
Chapter 2

Literature review

2.1 Smallholder’s exclusion from markets and horizontal coordination

The literature reviewed in this section outlines several explanatory arguments used to explain why smallholders are being excluded from markets. Limitations in value adding, changing consumer preferences and market power exerted by downstream actors are some of the reasons that help to explain why smallholders from developing economies have limited access to preferred markets (Dolan & Humphrey, 2004).

Pingali, Khwaja, and Meijer (2005) contend that food systems have become more integrated with increased international trade. In the domestic markets of the developing world, economic growth has increased consumers’ purchasing power particularly in urban areas, increasing the demand for healthier, safer and more convenient food on supermarket shelves (Van Der Meer, 2006; Vorley, Lundy, & MacGregor, 2009). Stringent grades and standards were introduced to meet the food quality and safety preferences of more discerning consumers (Dolan & Humphrey, 2004; Jaffee & Henson, 2004). For affluent consumers in importing countries, preferences may go well beyond food quality and safety. Consumers are now also concerned with the social and environmental impact of the systems used to produce the food they are buying (Van Der Meer, 2006). These changes have created opportunities in developing countries, but have also brought challenges for small farmers.

Caswell and Mojduszka (1996) categorised what consumers seek in food products, as search, experience and credence attributes. Search attributes (e.g. colour) are those that are easily perceivable before buying the product; experience attributes (e.g. taste) require that the good is consumed; and finally credence attributes which (e.g. ethical production) cannot be perceived by the consumer even after the product is bought and consumed (Caswell & Mojduszka, 1996). Product labelling by certification agencies has become more important for assuring consumers about the presence of credence attributes. Greater control over processes is needed to ensure that these attributes are present in the final product. Unfortunately, many of the costs that farmers must incur to meet buyer requirements in preferred markets are fixed costs. Likewise, many of the costs incurred by buyers who transact with farmers are fixed costs (e.g. search and information costs) (Dever, 2007; Dolan & Humphrey, 2000; Trienekens, 2011). Scale is therefore important and smallholders who transact low volumes are relatively less competitive than large producers who are able to spread these fixed compliance and transaction costs over larger volumes (Bhattarai, Lyne, & Martin, 2013; Pingali et al., 2005).

Many researchers report a trend where downstream buyers want to deal with small numbers of large producers, rather than large numbers of small producers. Dolan and Humphrey (2004) report that
Kenyan production of fresh fruit and vegetables for export is concentrated in large farms owned by a small number of companies. Smallholder participation in the chain has decreased in part due to retailers’ belief in their own ability to monitor processes and meet regulations. Dever (2007) also highlights production and environmental risks to which smallholders from developing countries are exposed to when entering high value export supply chains. Such chains usually involve products with high quality standards. Production risk arises if a large portion of the crop is rejected (Dever, 2007).

Collective action has been regarded as a way for smallholders to countervail market power from downstream actors, and to reduce unit compliance, transaction and marketing costs by pooling products (Bhattarai et al., 2013; Markelova, Meinzen-Dick, Hellin, & Dohrn, 2009; Trienekens, 2011). By pooling resources producer organisations such as marketing cooperatives have also been suggested as a way of financing value-adding assets (Markelova et al., 2009; Narrod et al., 2009). In developing countries, government bodies and NGOs have been identified as key players for assisting in the formation of producer organisations with sound institutional arrangements (Dever, 2007; Markelova et al., 2009; Narrod et al., 2009).

Should property rights be imprecise, producer organisations are likely to run into institutional problems that can limit their access to capital for pursuing value-adding activities (Cook, 1995). The internal free-rider problem arises when new members have equal voting and benefit rights with existing members. An external free-rider issue arises when outsiders can obtain the same prices as members. In both cases members don’t find incentives to invest as the benefits do not accrue to them proportionately. The horizon problem arises when members are reluctant to invest in assets that will generate capital gains beyond their own membership scope. This is especially the case in traditional cooperatives, where shares are redeemed at par value rather than at market value (shares are non-appreciable). The portfolio problem occurs when members cannot trade their equity shares to meet their personal risk preferences. A control problem arises when managers cannot be sanctioned or monitored due to the absence of a market price for equity shares. The influence problem is related to equal voting power (democratic voting) in a producer organisation. As decisions are influenced by majority voters rather than majority investors, entrepreneurial members as well as finance institutions are discouraged from financing assets. These institutional problems prevent organisations from raising equity capital internally and from borrowing debt capital from lenders (Cook, 1995; Cook & Iliopoulos, 2000). Hybrid models of marketing cooperatives have been developed in order to address these issues, such as New Generation Cooperatives (NGCs), Proportional Investment Cooperatives (PICs), or Investor-Share Cooperatives (ISCs). Among them, NGCs and PICs have successfully addressed the free-rider problem by matching investment to their supply (or patronage). The horizon, portfolio and control problems are alleviated by NGCs, and as well, NGCs provide a better forecast of member supply (Harris, Stefanson, & Fulton, 1996). Another hybrid model is the ISC. This model acquires equity capital from non-members by issuing equity shares that do not carry voting rights, preserving members’ control of the organisation (Chaddad & Cook, 2004). Hybrid cooperative models
can then enable smallholders to add value to their products and link them with supply chains by maximising the benefits of collective action.

Complementary paths to collective action have been developed for preventing smallholder exclusion from supply chains. Alternative trade models have emerged to link smallholders from developing economies to affluent markets (Vorley et al., 2009). The Fair Trade movement is arguably the best known alternative trade model. In the eyes of the consumer, Fair Trade certification entails a credence attribute that assures ethical conditions for production. In the eyes of the producer, Fair Trade can provide access to markets and/or price premiums in affluent markets.

2.2 Fair Trade

2.2.1 What is Fair Trade?

In essence, the Fair Trade movement is about establishing an alternative market for small producers in developing countries that enables consumers to choose small producers’ products and so directly improve the producers’ livelihoods. A working group named FINE was formed in 1996 by members of four Fair Trade organisations (Fair Trade Labelling Organisation, International Federation for Alternative Trade, Network of European World Shops, and European Fair Trade Association) to monitor the performance of Fair Trade advocacy bodies worldwide (Krier, 2001). This group defined Fair Trade as:

* A trading partnership, based on dialogue, transparency and respect, that seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, marginalized producers and workers – especially in the South. Fair Trade Organizations, backed by consumers, are engaged actively in supporting producers, awareness raising and in campaigning for changes in the rules and practice of conventional international trade. (WFTO & FLO, 2009, p. 6)

Redfern and Snedker (2002, p. 1) state that “although fair trade was born out of politics as much as it was born out of business, the primary goal of fair trade has been about providing market opportunities and developing the Northern market for products from poor producers in developing countries. The appearance of fair trade was in part a political reaction to the rise of free trade, capitalism and the Transnational Corporation (TNC) which would lead to the poor and marginalized being exploited or excluded”. Moreover, the movement intended to bring the possibility for small producers from developing countries to access the benefits of international trade, by providing them with an alternative supply chain to link them with consumers from developed countries. Among the organisations that provide advocacy for Fair Trade are Fairtrade Labelling Organisation (FLO), Fair for Life (Institute of Marketecology), Fair Trade USA, and their umbrella organisations, World Fair Trade Organisation and Fair Trade Federation.
2.2.2 The goals of Fair Trade

As described by FINE, the goals of Fair Trade are:

- To improve the livelihoods and well-being of producers by improving market access, strengthening producer organisations, paying a better price and providing continuity in the trading relationship;

- To promote development opportunities for disadvantaged producers, especially women and indigenous people, and to protect children from exploitation in the production process;

- To raise awareness among consumers of the negative effects of international trade over producers so that they exercise their purchasing power positively;

- To set an example of partnership in trade through dialogue, transparency and respect;

- To campaign for changes in the rules and practice of conventional international trade;

- To protect human rights by promoting social justice, sound environmental practices and economic security (Krier, 2001, pp. 5,6).

One of Fair Trade’s primary goals is to establish a direct link between buyer and seller. By promoting long-term contracts with growers and a minimum base price for their production, Fair Trade aims at providing a more stable sale channel. Other benefits are also offered, such as pre-harvest credit finance. Fair Trade promotes producer associations in order to reduce unit transaction, compliance and marketing costs for farmers and for downstream buyers.

Fair Trade certification also enables producers or workers to benefit from the Fair Trade premium. The Fair Trade premium is an additional income above the minimum Fair Trade price paid to producers. It is aimed at developing the local workers’ and farmers’ social, economic and environmental conditions. The Fair Trade premium is used by workers’ and farmers’ organisations to finance education and healthcare, to finance farm improvements to increase yield and quality, and to finance processing facilities to increase income (FLO, 2011). Fair Trade certified producer organisations need to monitor and report their production costs (Fundación Fortalecer, 2010). Such costs are utilised by the advocacy organisation to determine what the minimum Fair Trade price should be, as well as the Fair Trade premium. For example, in a case study of Fair Trade certified wine and fruit by Ferrer et al. (2008) a 2% share of the Fair Trade premium was taken by the advocacy organisation and the balance channelled into a Trust managed by farm workers.
2.2.3 Fair Trade positive effects

Many studies describe the positive effects of Fair Trade certification on smallholders in different agribusiness supply chains, especially in well-established Fair Trade products such as coffee (Bacon, 2005; Raynolds, Murray, & Leigh Taylor, 2004; Ronchi, 2002). Unfortunately, the effects of Fair Trade certification, as Ruben and Fort (2012) report, are not always positive.

However, Bacon (2005), through his study of Fair Trade Organic coffee in northern Nicaragua demonstrated how, by joining this alternative chain, small farmers can reduce exposure and thus vulnerability to changing market prices, and can earn higher average prices and feel more secure in their land tenure. Ronchi (2002, p. 25) found similar outcomes in the case of Costa Rican coffee cooperative Coocafé, where “the Costa Rican consortium has become recognised as an example of sound organisational development in Fair Trade”. Both these cases show how Fair Trade strengthens the position of producers and farm workers in developing economies, and provides improvements in their livelihoods.

A comparative case study by Ferrer et al. (2008) found that Fair Trade certification can provide access to favourable markets for products such as fruit and wine. However, permanence of shelf space at the point of sale may be determined by other reasons related to product quality. Ethical labelling was found to market better in high-end products that have a relatively longer shelf life and where quality cannot be instantly assessed by the customers’ senses (Ferrer et al., 2008).

Evidence of beneficial indirect effects from Fair Trade certification have been detected by Raynolds et al. (2004). Small-scale coffee farmers from Latin America were found to improve their financial situation in the short-term while also reaping benefits in the internal capacity of the organisations they belong to. This was achieved through information, training and links to international marketing channels and non-government organisations (NGOs). Ruben et al. (2009) report that producers linked to Fair Trade certified organisations are able to invest in goods that would benefit their livelihoods in the long run. Also, market information was found to be more transparent in areas with active Fair Trade practices. The Fair Trade premium even proved useful in some cases as collateral to secure financial support from other organisations for local infrastructure improvement (Ruben et al., 2009).

In a case study for Rooibos tea in South Africa, Raynolds et al. (2004) showed that Fair Trade certification brought significant advantages to small-scale black producers in post-apartheid South Africa. In this instance, two cooperatives, Wupperthal and Heiveld, accessed resources through Fair Trade networks to move into downstream, value-adding activities such as post-harvest processing and a tea packaging plant. Such resources were previously managed by white-owned enterprises, and are now controlled by farmers who export their own ethically labelled product which earns a premium in markets opened by Fair Trade certification (Raynolds & Ngewangu, 2010).
Ruben and Fort (2012) found that access to credit and capital appeared to be relatively higher for Peruvian Fair Trade coffee growers, facilitating the recovery of farmer cooperatives and improving production practices. Similar results were found in the study by Raynolds and Ngewangu (2010). Ruben and Fort (2012) also found that Fair Trade coffee producers invested and planned on a long-term basis, focusing on private labels to access premium market segments.

2.2.4 Fair Trade challenges

Although the fair trade movement has aimed to create an alternative market to directly link consumers with producers, it still has some challenges to face. Renard (2003) states that there is a contradiction between the ‘militant’ concept of fair trade and the commercial reality of it. Fair Trade certified products have entered large distribution networks. Because of this, Renard (2003) warns that there is a risk of fair trade becoming reabsorbed by the market into conventional trade. Johannessen and Wilhite (2010) have argued that large coffee multinationals are using Fair Trade labelling to their marketing benefit instead of enhancing producers’ welfare. Several studies report that only a fraction of what Fair Trade certified coffee cooperatives produce is sold to Fair Trade buyers, while the rest is sold to conventional channels despite all coffee produced being technically Fair Trade certified (Bacon, 2005; Valkila, 2009; Weber, 2007).

As Fair Trade base prices cannot adjust quickly to changes in market prices its benefits tend to erode during periods of rising prices (Vorley et al., 2009). Ruben and Fort (2012) show that despite providing better access to markets, Fair Trade certification did not have a significant impact on household income for growers of Fair Trade coffee compared to conventional coffee. This was attributed to a small market for Fair Trade coffee in the region and high local coffee prices (Ruben & Fort, 2012). Johannessen and Wilhite (2010) found in their study that 96.3% of the retail value of Fair Trade coffee stayed in consumer countries. The Fair Trade Social Premium provided the producer cooperative with just 0.01% of the final price paid by consumers (Johannessen & Wilhite, 2010). The authors describe problems in the distribution of the social premium where smaller cooperatives have to rely on bigger, Fair Trade certified cooperatives to access Fair Trade markets. In this instance, small cooperatives were found to face entry barriers for Fair Trade certification such as the requirement to have an export licence.

2.2.5 Market development of Fair Trade products

Since its inception Fair Trade has evolved rapidly. Indicators from market consumer research show that demand for these products is still growing. Retail sales growth of Fair Trade products in the United Kingdom during the last decade has seen coffee sales up 944% since 2001, tea sales up 136%, wine 128%, and flower sales up 511% (FLO, 2011). Moreover, retail sales of Fair Trade items passed US$ 7 billion worldwide in 2012, growing 20% over 2011 (Fair Trade Resource Network, 2014).
There is a growing awareness of the need for sustainability in agricultural supply chains for products that are sourced from developing economies. Regarding Fair Trade marketing, Bacon (2005, p. 507) notes that “markets are institutions that reflect the collective results of socially agreed upon rules and practices.” In the early years of the coffee crisis that started in 1989 the North American public was regularly informed by mainstream media on how low prices threatened smallholders’ livelihoods and the coffee industry itself (Bacon, 2005; Taylor, 2005). Roasting companies formed alliances with civil society organisations and grower cooperatives. Student activists established the United Students for Fair Trade network, with promotion in over 100 universities across the United States (Bacon, 2005).

Nicholls (2002) outlines a series of reasons that explain why the Fair Trade market is increasing. These include political reasons, with the “trade not aid” sentiment leading United Nations Development Programme initiatives for poverty alleviation in developing countries; and specific policies such as “ethical trading” sponsored by the Department of International and Foreign Development (DFID) in the UK. The “ethical trading” concept promoted public awareness of the Fair Trade movement, as did British supermarkets involved in such alternative supply chains. Some supermarkets now carry the Fair Trade logo on certain home-branded products. Fair Trade market development is also explained by academic influences. Academic research into Fair Trade retailing has evolved rapidly. This has led to several studies centred on ethical issues relating to poverty and working conditions, and sustainable production practices from the social side of the business. The rise of “ethical consumerism” has been a catalyst for exploring the motives behind consumers wanting to help resource-poor farmers through their purchasing power. New graduates as future managers are expected to carry this information in their academic backgrounds (Nicholls, 2002). Improved access to information is also driving growth in Fair Trade’s market share, with consumers being more aware of the processes behind the goods they are buying. In large part, this has been facilitated by social media and the internet (Nicholls, 2002). However, it has also happened because of the media’s engagement with consumerism, particularly inciting the development of ethical consumerism (Strong, 1997). Corporate responsibility issues have increasingly become a matter of discussion with supply chain relationships questioned regardless of intrinsic product characteristics (Nicholls, 2002).

Fair Trade has had a large impact in South American countries. The movement is still growing with increasing numbers of products being Fair Trade certified, and with signs of geographic spread of markets (Boonman, Huisman, Sarrucco-Fedorovtsjev, & Sarrucco, 2011; Parvathi & Waibel, 2013). Fair Trade coffee has been the most popular Fair Trade agricultural product in European supermarkets (Raynolds, 2000). Supermarket chains are establishing sustainable networks for different varieties of coffee coming from countries such as Peru, Nicaragua, Guatemala, Colombia, Bolivia and Honduras. Fair Trade rapidly claimed around three percent of the European coffee market a few years after its debut (Raynolds, 2000). Other Fair Trade products coming from Latin America include cocoa, sugar, fresh fruit, cotton, wine, tea and yerba mate.
2.2.6 Fair Trade and Organic certification: Combining two credence attributes

Organic production practices first introduced in developed economies have also been adopted in developing countries (Parvathi & Waibel, 2013). Organic agriculture is characterised by the exclusion of chemical fertilisers and pesticides (Scialabba, 2000). Pursuing Organic certification can allow producers to achieve a price premium or larger market share while working under environmentally responsible conditions (Raynolds, 2000). Through the combination of Fair Trade and Organic labels, new niche market possibilities arise for less favoured farmers from developing countries. Raynolds (2000, p. 298) explains that these alternative trade initiatives “critique the subordination of agriculture and food to capitalist market principles that devalue, and thus encourage the degradation of, environmental and human resources, particularly in countries of the South.”

However, both Fair Trade and Organic certifications come at a cost to producers in the developing world (Parvathi & Waibel, 2013). In situations where producers are unable to purchase chemical inputs, Organic labelling might be easy to adopt. However, upfront investment in certification might make it financially non-viable for them. Other challenges for the expansion of Organic agriculture in developing countries include limited domestic markets for Organic products, costly conversion periods and intensive labour and management requirements (Parvathi & Waibel, 2013; Valkila, 2009; Willer & Yussefi, 2007).

Nevertheless, Parvathi and Waibel (2013) report in their empirical study of small producers of black pepper in India that the adoption of both Fair Trade and Organic certification resulted in a significant welfare gain compared to other producers who were not certified. Ruben et al. (2009) finds that indirect welfare effects such as willingness to invest are highly significant among Fair Trade producers, especially those also involved in Organic production. In this instance, spill-over effects are expected from a stable sale channel provided by the Fair Trade label. Fair Trade producers are more likely to adopt Organic agriculture, especially for products that earn an additional price premium. Gains resulting from increased employment on farms are also anticipated (Ruben et al., 2009).

From the range of agricultural products in Latin America in which Fair Trade and Organic certifications have been adopted, coffee is the most widespread (Boonman et al., 2011). However, in the southernmost countries, conditions are less favourable for coffee production. In Argentina, Fair Trade and/or Organic certifications have been adopted for products such as wine, blueberries, yerba mate, fresh fruit and vegetables, and honey.

Napolitano et al. (2006) and Mogni, Tresoldi, Senesi, Palau, and Vilella (2009) argue that Argentine honey’s quality is highly regarded in foreign markets. Beekeeping does not imply high barriers of entry for new producers. It is relatively capital-extensive, and although beekeepers need to attend their beehives regularly, it can be carried out as a part-time activity. The apiculture sector can therefore be
considered as strategic for the development of less favoured regions in Argentina (Napolitano et al., 2006).

2.3 Honey production in Argentina

2.3.1 Argentina’s position in the world honey market

Argentina plays a major role in the global honey market. Almost 1.6 million metric tonnes (MTs) of honey were produced in the world in 2012. China was the largest producer with about 27% of the total, followed by Turkey (6%), Argentina (5%) and Ukraine (4%) (FAO, 2012). Argentina accounted for 15% of the 492 MTs exported in 2011, second only to China with a 21% share (FAO, 2011). Argentina’s domestic consumption of honey is very low (180-200 grams per capita per year) compared to other countries such as Austria, Germany and the USA, where the average consumption per year is above 1,000 grams (Napolitano et al., 2006). As a result, Argentina exports most of its honey. In 2011, 96% of the production was exported, mostly to European countries and the USA (FAO, 2011; Fundación Fortalecer, 2010; Napolitano et al., 2006).

2.3.2 The honey supply chain in Argentina

The apiculture sector in Argentina has been constrained by unstable conditions over the past 20 years. Periods of good international prices and relative foreign exchange competitiveness were followed by the advance of GM crops over marginal lands (with direct-sowed soybean leading the change) and periods of unfavourable weather conditions that affected the development of beekeeping throughout the country (Napolitano et al., 2006). As a result, honey production in Argentina has not grown in the last two decades. Similar production occurred in 1995 and 2012 (FAO, 2012). Between 2012 and 2014 production plummeted to the same levels found in the early 1990s. However, bulk honey international prices increased steadily over the period 1999-2014 (MinAgri, 2014).

Most of the honey produced in Argentina originates in the “Pampas” region, mainly in Buenos Aires province, south of Santa Fé and Córdoba provinces. Approximately 45% of the country’s honey comes from this area (Fundación Fortalecer, 2010). Due to the advance of GM agriculture, the availability of flowers for pollinators has reduced. Also, chemical inputs such as herbicides are negatively affecting production per beehive. This has pushed beekeeping towards new production areas (Napolitano et al., 2006).

In 2010 there were approximately 33,000 beekeepers registered in the Argentine territory, managing almost four million bee hives (Fundación Fortalecer, 2010). About 70% of beekeepers in Argentina are considered small- or medium-sized, managing less than 500 bee hives each (Mogni et al., 2009). These
statistics exclude a large number of informal honey producers (Napolitano et al., 2006). The informal honey producers has caused concerns about the positioning of Argentine honey in world markets as informal beekeepers may not adhere to official quality standards. Also, the possibility of complying with international trade agreements is constrained. In 2001 the USA applied sanctions to Argentine honey, accusing Argentina of dumping honey in US markets at prices lower than the official cost of production. In 2003 a honey cargo was rejected by the UK because of the presence of nitrofurans (antibiotics), causing concern in the main importing countries (Mogni et al., 2007).

The market structure of the conventional honey supply chain in Argentina can be characterised as an oligopsony in the producer-buyer relationship (Mogni et al., 2007). According to Mogni (2008), the most common governance structure observed between these actors is the spot market. However Ferrán, Gatti, and Balestri (2002) contend that beekeepers are usually price takers, subject to a greater bargaining power exerted from brokers and exporters. This suggests relational or ‘captive relational’ contracting (Bhattarai et al., 2013). Producers generally extract the honey from their beehives in their own extraction rooms, except for cases in which producers are horizontally organised in cooperatives. In those cases they might collectively extract their honey in upgraded facilities and sell it to brokers, or exporters directly. However, most beekeepers in Argentina act individually (Napolitano et al., 2007).

Exporters are commonly supplied by large producers or brokers who usually blend the honey purchased from small- and medium-sized beekeepers. Because of this, part of the traceability process is often lost at this stage of the supply chain. Although a traceability protocol was officially established by the Argentine government in 2006, in practice it is only controlled back to the extraction rooms and not to the beehives. Some authors have outlined the importance of establishing a good-practices manual to help the beekeepers to increase yields, reduce waste, and minimise product rejection from buyers (Mogni et al., 2007). This manual was established as part of the INTA (National Institute of Agriculture Technology) – PROAPI (National Programme for Apiculture Development) protocol. However, downstream processes such as the blending of honey need to be revised as well.

As a contrast to the atomised production stage of the supply chain, exports of honey in Argentina are in the hands of just a few companies. About ten exporters control over 60% of the product sold in foreign markets (Mogni et al., 2009). Approximately 90% of the honey that Argentina exports is sold in bulk and shipped in 330 kilogram drums. Because of its commoditised nature, price fluctuations of honey sold as bulk are higher than those of honey differentiated through some kind of label (Fundación Fortalecer, 2011). Fundación Fortalecer (2011) further explains that implementing quality

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1 Informal beekeepers: Beekeepers who act in the informal sector, created partly by the coping behaviour of individuals and families in economic environments where earning opportunities are scarce. The informal sector is typically devoid of state regulations compliance, particularly regarding tax and labour regulations.
protocols for honey is considered essential in order to prevent the loss of markets, while it may also provide the basis for adding value to production.

Honey that is produced in specific areas can be differentiated because of the particular agricultural landscape where bees collect pollen. In addition, honey is being produced under Organic and Fair Trade protocols in Argentina (Napolitano et al., 2006). Mogni et al. (2009) reports that the “Cooperativa Norte Grande” achieved stable prices higher than spot market prices in periods of low prices for its Fair Trade certified honey.

2.4 Fair Trade honey in South America and its impact on producers

Few studies have been conducted in South America on the impact of Fair Trade and Organic certification on honey producers. Becchetti and Castriota (2009) carried out an empirical study to evaluate the effects of Fair Trade affiliation for Chilean beekeepers. Their analysis mainly involved evaluating the productivity (measured by honey production per hour worked) of producers, although contributions from training courses, mutual cooperation and payment advances were also reported. The research was conducted in a period of high market prices, and its results did not find major differences between the Fair Trade price and the market price for honey. However, the results emphasise the relevance of conditions brought by Fair Trade certification to “create opportunities for economically disadvantaged producers” (Becchetti & Castriota, 2009, p. 24). Becchetti and Castriota (2009) found that over time, affiliated producers become much more productive than non-affiliated. They attributed these gains to training courses and to the financial benefits brought by their Fair Trade accreditation. As a complement to the above mentioned study, Becchetti, Castriota, and Michetti (2013) further evaluated the effect of Fair Trade affiliation on child schooling of Chilean honey producers. Their study reports a positive correlation between child schooling and the number of years delivering to the Fair Trade supply chain (Becchetti et al., 2013).

Vieira and Maia (2009) explored the honey supply chain in Brazil and evaluated the potential of a number of honey producer organisations from a particular region to access Fair Trade markets. The authors identified several barriers, including inadequate export and organisational capacity, which were considered key obstacles. Assistance from publicly funded bodies was considered essential to confront high certification costs and to train producer organisations to meet the criteria of the advocacy organisation, in this case FLO (Vieira & Maia, 2009). Vieira and Maia (2009) also found the Fair Trade supply chain to resemble a buyer-driven chain and one with close, captive relationships as described in Global Value Chain analysis by Gereffi, Humphrey, and Sturgeon (2005).

The finding was supported by Hegelund (2014) in her study about multi-stakeholder initiatives institutionalisation for sustainable honey production from East Argentina’s Santa Fe province. Additionally, Hegelund (2014) reports concerns about certification costs for both Fair Trade and Organic honey producers, as well as challenges for value-adding. Most importantly, lack of market
access for Fair Trade products prevents producer organisations from selling all their honey as Fair Trade certified (Hegelund, 2014).

A research project on the transformation of natural resource industries in Latin America was conducted by Marin and Vila Seoane (2012). As part of their project, a case study on the Coopsol cooperative in Santiago del Estero province was performed to understand if their initiative was delivering significant economic, social and/or environmental outputs in respect to the dominant socio-technical production regime. However, general implications were addressed rather than insights on Fair Trade and Organic certification advantages and disadvantages for associated beekeepers.

2.5 Gap in the literature and conclusions

Case studies of Fair Trade networks show variable outcomes but generally a positive effect for producers and workers. Benefits occur for the producer organisations through information, training and links to international marketing channels and development NGOs (Raynolds et al., 2004). Other benefits for producers include reduced exposure and thus vulnerability to changing market prices, receiving higher average prices and feeling more secure in their land tenure (Bacon, 2005). Moreover, Fair Trade networks enhance the possibility of engaging in downstream, value-adding activities (Raynolds & Ngewangu, 2010). Combined Fair Trade and Organic certifications allow for a willingness to invest and the opportunity for improved rural employment (Ruben et al., 2009).

There is a gap in the literature regarding the impact that Fair Trade and Organic certification has had in Northwest Argentina’s certified small beekeeper organisations and specifically, on how certification has impacted the small honey producers working under these certification protocols. This could be partially explained because of the relatively low adoption of these innovations in Argentina so far. A programme funded by the Multilateral Investment Fund (MIF) of the Inter-American Development Bank (IDB) and instrumented by Fundación Fortaleer, has run in Argentina from 2009 to 2014. The programme provided technical assistance for FLO certification to eligible producer organisations, and intended to develop a domestic Fair Trade label. Fair Trade and Fair Trade Organic certified honey producer organisations have been operating in Northwest Argentina since 2007. However, the gap in the literature still exists.

This research fills this gap by understanding the Fair Trade and Fair Trade Organic honey supply chains in Tucumán and Santiago del Estero provinces of Northwest Argentina. The origins of the supply chains, who the actors are and how they interact, are chief areas researched. Furthermore, the advantages and disadvantages of beekeepers delivering to these supply chains complete the study, as these effects have not previously been documented in the literature.
2.6 Theoretical framework

Theories that inform the research mainly stem from New Institutional Economics. Transaction Cost Economics (TCE) theory and Agency theory are introduced and utilised to provide insights in order to achieve the research objectives.

2.6.1 Transaction Cost Economics theory

Transaction Cost Economics (TCE) theory suggests that exchanges happen in an environment where information is not freely available and actors behave opportunistically, advancing their own interests in a selfish way. In such circumstances, transactions are neither easy nor inexpensive to carry out. First introduced by Coase (1937) in his theory of the firm, the concept of hierarchy explained why a firm would decide to produce a good in order to avoid prohibitively high transaction costs rather than purchase it. Spot market transactions are often found where goods do not incur high transaction costs. In supply chain relationships, TCE theory utilises concepts with which different kind of exchanges could be characterised. The concepts of asset specificity, uncertainty and frequency were introduced to help explain what type of governance structure would be chosen to reduce transaction costs (Williamson, 1979). A key concept in TCE theory is asset specificity, where firms or individuals may be exposed to the risk of being taken advantage of if an investment is only relevant for that specific transaction. Particularly in the producer-buyer relationship, producers often have to make transaction-specific investments, thereby becoming exposed to hold-up situations (Chaddad & Cook, 2000). Hold-up situations can come in the form of new production methods or up-front costs required to achieve certifications for credence attributes such as Organic, or Fair Trade (Jaffee & Morton, 1995). Organic production can be considered an asset-specific investment as producers forego higher yields in exchange for a price premium to be paid by the buyer (Bhattarai et al., 2013). These kind of investments may create asymmetric power relationships, as buyers can be drawn to obtain excessive profits from that relationship. Uncertainty, in the form of yield and quality (environmental risk) but also through opportunistic behaviour (behavioural risk) from actors can be especially detrimental to the relationship as well, increasing the complexity of contracts. The parties involved in a transaction may find themselves more exposed to behavioural risk when information asymmetry is present. Information asymmetry can arise from product traits that are difficult to ascertain such as credence attributes, or it can arise from unknown agendas of the parties involved in a transaction (Hobbs & Young, 2001). Should transactions happen recurrently, the chances of finding relational contracts with tailor-made governance structures are higher because the cost of such transactions can be amortised (Williamson, 1979). However, there is a distinction between recurrent and frequent transactions. Frequent transactions, as opposed to recurrent ones, increases transaction costs as they are carried out with different partners.
2.6.2 Agency theory

Agency theorists place emphasis on the terms of a contract between an agent and its principal (Eisenhardt, 1989a). Certain conditions are studied in order to economise on agency costs for carrying out that contract. These conditions are: the degree of risk aversion of each party, the information systems in place, and the certainty about the outcome. Agency theory provides explanations on how the transfer of risk between principal and agents, and the monitoring costs involved in a contract, will result in a certain governance mechanism that reduces agency costs.

Both positivist theory (Jensen & Meckling, 1976) and principal-agent theory (Grossman & Hart, 1986; Harris & Raviv, 1979) stem from agency theory. Positivist theory has been largely focussed on describing intra-firm relationships where an agent performs a task for its principal, such as owner-manager (Fama, 1980; Fama & Jensen, 1983; Jensen & Meckling, 1976). Principal-agent theory intends to find the ideal contract across different kinds of relationships such as manager-employee, or buyer-supplier (Harris & Raviv, 1979). Conflicts may arise between principal and agent due to misalignment of goals in a context of incomplete contracts (Royer, 1999). The objective of principal-agent theory is to predict whether a behaviour-based or an outcome-based contract will be adopted in a relationship. The underlying factors for determining this are the costs of measuring outcome and monitoring processes, and the degree of risk aversion of the principal and agent.

The principal-agent stream will be utilised to inform and understand the buyer-producer relationships in the cases under study. The positivist branch of agency theory will serve to identify issues within the producer organisations in each case.

2.7 Conclusion

This chapter has presented literature to inform the research. First, reasons behind smallholders’ exclusion from markets were introduced. Second, the concept of Fair Trade, its goals, positive outcomes and challenges, and its marketing evolution were described. The combination of Fair Trade and Organic credence attributes were then introduced. In section 2.3, an overview of the apiculture sector in Argentina was provided to give the reader background information. Section 2.4 reviewed previous literature about Fair Trade and Fair Trade Organic honey, to define the gap in the literature. Section 2.6 presented literature dealing with TCE and Agency theories. These theories will contribute to the understanding of how small beekeepers connect with markets. Chapter 3 will describe the research methods and design in order to describe how the research objectives presented in Chapter 1 will be achieved.
Chapter 3
Research methods and design

This chapter will describe the research strategy and methods utilised in undertaking data collection and analysis in order to address the research objectives displayed in Chapter 1.

3.1 Research strategy

The research describes the Fair Trade and Fair Trade Organic honey supply chains operation in the Northwest Argentina Tucumán and Santiago del Estero provinces. It provides information about small farmer access to these chains and the advantages and disadvantages that delivering to these chains bring to small honey producers. Davidson and Tolich (2003, p. 117) assert that qualitative methods deal better with in-depth studies “drawing heavily on impressions, descriptions and quotes”. The perceptions of different stakeholders such as managers and smallholders are described. Qualitative studies are recommended when dealing with small populations where rich but narrow data are collected (Bergman, 2008; Davidson & Tolich, 2003). A qualitative research strategy was utilised to achieve the research objectives, as the research questions involved understanding the relationships between honey producers, cooperatives and other chain participants.

The case study method was utilised in this research. This method can be utilised to describe a situation or phenomenon. Where contextual conditions are relevant to the object of study, the case study approach is preferred (Yin, 2009, p. 1). Case study analysis description can be useful to confirm or reject hypotheses, or to build new theory (Eisenhardt, 1989b). The case study research method is not limited to a particular aspect of the research process. Rather, it is a broad approach that covers the research design as well as data collection and analysis. Hence, the case study method was considered appropriate in order to understand how the Fair Trade and Fair Trade Organic supply chains are operating in Tucumán and Santiago del Estero provinces, and how they are impacting small beekeepers.

3.2 Case selection and research design

According to Yin (2009), the selection of cases must be based on their potential to answer the posed research questions. Yin (2009) considers the unit of analysis (the “case”) to be a key component of the research design. Its definition allows the researcher to distinguish between the issue to be studied and the context in which the issue occurs, thereby focussing the data collection (Yin, 2009). In this instance, the supply chains were the unit of analysis. The selected cases were the Fair Trade honey supply chain, and the Fair Trade Organic honey supply chain.

The research design links the evidence with the initial research questions (Yin, 2009). Herriott and Firestone (1983) argue that two-case research designs can provide a more robust study than single-
case designs because of their wider and deeper evidence. This study treated the Fair Trade and Fair Trade Organic honey supply chains as two separate cases. Each case had its own sources of data although some respondents provided data for both cases. The actors involved at different levels of each chain were treated as embedded units. These involved small producers and directors from Fair Trade and Fair Trade Organic certified honey producer organisations, buyers, and members of agencies mandated to strengthen these chains in Argentina.

3.3 Data collection strategy

A Fair Trade certified cooperative and a Fair Trade and Organic certified export consortium were selected to provide insights into the Fair Trade and Fair Trade Organic supply chains, and the situation of small producers involved in each case.

The Wayra consortium is based in La Banda, a rural town in the north of Santiago del Estero province. The consortium is formed by two producer organisations: The Coopsol cooperative and a producers’ association named APONA (Association of Organic Producers of the Noroeste Argentino). With financial and technical support from a range of international donors and national agencies, both organisations in the consortium achieved Fair Trade and Organic certifications for their honey, which is mainly exported to European Union countries (Marin & Vila Seoane, 2012). The Wayra consortium was selected as Case 1.

Cooperativa Agropecuaria y Apicola Norte Grande (Norte Grande) is a cooperative based in Famaillá, in the south of Tucumán province. It was created in 2002 with the support of the local INTA agency with the objective of integrating small beekeepers of Tucumán and the surrounding provinces (Alba, Bedascarrasbure, García, & Álvarez, 2008). The Norte Grande cooperative was Fair Trade certified by FLO in 2007, and its members largely produce honey under conventional methods. This cooperative was selected as Case 2.

As suggested by Denscombe (2012), practical issues such as accessibility and costs have been considered when selecting these cases, which are geographically close to each other. Interviews with small honey producers delivering to the Fair Trade and Fair Trade Organic supply chains were undertaken in Tucumán and Santiago del Estero to limit differences in the biophysical conditions of production.

Qualitative research uses multiple sources of evidence rather than relying on one source alone (Yin, 2010). Utilising different sources of evidence improves the quality and internal validity of the research (Yin, 2009). The main source of data for this research were in-depth, semi-structured personal interviews. These were conducted by the researcher with key informants. Initial informants were utilised to generate contact with other people involved in the activity of interest – this is described as the ‘snowballing’ effect by Davidson and Tolich (2003). Interviews were conducted with Argentine researchers, and members of organisations such as INTA that administer programmes for honey
development throughout the country, and CONICET (National Scientific and Technical Research Council). Key actors of the Fair Trade and Fair Trade Organic honey supply chains were interviewed during the months of April and May, 2015. All interviews were conducted in Spanish and were recorded when the respondent granted consent (consent was always granted). Primary respondents were selected purposefully to provide richness and validity of data (Watters & Biernacki, 1989). An initial number of five key informants were selected to begin the research. A further twelve respondents were identified in the field by using the ‘snowballing’ technique (see Table 3.1). Interviews were performed until new data did not provide additional findings, and theoretical saturation was reached (Eisenhardt, 1989b). Records held by the producer organisations showing prices and quantities of traded honey to supplier databases were considered as relevant sources of secondary data to enrich the evidence and for triangulation (Yin, 2010). The respondents are outlined below in Table 3.1.

**Table 3.1 Respondents interviewed in this study**

<table>
<thead>
<tr>
<th>Supply chains</th>
<th>Case 1 Fair Trade Organic</th>
<th>Case 2 Fair Trade and conventional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consortium’s Commercial Manager</td>
<td>GM1</td>
<td>-</td>
</tr>
<tr>
<td>Cooperative’s Commercial Manager</td>
<td>-</td>
<td>GM3</td>
</tr>
<tr>
<td>Consortium’s Technical Manager</td>
<td>GM2</td>
<td>-</td>
</tr>
<tr>
<td>Cooperative’s former President</td>
<td>-</td>
<td>GM4</td>
</tr>
<tr>
<td>Producers (includes producer organisation directors)</td>
<td>BK1-BK2-BK3-BK4</td>
<td>BK5-BK6-BK7-BK8-BK9</td>
</tr>
<tr>
<td>National Institute of Agriculture Technology (INTA) Researcher</td>
<td>-</td>
<td>RS1, RS3</td>
</tr>
<tr>
<td>National Scientific and Technical Research Council (CONICET) Researcher</td>
<td>RS2</td>
<td>-</td>
</tr>
<tr>
<td>Fortalecer Foundation’s former Extension Manager &amp; Researcher</td>
<td>RS4</td>
<td>-</td>
</tr>
<tr>
<td>Total respondents</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

Note: GM (General Manager), BK (Beekeeper), RS (Researcher)

Stratified purposeful sampling can be utilised to show specific characteristics of subgroups of interest and to facilitate comparisons (Quinn, 2002). An initial sample stratification was made before collecting data from small honey producers. This was done in order to create variability and identify contrasts in the embedded units of analysis within each case study. The main criteria for stratification was the size of the beekeeper as measured by the number of beehives owned. This criteria was chosen because producers’ size is expected to have significant impact on per-unit transaction costs, making larger producers relatively more advantaged (Bhattarai et al., 2013). INTA and the cooperatives’ managers provided assistance in identifying producers of similar size. A total of nine beekeepers were
interviewed, four from Case 1 and five from Case 2. They were divided into three strata according to the criteria.

Paul (2005) argued that in-depth interviews worked well when collecting data related to Fair Trade’s impact on smallholders’ well-being, due to the nature of the subject matter. Semi-structured interviews with actors such as cooperative managers, partner institutions or research bodies “enabled more intangible socio-economic impacts to be detected, while informal discussions assisted in identifying lines of enquiry and posing research hypotheses. Finally, joint interviews and focus groups (...) provide a range of perspectives on a given social dynamic” (Paul, 2005, p. 141). Interview protocols can be utilised as conversational guides to focus on key topics related to each interview (Yin, 2010). An interview schedule with a set of closed and open-ended questions was followed. The questions served to characterise the interviewee and to provide information for addressing the research objectives. Interview schedules were designed specifically for each actor in the supply chain, involving topics such as supply chain relationships, honey production, sale channels and contractual terms (including price premiums), and other benefits of certification (see Appendix C).

The gathered documentation such as transcribed interviews, articles, or records from organisations, developed into an audit trail that supported the trustworthiness of the findings. The audit trail serves to convince the scientific community of the rigor of a qualitative study by attesting to the interpretations of the researcher (Wolf, 2003). Collected data will be filed and stored by Lincoln University. Together with the detailed data analysis method, the audit trail will allow for verification of the raw sources of evidence, or replication of the study by researchers.

3.4 Data analysis

Data collected from the semi-structured interviews was translated and transcribed by the researcher. NVivo (v.10), a computer assisted qualitative data analysis software package, was utilised to assist in the data analysis process. The researcher used this software to create an organised database from the transcribed interviews.

Case study write-ups were employed initially in this analysis. These case study descriptions were useful for organising the abundant evidence from the qualitative studies (Eisenhardt, 1989b). Notes taken in the field helped the researcher to become closely familiar with the cases. Detailed descriptions were made through written and recorded notes, allowing the researcher to carry out within-case analysis and initial identification of patterns. Field notes also contributed to the research as a means for informing later data collection, in order to corroborate data and to strengthen the quality of the information and results.

As open-ended questions can provide detailed though varied responses, data coding in the transcription process of open-ended interviews can be difficult for the researcher (Creswell, 2012).
NVivo was utilised for coding interviews and to facilitate the organising of data obtained from the interviews into themes.

Following initial data analysis, pattern matching was used to address the research questions. Pattern matching logic is based on the comparison between patterns observed in reality with predicted patterns (Yin, 2009). Should the patterns match, the internal validity of the case study research is reinforced. In this research, the benefits to smallholders of delivering to Fair Trade and Fair Trade Organic supply chains suggested by the literature were compared with those observed in the selected cases. Where the findings were not consistent with the theory, the propositions were questioned, providing a basis for explanation building (Yin, 2009). Explanation building is a form of pattern matching logic that usually occurs in narrative form (Yin, 2009). This method was utilised in order to develop insights and for further study in the field.

The case study method is particularly useful when one result requires triangulating data from various sources of evidence. Case study research is also convenient when previous theoretical propositions are useful guides to data collection and analysis (Yin, 2009). A comparative case-study analysis was carried out between the Fair Trade and Fair Trade Organic honey supply chains, and the advantages and disadvantages for smallholders delivering to these chains. Comparing paired cases is described by Eisenhardt (1989b) as a strategy for identifying cross-case patterns. Searching for cross-case patterns can avoid pre-empted results by examining the data in different ways, thereby increasing the chances of achieving new findings (Eisenhardt, 1989b). NVivo also assisted in thematic analyses in order to identify cross-case patterns between the units of analysis.

3.5 Human ethics and health and safety

Human ethics clearance was not required as the questions asked of respondents concerned issues within their professional competence, as provided for by article 6.2.3, sub-article 2 of the Lincoln University Policies and Procedures, Human Ethics Committee. In this instance the researcher, an Argentine national, was personally acquainted with the cultural environment of the research sites, which were all located within the Argentine territory. The respondents were given a copy of the Research Information Sheet (see Appendix A). They were also required to provide signed consent which outlined their right to remain anonymous, as well as their right to withdraw from the research project at any time if desired (see Appendix B).

A New Zealand based travel and health insurance policy provided by NZ Aid covered the researcher’s personal welfare over the period of the research. Although the research sites are relatively low-crime areas in Argentina, the researcher took all necessary precautions to prevent situations where personal health and safety were at risk.
3.6 Conclusion

This chapter introduced the research strategy and design. The methods utilised to collect and analyse data were also discussed. The next chapter will introduce and describe Case 1, the Wayra Consortium’s Fair Trade Organic honey supply chain in the Santiago del Estero province.
Chapter 4

Case 1: The Wayra consortium’s Fair Trade Organic honey supply chain

This chapter describes the Wayra consortium’s Fair Trade Organic honey supply chain operation in the Santiago del Estero province. The first section describes the creation of the Wayra consortium and development of the Fair Trade and Organic certified honey supply chain. An outline of the organisations that form the consortium is also provided. Section 4.2 summarises the structure of these supply chains and the functions of the stakeholders along the chain, with a description of their processes and relationships. Section 4.3 concludes the chapter.

4.1 Development of the Fair Trade Organic honey supply chain

4.1.1 The Wayra consortium

The Wayra consortium is based in La Banda, a rural town in the north of the Santiago del Estero province in Northwest Argentina (see Figure 4.1). La Banda neighbours the province’s capital city, Santiago, separated by the Dulce river. The consortium is formed by two producer organisations, the Coopsol2 cooperative and a producers’ association, APONA (Asociación Civil de Productores Orgánicos del Norte Argentino – “Civil Association of Organic Producers of Northern Argentina”). Both organisations have Fair Trade and Organic certifications for the honey they produce. The honey is exported to Europe. The consortium was developed under Coopsol’s leadership and had financial and technical support from a wide range of organisations inside and outside Argentina.

4.1.2 Brief History of Coopsol and APONA

Coopsol was started by a group of young people from a Catholic Non-Government Organisation (NGO) named Casa de la Juventud (“Youth House”) in Santiago del Estero. The aim was to develop an activity to retain young people in their province instead of them migrating in search of job opportunities. Coopsol was established as a work cooperative. After failed attempts in alfalfa production and other horticultural products, some members took a course in apiculture. Eventually the co-operative’s honey production displaced the previous activities. Coopsol started with 35 beehives and a borrowed small farm, and quickly began processing and marketing other producers’ honey in addition to their own.

In 1994 they exported their first container of honey to Italy. This operation failed due to weighing and administrative issues, evidencing their lack of experience. The focus then turned to developing their sales network in neighbouring Brazil, where they quickly achieved sales of about 900 tonnes per year

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2 The name “Coopsol” comes from the words Cooperación (cooperation) and Solidaridad (solidarity).
of conventional honey. However, the Brazilian business ended after Brazil devalued its currency in 1999. This left Coopsol with a large debt to beekeepers in Argentina whose contracts were based on a much higher exchange rate. After settling their debts, many Coopsol members left the cooperative. Four members of Coopsol remained in apiculture and when Argentina devalued its currency in 2002, the cooperative started exporting again. Coopsol signed up for Ministry of Social Development’s Manos a la Obra project. The project provided funds for apiculture courses which Coopsol published this through its Catholic network. With this funding, Coopsol provided beehives to potential beekeepers who were organised in groups that took part in the course. These new groups of beekeepers were not required to pay for their start-up beehives. This was a mistake according to some members of Coopsol because the business model was neither sustainable nor replicable.

Coopsol applied to a microcredit fund project from the Inter-American Foundation in order to develop a financially sustainable group of beekeepers. A newly formed group of Organic honey producers received loans from Coopsol in order to increase production. The group was mentored by Coopsol and organised as an association named APONA.

In 2007, Coopsol applied for a three-year project funded by the Italian Ministry of Foreign Affairs and an Italian NGO, IPSIA, through the Catholic network of Casa de la Juventud. The project provided funding for the formal establishment of APONA, the construction of much of the infrastructure Coopsol presently has, as well as increasing the number of beehives.

APONA achieved its Organic certification, and Fair Trade (FLO) certification guided by Coopsol. The Fortalecer Foundation funded 75% of the certification costs through the IDB project for Fair Trade promotion in Argentina. Coopsol already had Organic certification. The purpose of the certification was to add value to their honey. Coopsol invited conventional honey producers who had previously sold honey to them to join APONA. Only a few joined as it required either changing production methods, or moving away from their lands to become Organic producers.

*The constraint to produce under Organic conditions can either be geographical or voluntary [GM1]*

Most of the producers who did not switch to the Organic project that Coopsol was promoting still supplied Coopsol with conventional honey.
4.1.3 Overview of Coopsol and APONA

Honey producers in the Fair Trade Organic supply chain are required to be either horizontally organised or partnered with an organisation (an exporter or a NGO) who will assist them to create an organisation of their own. Following FLO criteria, the institutional arrangements of the organisation need to follow democratic voting rights and equal distribution of profits to be Fair Trade-eligible (Fairtrade ANZ, n/d). The Coopsol and APONA producer organisations were quite different.
Coopsol

Coopsol is an urban workers cooperative and acts as a producer, processor and trader of honey. Coopsol is Fair Trade and Organic certified as both producer and trader. It produces, processes and exports its own Fair Trade and Organic certified honey. In addition, Coopsol also processes and exports Fair Trade Organic certified honey produced by APONA. Coopsol has 14 members. Its assets include an office building, a fully equipped extraction room and warehouse, beehives, bees, a pickup truck, and a small truck. Each member of Coopsol invoices independently for the work services they provide to Coopsol. In addition, they share the profits generated by the cooperative from sales of own-produced honey, honey traded with non-members, and from processing and marketing services.

Our fiscal structure is similar to that of an SRL\textsuperscript{3} [GM1]

New members have to perform specific duties demanded by Coopsol, and go through a one-year trial period before being accepted into the cooperative.

The person that enters has to understand that it’s not only a company to make money, but that it has a development concept tied, rooted [GM1]

Coopsol’s board of directors consists of seven members. Board meetings are usually open to everyone, unless sensitive issues are to be discussed. An Annual General Meeting (AGM) is held each year to scrutinise the cooperative’s annual report and financial statements before results are submitted to the local IPAC (Provincial Institute of Cooperative Action).

APONA

APONA is a producers association of Organic producers in Santiago del Estero and neighbouring provinces of Northwest Argentina. The organisational structure was decided by Coopsol. Coopsol’s managers favoured an association over a cooperative as a start-up organisation, for cultural reasons. The first settlers in the region were poor farmers from Santiago who historically acted individually rather than cooperatively. APONA lacked sufficient resources to support its members in production practices, logistics, or marketing. It relied heavily on Coopsol’s organisational, financial and technical support to undertake its functions.

APONA’s AGMs take place in Coopsol’s headquarters in La Banda. The AGM is one of the few occasions in which APONA members have contact with their organisation. Turnouts to APONA’s AGMs are low due to the transport costs involved for most beekeepers. At the AGMs, board members are elected, the annual report and balance sheets are presented, and use of the Fair Trade Social

\textsuperscript{3} SRL, “Sociedad de Responsabilidad Limitada” (Limited Liability Company) is a business structure form in Argentina that limits the liability of its members up to their capital contribution in the company. It has a very similar structure to that of a LLC.
Premium is democratically decided. Two members of Coopsol act as trustees of APONA and regularly assist the organisation and the presentations at APONA’s AGMs.

New beekeepers wishing to join APONA are introduced by current members, usually from the same rural community:

*New member additions do not happen here in the city, but usually take place in rural communities, in the countryside [GM2]*

To join APONA, new members have to own at least 10 beehives and be Organic certified, or immediately begin their transition to become Organic certified. They usually finance beehives through microcredit funding provided by APONA or Coopsol, but always managed by Coopsol. Members are required to pay an annual fee of AR$50 and a levy on honey supplied to pay for the association’s running costs. Most of APONA’s members are informal beekeepers. In 2012 APONA were believed to have between 120 and 130 members. At the time of data collection Coopsol’s management noted there were 56 members of APONA [GM2].

4.2 Structure of the Fair Trade Organic honey supply chain

The Fair Trade Organic honey supply chain is relatively short. Input suppliers provide beehive materials and inputs to APONA producers and to Coopsol. Coopsol processes and exports the honey which is bought by an importer - either a wholesaler, retailer, or both. The honey is then sold to consumers. Organic and Fair Trade certifiers, logistics suppliers, and accreditation and regulation bodies are also involved at different stages of the supply chain. Figure 4.2 below shows the main actors involved in the Fair Trade Organic honey supply chain.

4.2.1 Coopsol’s supply chains

Coopsol also takes part in other supply chains. It trades and exports non-members conventional honey to buyers from various regions and countries including Europe and the USA. Coopsol receives commercial support from overseas brokers to market conventional honey. Trading conventional honey from non-members is Coopsol’s main business.

Coopsol also packs some of the honey produced by the Wayra consortium, and markets it domestically as Organic certified (without a FLO label) to supermarkets and stores, and through an agent that sells the product in urban locations and on an auction website. Figure 4.2 below shows the supply chains observed. Larger arrows represent relatively larger volumes transacted between the actors.
Table 4.1 below provides a functional analysis chart of the Wayra consortium’s Fair Trade Organic honey supply chain. Production, extraction and processing takes place in Santiago del Estero and the honey is exported through the shipping port in Buenos Aires.
### Table 4.1 Functional analysis of the Wayra consortium's Fair Trade Organic honey supply chain

<table>
<thead>
<tr>
<th>Stage of the chain</th>
<th>Function</th>
<th>Agent</th>
<th>Output</th>
<th>Accreditation &amp; Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production</strong></td>
<td>-Input provision (medicine &amp; materials)</td>
<td>Coopsol, APONA &amp; input suppliers</td>
<td>Honey in beehives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Honey production</td>
<td>Beekeepers (Coopsol &amp; APONA)</td>
<td>Honey in beehives in extraction room</td>
<td>FLO-Cert Food Safety SENASA</td>
</tr>
<tr>
<td></td>
<td>-Transport of beehives to extraction room</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Fair Trade Social Premium management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Training, technical assistance</td>
<td>Coopsol</td>
<td>Honey certified &amp; traceable to beehive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Logistic support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Extraction &amp; processing</strong></td>
<td>-Extraction of honey from beehives</td>
<td>Coopsol</td>
<td>Honey packed in 300kg drums</td>
<td>Food Safety SENASA</td>
</tr>
<tr>
<td></td>
<td>-Decantation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Filtering</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Blending</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Packing in 300kg drums</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Sampling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Transport to warehouse/port</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Analyses of honey samples</td>
<td>Laboratory approved by SENASA</td>
<td>Honey samples approved by buyer and by SENASA for traceability &amp; export</td>
<td></td>
</tr>
<tr>
<td><strong>Export</strong></td>
<td>-Price negotiation with importer</td>
<td>Coopsol</td>
<td>Honey drums exported to overseas buyers</td>
<td>FLO-Cert Food Safety SENASA</td>
</tr>
<tr>
<td></td>
<td>-Export</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Import</strong></td>
<td>-Honey imported</td>
<td>Importer</td>
<td>Honey imported and ready for distribution</td>
<td>FLO-Cert</td>
</tr>
<tr>
<td></td>
<td>-Blending</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Wholesale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Distribution</td>
<td>Distributor</td>
<td>Honey distributed to retail locations</td>
<td></td>
</tr>
<tr>
<td><strong>Retail</strong></td>
<td>-Packing</td>
<td>Packer</td>
<td>Fair Trade Organic honey packed in retail containers &amp; labelled</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Labelling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Consumption</strong></td>
<td>-Purchase and consumption</td>
<td>Consumer</td>
<td>Fair Trade Organic honey purchased and consumed</td>
<td></td>
</tr>
</tbody>
</table>

#### 4.2.2 Production

In the production stage of the Wayra Fair Trade Organic honey supply chain the actors are:
Beekeepers from Coopsol and APONA, Coopsol’s management, and input suppliers that mainly interact with Coopsol. The Fair Trade certifier (FLO-Cert), the Organic certifier (Food Safety), and the regulation body (SENASA) are involved in different steps of the honey production process. The output of this stage of the chain is honey-filled beehives delivered for honey extraction.
Beekeepers characteristics, processes and costs

Honey sold by the Wayra export consortium is produced in equal shares by Coopsol and APONA. However, Coopsol and APONA’s modes of production are quite different. Coopsol, in its worker cooperative tradition, manages its beehives collectively. Coopsol owns the beehives, and members are paid for their work in producing and processing the cooperative’s honey. Coopsol’s beehives are located in the Loreto region, about 80 km from the extraction room and headquarters in La Banda. Coopsol harvests, extracts, processes and markets its own honey.

Coopsol’s recruitment process for potential APONA beekeepers started through religious groups. These groups, organised by Casa de la Juventud, gathered young people from the poor surroundings of Santiago city, and rural communities throughout Santiago del Estero and neighbouring provinces. As a consequence, many of the members of APONA were in their mid-thirties and came from low socio-economic backgrounds. Most had not completed secondary school. Generally, they had been required to work from a young age to provide for their household through subsistence farming practices or selling what they could extract from the native forests. The rural dwellers of Northwest Argentina are culturally characterised by their individualistic behaviour, in contrast to the habitants of other regions in Argentina. For this reason, and the geographical dispersion, members of APONA tend to socialise and share information within small sub-groups where they share resources, location or interests.

The interviewed beekeepers for this case were all APONA members who supply honey to the Wayra consortium. Of the four producers interviewed, BK1 and BK2 live in Santiago city. They both produce honey as a side activity, complementing it with a family-run grocery store. In contrast, BK3 and BK4 live in the countryside close to their apiaries. They clearly dedicate more time and resources to producing honey, which they consider to be their main business. Table 4.2 below outlines key characteristics of the beekeeper respondents.

Producers who supply honey to the Fair Trade Organic supply chain undertake honey production and harvesting. In some cases, beekeepers with extraction facilities extract honey themselves. Otherwise, they transport their honey-filled beehives to Coopsol’s extraction room.

APONA’s beekeepers’ production season starts in spring and finishes at the onset of autumn each year. During this period, bees produce honey which is collected. The rest of the year is dedicated to maintaining apiaries or increasing the number of beehives for the next season. During the off-season, empty beehive “supers”, which are the top sections of the beehive where honey is collected, need to be stored to protect them from the sun and rain. Maintenance tasks include weeding around apiaries, replacement of deteriorated beehive components such as wood or wax, and ensuring that bee colonies have sufficient nectar reserves to survive through the coldest months of the year. Beekeepers usually need to manage feed supply from stronger to weaker beehives, and also check on the health of colonies and behaviour of the queen bees in each hive.
### Table 4.2 Case 1 beekeepers’ characteristics

<table>
<thead>
<tr>
<th></th>
<th>Beekeeper 1</th>
<th>Beekeeper 2</th>
<th>Beekeeper 3</th>
<th>Beekeeper 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size (number of beehives)</strong></td>
<td>100</td>
<td>44</td>
<td>17 (170 beehives community shared between 9 individuals)</td>
<td>260</td>
</tr>
<tr>
<td><strong>Honey main activity?</strong></td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Years of experience</strong></td>
<td>7</td>
<td>4</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Santiago city</td>
<td>Santiago city</td>
<td>rural</td>
<td>rural</td>
</tr>
<tr>
<td><strong>Distance to workplace, apiaries</strong></td>
<td>25 km</td>
<td>20-25 km</td>
<td>Less than 10 km</td>
<td>Less than 10 km</td>
</tr>
<tr>
<td><strong>Has extraction facilities?</strong></td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Distance from apiaries to Coopsol</strong></td>
<td>30 km</td>
<td>25-30 km</td>
<td>110 km</td>
<td>30 km</td>
</tr>
<tr>
<td><strong>Owns a vehicle to transport beehives?</strong></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Additional source of income</strong></td>
<td>Grocery &amp; food store</td>
<td>Grocery store</td>
<td>Goats &amp; pigs, fence posts</td>
<td>None</td>
</tr>
<tr>
<td><strong>Participated in Fair Trade Premium use discussions?</strong></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Receives help from other beekeepers?</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, but little (during harvest)</td>
</tr>
<tr>
<td><strong>Previous production methods before certifying Organic</strong></td>
<td>Conventional</td>
<td>Started as Organic</td>
<td>Started as Organic</td>
<td>Started as Organic</td>
</tr>
<tr>
<td><strong>Sold to other channels?</strong></td>
<td>In bulk, as conventional, Local retail packed in jars, small quantities</td>
<td>No</td>
<td>Local retail packed in jars, small quantities</td>
<td>Local retail packed in jars, small quantities</td>
</tr>
<tr>
<td><strong>Will continue supplying to the consortium?</strong></td>
<td>Yes</td>
<td>In doubt</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

If weather conditions allow, beekeepers can increase the number of beehives for the following season. This requires getting frames ready with wax combs, wire and nails, acquiring new queen bees or splitting colonies from healthy beehives into nucleus hives to populate new ones. The cost of a new populated beehive ranges from between AR$2000 and AR$3000\(^4\).

\(^4\) The official exchange rate was US$1 = AR$9.1 during July 2015.
Organic honey producers could significantly reduce the maintenance costs of their apiaries with appropriate knowledge and care. Training is also a means to reducing production costs:

> We almost always lose some quantity, we almost lose 30%. In the dry years, you will always lose, (...) if we had some youngsters trained as apiculture technicians (...) we could make our own nucleus hives. Today we are missing that, the constraint to grow is to get trained and make our queens [BK3]

Harvesting takes place after the beehive supers start to fill with honey. Producers can continue adding supers to continue their honey production, or take the honey-filled beehives to the extraction room. In general, APONA producers use one half super\(^5\) per beehive. To save on transport costs, it is common practice to wait until the supers are entirely filled with honey before the honey is harvested. Weather conditions are the most decisive factor in determining the success or failure of a season’s honey harvest. At the time of data collection, the season was being reported by all beekeepers interviewed as one of the worst in recent years. Many beekeepers had moved beehives to better locations. None of them had been able to multiply their nucleus hives to populate new hives.

> It has been the worst season of the past decade (...) During the season 2013-2014, out of 100 beehives, I got around 12 drums. And in this past season 2014-2015, I got 2 drums [BK1]

Depending on the season, the harvest takes place once (in very dry seasons) or many times in good seasons. APONA producers start extraction as soon as October during a good season, after the first bloom. This also allows for honey differentiation, as supers get filled with honey produced mostly from one kind of flower. Monofloral honey from the “Atamisqui” shrub, or from the “Quebracho Colorado” tree, allows Coopsol to achieve a price premium with Fair Trade and Organic labels for international buyers, or with the Organic label for domestic buyers. More honey harvests take place over the following months if the weather is favourable.

Most APONA beekeepers need to carry their beehives for extraction and storage to Coopsol’s facilities in La Banda. The geographical dispersion of producers supplying the Fair Trade Organic honey supply chain means that complex and/or costly arrangements are needed in order to carry hives for extraction and storage. One of the requirements for Organic certification is that apiaries are placed three kilometres away from any kind of population or factory\(^6\). It is therefore essential to own a vehicle to carry beehives, inputs, and water. Hence, a high cost of honey production is transport, especially for Organic beekeepers who do not reside in the countryside. BK2 didn’t own a vehicle and access to transport was his main constraint to increased production. BK4 would have increased his production more quickly if he had been able to acquire a vehicle earlier. Some beekeepers collaborated

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\(^5\) *Half super* is the name given to the *Langstroth* type of beehive on top of the brood chamber, where the queen bee is located.

\(^6\) As indicated in Resolution 270/2000 by SENASA.
with each other to lower their transport costs and facilitate logistics; for example, taking turns to check on each other’s apiaries. Costs such as vehicle maintenance and fuel expenses tend to be relatively high, peaking during the busier months:

During the active season from September through March I visit the beehives two to three times a week. And in winter, when the season slows down, once a month [BK1]

There are several informal sub-groups within APONA. Some of them share geographical location and resources, and others have a common vision of the beekeeping business. However, few of these groups make decisions collectively. For example, although BK3 is part of a rural community that makes both sales and production decisions collectively, BK1, BK2 and BK4 conversely sometimes collaborate during the harvest, but make their sales decisions separately.

**Input supply**

Coopsol facilitates access, through collective purchases from input suppliers, to most of the beekeeping materials and inputs required by APONA producers. For example, old bees wax can be recycled by beekeepers by melting it and exchanging it at Coopsol for credit to pay for new boxes of wax. APONA beekeepers could also buy inputs from suppliers on a spot market basis.

Collective purchases are made through microcredit funds managed by Coopsol. Coopsol keeps track of quantities of inputs supplied to APONA beekeepers. Coopsol uses this information to complete registries for traceability purposes as required by SENASA and certifiers. Coopsol deducts the value of these inputs from its honey payments.

**Beekeeper’s trading relationships**

Under the Wayra export consortium, there is an agreement for Coopsol to market APONA’s honey. Under this agreement Coopsol deducts a percentage of the export (Free On Board, or FOB Buenos Aires port) price for technical support, Organic certification management and processing costs. None of the producers interviewed could accurately describe the agreement. According to one of Coopsol’s managers (GM2) the agreed percentage needed to be updated. APONA producers are, however, free to sell their honey elsewhere. There is no obligation for APONA members to deliver all of their honey to the Wayra consortium; that is, through APONA to Coopsol for processing and marketing.

APONA does not have a trading function. Each of its members or subgroups discuss prices individually with either Coopsol or another buyer through phone calls or in person. APONA’s bylaw indicates, according to FLO criteria, that the Fair Trade price for Organic honey sold by APONA members through APONA sales channels should be discussed and decided by the members on the 1st of December of each year. In reality, this does not happen as outlined by one of Coopsol’s managers in the interviews:
There has been a negotiation, each one has decided when to sell, when to get paid, but their honey is stocked here. It shouldn’t be that way. The processes of Fair Trade, when it is sold through Fair Trade, indicate that there has been a previous negotiation of the [APONA] directors of the honey price and that it has been confirmed in the assembly [GM2]

GM2 further explained this issue:

It’s hard to leave behind a way of working for stocking and marketing that has been happening since many more years than those in which APONA has been part of Fair Trade [GM2]

Sometimes APONA producers in need of cash sell their Organic honey to Coopsol as conventional honey. Coopsol buys conventional honey at spot market prices and pays the price in full at the time of sale. Fluctuations in conventional honey prices paid by Coopsol can be higher than for Fair Trade Organic honey prices. Fair Trade Organic honey is paid for by Coopsol in two instalments matching the European Importers advance payments (around 75% of the agreed price) and a second payment in full settlement once the transaction is completed. The first instalment is paid based on the current market price:

If the kilogram of honey is at 26 pesos in the market, we give them 20 pesos at Coopsol’s financial expense so they can hold on until the final price comes, that for example could reach 28, and then they are paid again [GM1]

Some APONA producers complain of receiving their second instalment after many months, reaching a final price for their Fair Trade Organic honey very similar to the price Coopsol was paying at the time for conventional honey.

Interviewed producers had delivered most of their Organic honey to Coopsol facilities. Although in the 2014-2015 season, APONA producers had to use their scarce production to feed the weaker beehives.

Beekeeper’s returns

Case 1 honey producers receive cash for their honey. Beekeepers supplying Fair Trade Organic honey in the past 2013-2014 season, reported a final price of AR$24 per kg of honey delivered. In the 2014-2015 season, BK3 delivered honey for a Fair Trade Organic shipment, receiving an advance payment of AR$23.43 per kg, and was expecting a second payment of about AR$7 totalling AR$30-31. BK4 wasn’t certain about the final price for this season, thinking it would range from between AR$27 and 28. Table 4.3 below displays the average prices paid by Coopsol to non-members of the consortium (conventional honey) and APONA producers (Fair Trade Organic honey) in the seasons 2013-2014 and 2014-2015. The table shows how the gap between conventional and Fair Trade Organic honey prices decreased in 2014-2015.
Table 4.3 Average prices paid by Coopsol in the 2013-2014 and 2014-2015 seasons, AR$ per kg.

<table>
<thead>
<tr>
<th>Honey type</th>
<th>Season 2013-2014</th>
<th>Season 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fair Trade Organic</td>
<td>Conventional</td>
</tr>
<tr>
<td>Price per kg.</td>
<td>AR$23.94</td>
<td>AR$15.93</td>
</tr>
</tbody>
</table>

Source: Coopsol, May 2015

(a)Note: At the time of data collection in May 2015 producers were still waiting to receive the balance of their Fair Trade Organic honey payments for honey delivered in February 2015.

Most of the beekeepers keep a small share (100-200 kg) of their production for local informal retail, packed in one kg or 500 gram jars at a price range of AR$40-50 per kg, which, after paying for the jar and other related costs, reduces to AR$32-42 per kg.

The Fair Trade Social Premium

As Coopsol and APONA have separate Fair Trade certification by FLO both are entitled to receive additional income for the honey they sell to Fair Trade markets; the Fair Trade Social Premium. Both organisations report annually to FLO-Cert on how the Fair Trade Social Premium is going to be spent, in order to renew their FLO certification.

At the time of this study, the established FLO Social Premium value was US$0.20 per kg of Fair Trade honey, regardless of its Organic status. The amount of the Social Premium was not specified in each sales contract between the Fair Trade trader and the Fair Trade importer, but was part of the price the trader/exporter received from the importer. The trader then had to convey the specific amount of the Social Premium to the producer’s organisation. The producer’s organisation had to assign the funds of the Social Premium to the plan previously informed to FLO-Cert in their audits.

Coopsol members discussed and decided democratically at their AGM how the Social Premium would be used the following season. This was then reported to FLO-Cert according to FLO-Cert requirements. They also reported on how the Social Premium of the past season had been spent, providing evidence such as invoices. Coopsol had used the Social Premium to improve the infrastructure of the extraction room, to buy a pickup truck, and to buy more beehives.

As APONA transacts in cash and does not have a bank account the Social Premium cannot be deposited by Coopsol. Almost all of the interviewed producers have participated at least once in an AGM, and have taken a role in the democratic decision-making about the use of the Social Premium. However, only two of the interviewed producers were aware of the precise value of the Social Premium. One of the beekeepers (BK4) stated that the Social Premium of 2013-2014 had been split between the beekeepers as part of the price for the honey they delivered. He also suggested that because of the current season’s small harvest, it was likely that the same use would be made of the
Social Premium in 2014-2015. BK1 and BK3, in keeping with the AGM reports of the previous two years, stated that the Social Premium had been used to purchase empty drums to pack their honey, and for transport costs of directors so they could have better access to APONA members.

There appeared to be confusion among some of the beekeeper respondents regarding the Social Premium, the levy that APONA deducts (2.5% at the time of study) from the Organic honey supplied by producers, and a “special fund for assistance” described in APONA’s bylaw. In Article 9 of APONA’s bylaw, the creation of a “special fund for assistance” was put forward. This fund was created in order for the board of directors of APONA to respond to emergency situations affecting shareholders. The Fair Trade Social Premium was deposited into this “special fund”, as they did not discriminate between the two funds as BK 4 explains:

This is discussed with the Board of Directors, where is the Premium going to (...) it could be donated to a school in the area, or it can be used among all producers, for example, last year we used it among all of us(...) or if there’s an area that is in greater need than the other one, for example where you’ve been yesterday, they’ve been in need so they received assistance. But last year a meeting took place and it was decided that the Premium would be given to the members [BK4]

Accreditation and regulation

Coopsol manages certification compliance for both Coopsol and APONA with FLO-Cert and Food Safety S.A., the Fair Trade and Organic certifiers respectively, and SENASA requirements for traceability. Information about certification standards flowed from Coopsol to APONA. Although Coopsol wanted APONA to administer its Fair Trade certification independently, APONA still needed support for it:

Years before, when APONA was being formed we had the responsibility of educating them, and lecturing them about Fair Trade. Today it’s not like that, we participate in the AGMs and bring up Fair Trade topics if they don’t do it. In Coopsol it’s different, there’s a training level, as promoters we have more knowledge [GM2]

Certifiers also provide information to APONA producers about approved medicines and practices through visits to apiaries and extraction rooms as part of the audit process. Food Safety S.A. performs audits at least once a year. FLO-Cert also carries out visits with similar frequency, although they tend to focus more on auditing the trader:

An inspector comes every year [from FLO], and for Organic too. And they usually go more over there [to Coopsol]. because that is where the one that sends the honey, the exporter, is. They control more over there than here

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7 APONA’s bylaw complements its constitution, and was issued in the context of the project by IPSIA adding clauses related to Fair Trade and Organic certification, among others.
They come to see that there’s no painted beehives, no rubbish in the apiary, etc. [BK4]

Every producer in the Wayra consortium has been given an alpha-numerical code for his or her Organic apiary. SENASA inspectors visit apiaries to audit Organic standards. Organic certified apiaries have been geo-referenced by SENASA to make sure they are situated away from GM crops.

Two engineers from SENASA Buenos Aires showed up (...) in one of the apiaries, inside the second radius there were 50 metres of a farm we couldn’t see (...) they had the satellite charts year by year and showed us that 5 years before, soybeans had been cultivated there, and there could be transgenic residues so that honey could not be considered Organic [GM1]

Coopsol has also provided APONA producers with information about a newly established tax regime for small rural producers, the “Monotributo Social Agropecuario” that if adopted, would reduce producers’ informality. However, small producers in this region didn’t show much interest in adhering to this regime (GM1).

4.2.3 Extraction and processing

Coopsol extracts, processes and stocks the Organic honey produced by its workers and by members of APONA, except the few cases in which APONA subgroups have extraction facilities near their apiaries. In these cases Coopsol also collects honey packed in drums from these subgroups. The outputs of these processes, that is the honey packed in drums approved by SENASA, is transported to Buenos Aires and exported.

Some of the beekeeper respondents (BK1 and BK4) emphasised the difficulties imposed by the high costs of extraction charged by Coopsol. Other producers such as BK3 have extraction facilities close to their apiaries which reduces their extraction costs. This allows a degree of independence as they can decide whether to market their honey already packed in drums to other buyers, ready for export. The extraction room has to be registered and licenced by SENASA for the honey to keep its Organic certification. Unfortunately, this is not the case for BK3’s extraction facilities, and therefore the honey cannot be sold independently as certified Organic.

BK3 noted that Coopsol sometimes collects his groups’ honey after they have extracted it in their own facilities. Other APONA beekeeper subgroups located in Northern Santiago del Estero and Chaco have mobile extraction rooms licensed by SENASA to handle the extraction process themselves. Coopsol managers stressed the need for an upgrade of APONA’s extraction rooms that are shared by these remote rural communities. Coopsol usually has to perform additional checks on honey collected from these extraction rooms to ensure compliance with the quality standards required by Fair Trade importers:
Almost half of the other Fair Trade honey comes from extraction rooms that are located close to the communities that produce. In those cases we do find minimal issues, we have tried to train them for this to be handled properly, but we control this anyway and sometimes we decant honey that comes from those extraction rooms. Obviously in each process some honey is lost. But basically to get the drum in the right conditions means to get it to 300 kilos net, clean, free from foreign matters [GM2].

APONA producers who don’t have extraction facilities bring their honey-filled beehives to Coopsol for extraction. Beehives are weighed by Coopsol in the presence of the producers. After the honey is extracted, APONA beekeepers’ empty beehives are returned, they get paid their first instalment and sign a receipt. This transaction is done in cash and individually between Coopsol and the producer.

Coopsol’s workers operate the machinery in the extraction room. The extracted honey follows a simple process through which it is filtered, and then distributed into decanters for a period of 12 hours. These contain honey delivered by producers in the last 12 hours. Honey samples are collected from the decanters for analysis. Honey from the decanters fills the drums. These are registered and labelled with the identification number of the licensed extraction rooms and extraction lots.

Coopsol stocks APONA’s beekeepers’ honey until it is enough to fill a 20-feet container load. Coopsol also keeps track of an estimated quantity of honey available for marketing. As small beekeepers supply small quantities from varied locations, it usually takes some time to fill a container. In some cases, Coopsol is required to blend honey to achieve a specific colour grade. However, this is generally for conventional honey buyers who emphasise visual attributes. Fair Trade Organic buyers can occasionally have colour requirements that require Coopsol to blend Organic honey, although this is unusual.

**Accreditation and regulation**

SENASA regulates the extraction rooms. In order for extraction rooms to be licenced by SENASA, there are requirements related to the equipment and infrastructure. These requirements are generally hard to achieve individually by small beekeepers. Coopsol’s extraction facilities are licenced by SENASA.

The extraction and processing facilities are also monitored by the Organic certifier through annual audits. Coopsol workers have to pay special attention when processing Organic honey, as the processing circuit has to be cleaned so there are no residues of conventional honey. However, audits from Food Safety and SENASA are mostly focussed on the production stage rather than on the extraction and processing of honey. Honey sample analysis is the control point to ensure the honey is not contaminated with prohibited products or traces of GM crops. These analyses are carried out in a

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SENASA approved laboratory for traceability for Organic certification, and to allow the honey to be authorised for export.

### 4.2.4 Export

Coopsol negotiates prices with buyers and exports the Fair Trade Organic honey produced by the Wayra consortium. After honey is approved for export, the customs broker is notified and a booking is made with the shipping line according to the sale conditions. Some customers prefer to pay for the sea transport themselves. Coopsol organises the labelled drums in export batches. SENASA and the Organic certifier are notified of the operation details and the honey is transported in trucks to a customs-licenced warehouse in Buenos Aires, near the port. There, containers are loaded and then carried to the port terminal to be loaded on board the booked vessel.

Coopsol’s activities are mostly focussed on buying, processing and exporting honey. Besides producing and trading Fair Trade Organic honey, Coopsol also buys, processes and sells conventional honey from non-members. This is Coopsol’s main business, exporting about 40 containers-worth per year representing around 800 metric tonnes (MT) of honey.

> We were producers and traders. We grew as traders (…) At one point we decided that our production would be Organic, but we didn’t stop selling conventional (…) we teach how to do Organic honey, and we have a big son that is APONA. Everything related to our son is the consortium, that is Organic production. But we have our life-long business, which also keeps us strong so we can create another son like APONA, that may be like the conventional [GM1]

About 10% of the honey Coopsol exports is Fair Trade and Organic certified, produced by the Wayra consortium. During the best production season, five containers (about 100 MT) of Fair Trade Organic honey were produced and exported. However, in 2013-2014, only around 70 MT were exported as Fair Trade Organic because some of the honey did not reach the Hydroxymethylfurfural\(^9\) (HMF) quality standards required by the buyer. Further, the season this study was conducted in (2014-2015) was a low yield season for honey in Argentina and only 40 MT (two containers) of Fair Trade Organic honey were produced.

In many cases, especially for conventional honey, Coopsol bears the costs related to export and honey payments through pre-finance credit with local banks. Fair Trade buyers also provide finance for their orders with advance payments of up to 50%. Buyers usually intend to fix prices at the start of the season, just after the first harvest. Coopsol members commented that this advance is beneficial for

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\(^9\) **Hydroxymethylfurfural (HMF)** is a break-down product of fructose (one of the main sugars in honey), it forms slowly during storage and very quickly when honey is heated. In the hive honey would normally be below 1 mg/kg but levels soon start to rise with ambient temperatures above 20°C. The international food standards requires that the hydroxymethylfurfural content of honey after processing and/or blending shall not be more than 40 mg/kg. *(Retrieved from http://www.sweetreehoney.co.nz)*
producers in the early stages of the season, but could play against the possibility of achieving a higher price as they move away from the harvest months.

**Coopsol’s trading relationships**

Coopsol, as a Fair Trade trader, contracts its sales with Fair Trade importers through international sales contracts or purchase orders. Fair Trade honey importers push to fix prices at around October, at the start of the honey harvest. Coopsol has different payment arrangements according to the level of trust with the buyer. With most customers, Coopsol operates through documentary collection payments, where banks act as collecting agents. With highly trusted customers, Coopsol works with an open account payment, sending the cargo and documents with no interaction of banks. Balance payment conditions for overseas buyers are usually 60-90 days from shipment date.

All of Coopsol’s Fair Trade Organic buyers are in Europe. One of their regular buyers, CTM in Italy, is connected with the Italian NGO (IPSIA) that had supported the formal establishment of APONA. CTM is a Fair Trade products importer, and regularly buys at least one container of Fair Trade Organic honey per year from Coopsol. Coopsol has developed a close relationship with CTM. Coopsol and CTM have an agreement where CTM packs and sells Coopsol’s Atamisqui monofloral honey and polyfloral honey under the “miele del sol” brand. CTM’s website advertises it as produced by Coopsol. Through this agreement Coopsol provides an updated estimate of production costs to CTM to inform a fair price for their orders. The other European importers either pack the honey they receive with their own brands or re-sell to retailers. Coopsol exchanges information with Fair Trade importers about quality, logistics and prices through the negotiation of each contract. Coopsol receives enquiries from potential Fair Trade importers by email, and these contacts are facilitated by FLO’s database.

The Fair Trade Organic sales channel is highly regarded by Coopsol:

*That is a channel and to be true, it is a lot smoother than in conventional honey [GM2]*

At the time data were collected, Coopsol had unmet demand from buyers of Fair Trade Organic honey because of lack of production (GM1).

**Coopsol’s returns**

Coopsol has different returns from the different supply chains in which Coopsol operates. In the Fair Trade Organic honey supply chain, the returns are the differential price they obtain for their Organic honey, and the Fair Trade Social Premium derived from it. Coopsol forwards APONA the Social Premium from the Fair Trade Organic honey bought from beekeepers. As APONA does not have a bank account, this is done in cash.

In 2014-2015 the difference between Atamisqui monofloral honey and polyfloral honey was US$0.14 per kg. Atamisqui honey achieved an export FOB price of US$4.54 per kg. The quantity of monofloral honey available in a season depends largely on weather conditions. In the 2014-2015 season, only 300
kg of Atamisqui honey were exported. Coopsol also sold part of the Organic honey it produced packed in 440 gram jars to supermarkets and stores in the domestic market at an approximate price of AR$102 per kg although quantities were relatively low.

In the 2013-2014 season, Coopsol exported Fair Trade Organic honey at an average FOB price of US$3.90 per kg, about AR$30.81\(^{10}\) including the Fair Trade Social Premium. From this, AR$23.94 per kg was paid to APONA producers.

In the 2014-2015 season, the difference between prices paid by Fair Trade importers for Organic honey and prices paid by conventional honey buyers was not enough to cover the compliance costs of certification. This raised concerns in Coopsol management at the time of data collection. This issue was included in Coopsol’s annual report and stressed by both of Coopsol’s managers interviewed (GM1 and GM2).

Coopsol trades in the conventional honey market, regularly exporting to customers in Europe, USA, and some Asian countries. Different prices are paid to conventional producers depending on the colour of the honey they deliver, measured in millimetres through the Pfund scale. Clear honey returns prices higher than darker honey due to scarcity. In the 2013-2014 season, Coopsol sold between two and three containers of clear (24 millimetres) conventional honey at prices that matched those of Fair Trade Organic honey. Table 4.4 below shows the average FOB prices at which Coopsol exported honey in 2013-2014 and 2014-2015 seasons.

### Table 4.4 Average FOB prices of the last two seasons, US$ per kg.

<table>
<thead>
<tr>
<th>Honey type</th>
<th>Season 2013-2014</th>
<th>Season 2014-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fair Trade Organic</td>
<td>Conventional</td>
</tr>
<tr>
<td>Price per kg.</td>
<td>US$3.90</td>
<td>US$3.41</td>
</tr>
</tbody>
</table>

Source: Coopsol, May 2015

**Accreditation and regulation**

Coopsol keeps records of utilisation of inputs in the Fair Trade Organic honey it exports to comply with traceability requirements by SENASA and Food Safety for Organic certification. The identification number of the apiary from which the extraction lot originates is included in each shipment’s information.

FLO-Cert also requires information related to Coopsol’s FLO certification as a trader. This information is related to payment of the Fair Trade Social Premium to producers, the production cost structure, and the estimated supply plan for the following season, for when audits take place. Also, the

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\(^{10}\) US$1 = AR$7.9, exchange rate of March 2014, when producers were paid the final price.
name and signature of each producer supplying honey for each shipment and the FLO Identification number of the organisation are required in the shipment documents.

4.3 Conclusion

This chapter has described how the Wayra consortium’s Fair Trade Organic honey supply chain developed, and has outlined its structure and operation in the Santiago del Estero province. The main participants were introduced as well as the relationships between them. An overview of Coopsol’s supply chains observed in the field was given to inform the reader of the wider context in which the Fair Trade Organic supply chain takes place.

In the next chapter, Case 2 will be introduced. It will provide information about Cooperativa Norte Grande’s Fair Trade and conventional honey supply chains in Tucumán province.
Chapter 5
Case 2: The Cooperativa Norte Grande’s Fair Trade and conventional honey supply chains

This chapter will describe Cooperativa Norte Grande’s (Norte Grande) Fair Trade and conventional honey supply chains operation in Tucumán province from data collected in the field. Section 5.1 covers Norte Grande’s creation, how the Fair Trade and conventional honey supply chains developed, and gives an overview of Norte Grande at the time of the study. In Section 5.2, the structure of these supply chains and functions of the participants at each stage of the chains are detailed. Also, processes and interactions of the chains’ stakeholders are described in depth. Finally, Section 5.3 concludes the chapter.

5.1 Development of Norte Grande’s Fair Trade and conventional honey supply chains in Tucumán

5.1.1 Brief history of Norte Grande

Cooperativa Agropecuaria y Apícola Norte Grande Limitada is based in Famaillá, at the foothills of the Tucumán province. Tucumán is the smallest province in the Argentine territory, and is situated in Northwest Argentina (see Figure 5.1). Norte Grande was created in 2001 by a small group of INTA researchers and honey producers willing to develop honey production. This took place at the INTA station of Famaillá, following an agreement between this institute and Tucumán’s IPACYM (Provincial Institute of Cooperative and Mutual Action). When PROAPI arrived at the INTA station of Famaillá in 1995, beekeeping was not widespread in Tucumán. The activity became more popular in the province through Cambio Rural\(^{11}\) groups that applied technology developed by PROAPI. This technology was included in a production protocol named “INTA 11”. Cambio Rural participants were introduced to the INTA 11 protocol by INTA field officers. Many producers from those groups became members of the cooperative.

Norte Grande was conceived of as an open cooperative whose purpose was to include small and medium producers into supply chains so they weren’t taken advantage of by local dealers. Fair Trade certification through FLO was established in 2007 through contacts with Fair Trade European importers. The Fair Trade certification process allowed the cooperative to improve its organisational structure and processes following the standards demanded by FLO-Cert. At the time of study Norte Grande was the only beekeeping cooperative in Tucumán certified as Fair Trade.

\(^{11}\) Cambio Rural is a federal programme promoted by the Ministry of Agroindustry to strengthen and develop the capacities of small and medium agricultural producers across Argentina. INTA provides technical and organisational support for this programme.
Although Norte Grande had held Organic certification as a trader, it did not achieve Organic certification for all the honey it sold as very few members could certify their honey production as Organic. This is due to the area in which their apiaries were located.

Figure 5.1 - Location of Norte Grande’s HQ and extraction rooms

Source: Adapted from [www.educa.ar](http://www.educa.ar) (undated)

5.1.2 Development of the Fair Trade honey supply chain

The Fair Trade honey supply chain in Tucumán was developed jointly with another cooperative based in the Santa Fe province, COSAR. COSAR had close connections with INTA and PROAPI and held Fair Trade certification as both a producer and trader. In 2015, COSAR was the largest Fair Trade honey exporter in Argentina.

Fair Trade honey sales from Norte Grande to COSAR lasted for two years and were then discontinued. COSAR found it difficult to sell Norte Grande’s honey due to lack of demand for dark-coloured honey produced by Norte Grande in Fair Trade overseas markets. Additionally, Norte Grande’s clear-coloured honey supply to COSAR had quantity inconsistencies. Norte Grande then developed a new Fair Trade sales channel through NOREVO, a Fair Trade certified honey trader, with headquarters in
Germany and offices in Buenos Aires. This grew to the point where all honey sales from Norte Grande were through NOREVO. NOREVO sold Norte Grande’s honey through Fair Trade channels in European countries such as Germany, Belgium and the United Kingdom. However, this relationship also came to an end when NOREVO decertified Fair Trade in 2012. With no purchases from NOREVO Norte Grande stopped selling honey through Fair Trade channels. Norte Grande had to pursue alternative marketing options for the honey produced by its members.

5.1.3 Development of the conventional honey supply chain

When this study was conducted, a five-year agreement between INTA and NEXCO, the largest honey exporter in Argentina, was in place. This agreement was established to sell large volumes of conventional honey from beekeepers that followed the INTA 11 protocol (containing the technological package developed by PROAPI) spread through Cambio Rural groups. Norte Grande quickly developed its sales channel to NEXCO. As NEXCO was not Fair Trade certified Norte Grande sold honey produced by its members as conventional.

5.1.4 Overview of Norte Grande

By the end of 2014, Norte Grande had 157 formally registered beekeeper members, although not all were active. During the same year, five new members joined the cooperative. Norte Grande members owned an average of 100 beehives each. Norte Grande pooled and marketed a total of 118 MT of conventional honey representing AR$3,046,784.19 in 2014. This resulted in commissions for Norte Grande for AR$148,500.81 that were utilised in administrative and management expenses. The net profit of Norte Grande for 2014 was AR$37,648.02. An average of 113 MT of honey were sold annually between 2011 and 2014. Figure 5.2 below shows the amount and type of honey sold by Norte Grande, in kilograms.

Figure 5.2 - Norte Grande honey sales 2011-2014, in kg.

Norte Grande’s governing body was elected every two years. Elections took place at AGMs. AGMs did not occur annually. The board (president, vice-president and treasurer) were producers who
worked ad-honorem, while the commercial manager was paid a salary plus sales commissions. Table 5.1 below gives an overview of the institutional arrangements of Norte Grande.

**Table 5.1 Overview of institutional arrangements of Norte Grande**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Membership</strong></td>
<td>Payment of AR$200 share and decision of the board. INTA 11 protocol desired</td>
</tr>
<tr>
<td><strong>Governing body</strong></td>
<td>Board of directors (president, secretary, treasurer). They are all producers who work ad-honorem</td>
</tr>
<tr>
<td><strong>Management</strong></td>
<td>Commercial manager, carries out marketing, administrative and accounting tasks</td>
</tr>
<tr>
<td><strong>Voting rights</strong></td>
<td>Democratic voting (one member, one vote) at the AGM, by show of hands</td>
</tr>
<tr>
<td><strong>Benefit rights</strong></td>
<td>Shares are transferable between members. Shares do not receive dividends. Profits are distributed in proportion to patronage (i.e. services provided or volumes delivered)</td>
</tr>
<tr>
<td><strong>Share redemption</strong></td>
<td>Shares are redeemed at nominal value. 5% of the net equity is available for redeeming of shares</td>
</tr>
</tbody>
</table>

Source: Cooperativa Norte Grande’s constitution

### 5.2 Norte Grande’s Fair Trade and conventional honey supply chains

The Fair Trade and conventional honey supply chains are depicted in Figure 5.3 below. Production, extraction and processing, and primary marketing are the steps that take place in the province of Tucumán, the study area. It must be noted that the Fair Trade certifier intervened only when honey was sold through the Fair Trade honey supply chain. The dotted line in Figure 5.3 represents Norte Grande’s previous link to the Fair Trade honey supply chain and its participants.
Figure 5.3 - Norte Grande’s honey supply chains

A more nuanced description of Norte Grande’s honey supply chain can be found in Table 5.2 below outlining the functions and outputs of each agent at each stage of the chain. Shaded areas in the table are the ones described, namely each stage of the chain and how the accreditation and regulation bodies participate.
Table 5.2 Functional analysis of Norte Grande’s Fair Trade and conventional honey supply chains

<table>
<thead>
<tr>
<th>Stage of the chain</th>
<th>Function</th>
<th>Agent</th>
<th>Output</th>
<th>Accreditation &amp; Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>-Honey production&lt;br&gt;-Transport of beehives to extraction room</td>
<td>Beekeepers</td>
<td>Honey in beehives in extraction room</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Input provision (medicine &amp; materials)</td>
<td>Input suppliers &amp; Norte Grande</td>
<td>Honey in beehives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Training &amp; application of INTA 11 protocol</td>
<td>INTA</td>
<td>Honey of export quality traceable to beehive</td>
<td></td>
</tr>
<tr>
<td>Extraction &amp; processing</td>
<td>-Extraction of honey from beehives&lt;br&gt;-Decantation&lt;br&gt;-Filtering&lt;br&gt;-Packing in 300kg drums&lt;br&gt;-Sampling</td>
<td>Extraction room</td>
<td>Honey packed in 300kg drums</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Analyses of honey samples</td>
<td>Laboratory approved by SENASA</td>
<td>Honey samples approved by the trader and by SENASA for traceability &amp; export</td>
<td></td>
</tr>
<tr>
<td>Primary marketing</td>
<td>-Price negotiation with trader&lt;br&gt;-Honey pooling arrangements in one or more locations in Tucumán&lt;br&gt;-Fair Trade Social Premium management</td>
<td>Norte Grande</td>
<td>Honey drums collected by trader</td>
<td></td>
</tr>
<tr>
<td>Export</td>
<td>-Honey sample assessment&lt;br&gt;-Collection of honey drums and transport to warehouse/port&lt;br&gt;-Blending&lt;br&gt;-Export</td>
<td>Trader (Fair Trade or conventional)</td>
<td>Honey drums exported to overseas buyers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Honey imported&lt;br&gt;-Blending&lt;br&gt;-Wholesale</td>
<td>Importer (Fair Trade or conventional)</td>
<td>Honey imported and ready for distribution</td>
<td>FLO-Cert (if Fair Trade importer)</td>
</tr>
<tr>
<td></td>
<td>-Distribution</td>
<td>Distributor</td>
<td>Honey distributed to retail locations</td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>-Packing&lt;br&gt;-Labelling</td>
<td>Packer</td>
<td>Fair Trade honey packed in retail containers &amp; labelled</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-Retail</td>
<td>Retailer</td>
<td>Fair Trade honey at point of sale</td>
<td></td>
</tr>
<tr>
<td>Consumption</td>
<td>-Purchase and consumption</td>
<td>Consumer</td>
<td>Fair Trade honey purchased and consumed</td>
<td></td>
</tr>
</tbody>
</table>

5.2.1 Production

The main participants involved in the production stage of the Fair Trade and conventional honey supply chains in Tucumán are beekeepers, input suppliers, Norte Grande’s management and INTA. The Fair Trade certifier also participates when honey is sold to Fair Trade buyers. The output of this stage of the supply chain is the honey-filled beehives being delivered to the extraction room.
Beekeepers characteristics, processes and costs

Norte Grande beekeepers produce honey and transport honey-filled beehives for extraction. Most members of Norte Grande are small beekeepers producing conventional honey. Although one member of Norte Grande had produced Organic honey in the past, quantities of Organic honey were low as a percentage of all honey produced.

The beekeepers interviewed from Norte Grande were based along Tucumán’s route 38 that stretches North to South of the province. Beekeeping is considered as the main activity for respondents BK5, BK6 and BK9. Only BK6 and BK9 (the largest out of the five beekeeper respondents) have honey production as their largest source of income. Table 5.3 describes some of the beekeeper respondents’ key characteristics.

For Norte Grande beekeepers, high season takes place between the months of September and April. During this time, producers visit the apiaries as much as twice a week. During the rest of the year, the wintering of beehives takes place. In that period, honey producers prepare their materials for the following season and monitor the populations of their beehives. Beekeepers can increase their productive capacity by multiplying nucleus hives to populate new beehives. Producers in expansion stages trade beekeeping supplies such as beehive boxes for nucleus hives as a way of reducing the associated costs of increasing capacity. Approximate prices for new fully-equipped conventional beehives are in the range of AR$1500-1600.

Although beekeeping tasks in conventional honey production are similar to those in organic honey production as described in Case 1, there are substantial differences between the production methods. These differences lie in the locations of the apiaries, the size of the beehive supers and materials used to protect them, and the products utilised for feeding and healing beehives. Organic beekeepers’ apiaries are geo-referenced by certification and regulation bodies and must remain at a distance from GM crops and human populations. Conventional beekeepers can transport beehives throughout the season. They are able to look for new bloomings in different locations where bees can feed and produce more honey. This practice is known as transhumance and was practiced by many members of Norte Grande. Although it entails high transport costs, it lowers feeding costs because bees can feed in areas where early season bloomings happen. Transhumance also allows for more honey harvests in a season. BK6 practices transhumance, and moves his beehives to different locations as much as three times in a season. Norte Grande conventional honey producers utilise full size supers which allows a larger amount of honey to be harvested. However, larger beehives can also bring differentiation issues in a low yielding season. Clear honey may become unintentionally blended with darker honey from a late blooming. Honey harvests for Norte Grande producers were highly influenced by weather conditions. For example, a few months before the study was conducted, heavy rainfall had affected the province bringing severe beehive losses. One of the beekeepers interviewed had recently lost 70 nucleus hives due to a flooded river.
### Table 5.3 Case 2 beekeepers’ characteristics

<table>
<thead>
<tr>
<th></th>
<th>Beekeeper 5</th>
<th>Beekeeper 6</th>
<th>Beekeeper 7</th>
<th>Beekeeper 8</th>
<th>Beekeeper 9</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size (number of beehives)</strong></td>
<td>160</td>
<td>500</td>
<td>25</td>
<td>120</td>
<td>1000</td>
</tr>
<tr>
<td><strong>Honey main activity?</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Years of experience</strong></td>
<td>15</td>
<td>20</td>
<td>12</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Famaillá town</td>
<td>Famaillá town</td>
<td>San Miguel de Tucumán city</td>
<td>Aguilares town</td>
<td>Alberdi town</td>
</tr>
<tr>
<td><strong>Distance to workplace, apiaries</strong></td>
<td>Less than 10 km</td>
<td>Less than 10 km</td>
<td>10 - 20 km</td>
<td>Less than 10 km</td>
<td>10 -20 km</td>
</tr>
<tr>
<td><strong>Has extraction facilities?</strong></td>
<td>No</td>
<td>Yes but informal</td>
<td>No</td>
<td>No</td>
<td>Yes through other cooperative</td>
</tr>
<tr>
<td><strong>Distance to extraction location</strong></td>
<td>10 – 20 km</td>
<td>Owns extraction room</td>
<td>140 km</td>
<td>20 km</td>
<td>10 -20 km</td>
</tr>
<tr>
<td><strong>Owns a vehicle to transport beehives?</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Additional source of income</strong></td>
<td>Work in other beekeepers’ apiaries</td>
<td>Informal extraction room</td>
<td>Part time school teacher/ Rabbit production</td>
<td>Supervisor in local hospital</td>
<td>Part time public worker</td>
</tr>
<tr>
<td><strong>Participated in Fair Trade Premium use discussions?</strong></td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Receives help from other beekeepers?</strong></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes but shares production</td>
</tr>
<tr>
<td><strong>Sold to other channels?</strong></td>
<td>No</td>
<td>In bulk, informally. Local retail packed in jars, small quantities</td>
<td>Local retail packed in jars, small quantities</td>
<td>30% to local retail packed in jars in tourist village of Tafi del Valle</td>
<td>In bulk through other cooperative. Local retail packed in jars expanding</td>
</tr>
<tr>
<td><strong>Will continue supplying to the cooperative?</strong></td>
<td>Yes, if prices hold</td>
<td>Yes, if prices hold</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, if prices hold</td>
</tr>
</tbody>
</table>

One of the first honeys to be harvested in the region is Tucumán’s well-known citrus honey, which is characterised by its clear colour and high demand. In low yield seasons, clear honey can lose its value by getting mixed with dark honey as beehives fill with honey from different bloomings. Once beehives are full of honey Norte Grande producers begin their harvest by removing these hives from the apiaries.
Beekeepers in the Norte Grande supply chains usually transport their honey-filled beehives to the extraction room individually, although some collaborate with fellow beekeepers. They also receive assistance from family members. Others such as BK9 partner with trainee beekeepers to collectively manage production and transport. All beekeeper respondents have a vehicle to transport their beehives to the extraction room.

Beekeepers do not sell all their honey to Norte Grande. For example, BK6 usually sells half of his clear honey production informally. Informal buyers pay the full amount upfront and in cash. The rest of BK6’s clear honey, as well as most of his dark coloured honey, is sold through Norte Grande channels.

The clear one is the most wanted so they [informal buyers] desperately go looking for it. And then for the rest of the honey they don’t come looking for it that often (...) but we always have to save some for the cooperative, if not when we go to them with the darker ones they say: No, wait, you sold the clear ones [BK6]

Most of the beekeeper respondents sell part of their honey through alternative sales channels from Norte Grande’s. Norte Grande management was aware of this and it tried to gain more commitment from its members. Norte Grande notified the honey producers about payment conditions for new purchases and the producers decided whether to supply honey, or not. The same procedure took place for both Fair Trade and conventional honey operations.

Transport expenses are highlighted by respondents as one of the largest of their production costs. Other significant costs are for products used in healing beehives. BK9’s estimated break-even per beehive equalled about 10 kg of honey, or AR$250.

Input supply
Many inputs of production are provided by Norte Grande to its members at lower cost through collective purchases. Also, Norte Grande provides its members with access to supplies that are not readily available in the region. An example of this is medicines, developed by INTA’s PROAPI and specialised laboratories to cure beehive diseases such as varroosis or loque americana. Some Norte Grande producers use homemade products instead, which reduce production costs but can potentially leave residues in the honey produced. Many beekeeper respondents consider that input supply is one of the key benefits of being part of Norte Grande.

INTA
INTA’s role is considered important by Norte Grande beekeepers as many have received training through Cambio Rural groups and frequent technical support. Financial support was also facilitated through the ArgenINTA Foundation. At the time of this study, Norte Grande had received an AR$300,000 credit through the programme of the ArgenINTA Foundation to purchase inputs for its members.
Following the INTA 11 protocol is part of the desired criteria for new beekeepers to join Norte Grande. This protocol guarantees honey traceability from the apiaries and provides training in beekeeping practices including avoiding the use of antibiotics.

**Accreditation and regulation**

Although some Norte Grande beekeepers keep track of input applications and expenses incurred in their visits to the apiaries on field spreadsheets, others admit they do not keep these records. This is required under the INTA 11 protocol. The INTA 11 protocol follows SENASA’s standards for honey traceability, although audits of beekeepers is not undertaken on a regular basis. Testing takes place on the final product, when honey is sampled for analysis.

The Fair Trade certifier, FLO-Cert, audits Norte Grande and its producers annually. A special focus is made by FLO-Cert on the product’s traceability to make sure no conventional honey enters the Fair Trade channel. During FLO-Cert audits, field spreadsheets are required. Audits of the producers’ apiaries are also made, although these audits mostly relate to the environmental impact.

### 5.2.2 Extraction and processing

The extraction and processing of honey is performed in an extraction room, usually in the presence of the beekeepers. The outputs of this stage are honey sampled and packed in drums ready for collection, marketing and export. Approval of samples by a SENASA-approved laboratory is required. This step could also be undertaken by the trader after buying the honey.

**Extraction rooms**

Norte Grande does not own extraction facilities. Instead, Norte Grande established cooperation agreements with other cooperatives in the region enabling members to utilise other cooperatives’ extraction rooms. These are located in Alberdi, 70 km south of Famaillá, and in the town of Frias, in the Santiago del Estero province, where 17 members are based.

The extraction rooms undertake the extraction of honey from the beehives, decantation, filtering and packing into drums provided by either Norte Grande or the producer. After processing, analysis samples are collected for Norte Grande, the buyer, and the producers. No blending processes are undertaken by Norte Grande. Clear honeys, if available, are packed in separate drums to be processed downstream. Extraction rooms usually have a warehouse where the packed drums can be stored. Norte Grande owns a warehouse attached to Cooperativa Mora Micuna’s extraction room in Alberdi. Much of Norte Grande’s beekeepers’ honey is extracted there and then stored in that warehouse until the buyer collects it.

**Accreditation and regulation**

SENASA is the main body regulating honey extraction and processing in Norte Grande’s supply chains and regulates through licences for the extraction rooms that service beekeepers. In order to
obtain a licence, extraction rooms need to comply with SENASA requirements when they are inspected.

Honey samples collected in the extraction rooms have to be analysed by a laboratory approved by SENASA. This step is usually undertaken by the buyer although Norte Grande sometimes analyses samples in INTA’s laboratories upon the buyer’s request. Honey is checked for prohibited medicines (e.g. antibiotics) used illicitly during the production stage. Once samples are approved by SENASA the honey can be exported.

**Small beekeeper extraction issues**

The extraction rooms charge their services directly to Norte Grande honey producers. The extraction costs are paid in kilograms of honey and range from 5% to 11% of the honey delivered, according to the beekeeper respondents. However, there is evidence of SENASA regulations avoidance at this stage. BK6, based in Famaillá, owns extraction facilities and a warehouse that are not licenced by SENASA and which he uses to extract his and other producers’ honey. He utilises another extraction room’s SENASA licence number for which he pays an informal fee.

BK7 is the respondent furthest from an extraction facility. This creates logistic issues, despite collaborating with neighbouring beekeepers:

> At that time they are all harvesting. You call, and they say: Today I can’t, because I already have the honey (beehives) on the truck.- We have about 140 km to the room. With the volume we manage it’s not worth it [BK7]

Extraction, and the logistics associated with it, is cited by one of Norte Grande’s managers as one of the main issues faced by small beekeepers. GM4 stressed the need for revised standards for SENASA licences over extraction rooms, adapted to small beekeeper capacities.

> There’s a lot to correct. The system is made for the bigger ones, not for the small ones. The same regulations have to be adapted for small rooms [GM4]

A project was presented by Norte Grande to SENASA at a national level, and to the Secretariat of Agrarian Affairs and Agri-food (SAAyA) of the province of Tucumán, to bring forward new standards for extraction rooms.

**5.2.3 Primary marketing**

The honey produced by Norte Grande beekeepers is pooled and sold in bulk to a trader. This process is similar for both the Fair Trade and conventional honey sale channels. The output at this stage of the supply chain is the honey collected by the trader.
Norte Grande’s honey supply and delivery

Norte Grande estimates its honey availability before the season starts through a calculation of number of beehives owned by active members and average yields expected. After this, an estimated supply agreement is established between Norte Grande and the trader. This occurred when Norte Grande supplied both the Fair Trade and the conventional honey channels.

The management of Norte Grande cannot determine how much honey producers will deliver in a season. This uncertainty takes place despite yield variations for weather reasons. Although Norte Grande’s constitution states that at least 50% of the honey produced by its members has to be sold through the cooperative, this is neither controlled nor enforced. This is not the case in other cooperatives:

*I think there are other cooperatives, like COSAR, where they have to deliver 100% of their honey, and this is defined in its constitution. Because the reality and idiosyncrasy of producers in the north is different to the reality in other parts of the country, this was left open in the constitution so the producer can have freedom. Anyway this clause is not executed, because the idea of the previous and actual Board has always been that Norte Grande is here to obtain the safest and better paying commercial channel [GM3]*

Honey extracted stays in the beekeeper’s possession until Norte Grande agrees on a purchase order with the trader. There is no written contract between Norte Grande and its members for these to supply a given quantity or quality. Rather, a verbal agreement takes place after Norte Grande has agreed on price and payment terms with the producer. As a consequence of having no formal contract, part of the honey that the cooperative includes in its sales plan is sold to other channels within days of its harvest.

Also, sometimes Norte Grande beekeepers do not declare all of the honey they produce for tax reasons. Instead of moving to a higher tax category they sell their surplus informally. For these reasons it is difficult for Norte Grande to negotiate with buyers on the basis of quantities of honey.

Part of the honey that Norte Grande pools is from non-members who have not formally joined the cooperative but form part of Cambio Rural groups. Non-members are paid the same price as members although they cannot participate in other benefits provided by Norte Grande such as collective input purchases. In the last honey sale arranged by Norte Grande, about 20% of the honey supplied was from non-members.

After the honey samples are approved by the trader, the drums are pooled in specified locations in Tucumán so the trader can collect them. Such logistic arrangements are viewed as a benefit to members of Norte Grande as they diminish costs and risks associated with transporting honey-packed drums.
Norte Grande’s payment terms

Norte Grande producers invoice their honey sales directly to the trader. Norte Grande also invoices its commission of 5% of the agreed price directly to the trader. This commission is utilised to collectively buy beekeeping inputs and to pay the commercial manager. The manager undertakes marketing, accounting and administrative tasks.

Norte Grande usually makes advance payments to producers that range from 30% to 60% of the final price. The balance is paid 15 to 45 days from date of delivery. Additional financial resources are sought through credit lines for producers. Slightly higher prices are paid to beekeepers who choose longer-period payment terms. Norte Grande’s usual practice is to present the different commercial alternatives to members. They determine which alternative they sign up for.

Payment terms were always respected both by the Fair Trade and conventional honey traders. However, GM3 noted that during the time they were supplying to Fair Trade channels they could not get access to pre-finance from the Fair Trade trader, despite this being one of Fair Trade’s core benefits (Fairtrade ANZ, n/d).

Norte Grande’s benefits

Clear honey is usually the first product beekeepers sell. However, much of this honey is sold outside of Norte Grande’s Fair Trade and conventional channels. Norte Grande agrees on overall prices with the trader for a mix of different coloured honey delivered by its members, largely darker coloured.

Then for the dark honeys, the price that the cooperative sets is better than the other one. Because that is one of the benefits that the cooperative has. As the exporters prefer the clear honey, within 80 drums (a truckload) the cooperative has several spots of clear honey drums, so they bargain for an overall price [BK6]

Seasonal average honey prices obtained by Norte Grande in the last four years are detailed in Table 5.4 below. The difference between the producer price and the price at which Norte Grande sells is the amount of the Social Premium in the case of Fair Trade and Fair Trade Organic honey sales. In the case of conventional honey, this difference applies to the commission that Norte Grande receives from the trader.

<table>
<thead>
<tr>
<th>Table 5.4 Average prices obtained by Norte Grande, AR$ per kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selling price per kg.</td>
</tr>
<tr>
<td>10.14</td>
</tr>
<tr>
<td>Producers’ price per kg.</td>
</tr>
<tr>
<td>9.50</td>
</tr>
</tbody>
</table>

Source: Norte Grande, June 2015
International honey marketplace conditions played an important role in Norte Grande’s exit from the Fair Trade honey supply chain (GM4). United States importers were paying higher prices for conventional honey than European importers were paying for Fair Trade honey.

*All that chain, that nowadays we sell as conventional could have gone to Fair Trade. What is the difference? That all that package wouldn’t have got the same profit today, exporting through Fair Trade than going conventional. Why did this happen? Because USA paid better prices than the European Union [GM4]*

As Norte Grande had never exported it never developed relationships with Fair Trade overseas importers. Norte Grande management were clear that the monetary value of the commission the cooperative was getting paid for through its conventional honey sales in the domestic market was below what they could achieve through the Fair Trade Social Premium by exporting Fair Trade certified honey. GM3 commented that Norte Grande did not export because the cost-benefit of doing so compared with the commission they were obtaining from traders did not justify it. They struggled to find a trading partner for their dark honey type, did not have the infrastructure to support export activities and found that the members were not encouraged to export. However, they do consider exporting in the future. GM3 commented more contact and collaboration between the other Fair Trade certified cooperatives (i.e. with COSAR and Coopsol) would be beneficial for them in order to return to Fair Trade markets.

**Accreditation and regulation - The Fair Trade Social Premium**

FLO-Cert require in its annual audits that there are plans for supply for the following season and plans for management of the Fair Trade Social Premium. The supply plan was usually developed together with the Fair Trade trader and provided evidence of Norte Grande’s activity in the Fair Trade channel. FLO-Cert would ask Norte Grande management for evidence regarding what the Fair Trade Social Premium of the past season is used for, as well as a plan for how the following season’s Social Premium will be spent. The Fair Trade Social Premium was credited directly in Norte Grande’s bank account by the Fair Trade trader.

Norte Grande democratically decided on the use of the Social Premium at the AGMs. However, the AGMs have not been carried out annually in the last few years. Also, members have not been convoked for AGMs, as established by Norte Grande’s constitution. At the time of data collection an AGM had been recently conducted comprising issues of the last four years. Norte Grande’s Fair Trade Social Premium had covered the annual costs of FLO certification, the commercial manager’s salary, cell phone communications, and publicity for the cooperative. At the time that Norte Grande supplied honey to the Fair Trade honey supply chain, the value of the Social Premium was US$0.15 per kg of honey.
Norte Grande’s Fair Trade certification has been suspended because of lack of activity. Members have been notified of the board’s intention to regain Fair Trade certification. This will entail paying for the auditor and re-certifying, which represents a total cost of around AR$30,000 [BK6].

5.3 Conclusion

This chapter described the development, structure and operation of Case 2, Cooperativa Norte Grandes’ Fair Trade and conventional honey supply chains in the Tucumán province. It also provided information on who the main participants are and how they interact. Moreover, it shared the respondent’s view on why the Fair Trade honey supply chain was interrupted and replaced by the conventional honey supply chain.

In the following chapter, a within-case analysis of Case 1 and Case 2 is undertaken. Following this, a cross-case comparison will take place utilising a sample stratification of beekeepers interviewed in each case. Findings from this research will then be compared and contrasted with the literature.
Chapter 6

Within-case analysis and cross-case comparisons

In this chapter, Case 1 and Case 2 will be analysed. Issues arising from observed relationships and beekeeper characteristics will be highlighted. Cross-case comparisons will then be made, facilitated by a sample stratification of beekeepers by size. These comparisons will assist in identifying patterns in order to answer research objectives 2 and 3 (see Research Objectives, p. 2).

6.1 Case 1 analysis

In Chapter 4, Coopsol and APONA’s Fair Trade Organic honey supply chain was documented. This section will provide an in-depth analysis of Case 1. The benefits to smallholders of being part of the Wayra consortium will be noted, as well as the advantages of supplying honey with Fair Trade and Organic certification. A description of the disadvantages that small beekeepers face in this supply chain follows.

6.1.1 Benefits to beekeepers of being part of the Wayra Consortium

The beekeepers interviewed found good reasons to be a part of their organisation, APONA, as well as of the umbrella organisation where their honey is sold, the Wayra consortium (see Figure 6.1). It must be noted that these responses were captured without pre-empting or suggesting possible benefits.

Figure 6.1 - Case 1 benefits to beekeepers of being part of the Wayra consortium (n=4)
An assured sale channel is the greatest benefit highlighted by the beekeeper respondents. Half of the producers noted that buying inputs collectively, being represented within Argentina and abroad, receiving financial support and having a stable occupation throughout the year are also significant advantages of being part of the consortium. The latter is considered crucial as beekeeping provides young people from rural communities with an alternative to working as seasonal farm workers or migrating into cities in search of job opportunities.

*We have prevented the uproot of young people from the countryside. We have given a new tool to youngsters or people that did not know what to do, to seek economic sustainability [BK1]*

Other advantages were noted by some beekeepers. Receiving commercial advice, achieving better prices for honey sold in bulk, and convenience, are also considered important benefits.

*There’s no contract that states I have to extract and bring [honey]. You have freedom to offer it. There are two or three companies in Santiago that buy, but they always pay less, so we can never arrange with them, besides they want you to bring them the honey. In the consortium through APONA, Coopsol comes and picks up the drum [BK3]*

Being part of the consortium provides a sense of community to some producers, who feel supported through collaboration with other members:

*It’s comfortable, it’s like being in a big family. And then, having secured a job, this is what I dedicate my time to (...) If I were alone I wouldn’t have had the benefit of selling my production [BK4]*

BK1 also reports institutional benefits, as APONA is supported by the Wayra consortium. Additionally, the possibility of expanding the network for input provision and sales is considered important to BK3. BK4 saw accessing certifications as another benefit.

As these beekeepers were introduced to apiculture in order to enter the Fair Trade Organic honey supply chain, it is argued that these benefits are part of the Fair Trade Organic honey supply chain.

### 6.1.2 Advantages to beekeepers of being part of the Wayra consortiums’ Fair Trade Organic honey supply chain

All beekeeper respondents were positive about being part of the Fair Trade Organic honey supply chain. Only BK2, the smallest, was hesitant regarding his future sales to Coopsol because of price conditions, albeit acknowledging its advantages. Coopsol management note that although being part of this chain locks producers in, it has nevertheless enabled producers to engage in other donor projects:

*Yes, they sell all their honey [through the consortium]. It’s a matter related to Organic, I mean receiving a price. The organisation is Organic. And it’s an entry barrier, but also establishes an exit barrier for producers. But the Organic and Fair Trade is not to be only justified by price but it’s also*
generating partnership and other benefits. Today they have credit funds, possibilities for many projects, they are about to get vehicles in other projects, and they have grown financed by Coopsol and by being Fair Trade and Organic. I don’t think it would’ve been possible to do it without these features. It’s a benefit beyond price [GM2]

Assured market access was mentioned by all respondents as an advantage of supplying to the Fair Trade Organic chain. BK3 states it is easy to sell his honey in this chain thanks to newly established networks, and thanks to increased communication with buyers.

Many years ago, all production fell apart because there were no commercialization networks of any kind. Nothing was going on here [BK3]

Increased transparency in relationships is valued by BK1, while BK2 mentions dealing with more conscientious buyers as another advantage. Financial support is through a microcredit fund granted based on APONA’s involvement in the Fair Trade Organic supply chain [BK4]. Producing honey under organic processes is considered a personal preference to some of the beekeeper respondents. It is thought of as a benefit towards their living environment. It replaces previous activities such as charcoal production from native forest species like the Quebracho tree. Bees feed from the Quebracho tree blooms to produce Organic monofloral honey:

Working with the charcoal, we saw that was coming to an end (...) You tumbled the Quebracho from the forest and you lost a hundred years. Instead, with beekeeping you will still have it [BK3]

BK3 reports that by holding Fair Trade and Organic certification, his rural community has achieved more lobbying power in legal disputes of long-dated land tenure issues in Santiago del Estero.

Our struggle has been around the land issue, in the province very few people hold domain titles. And it’s very useful if you have to face a conflict with companies coming from outside, by having a certification that shows you are producing, exporting food, this makes the province’s executive and judicial powers value yourself (...) It empowers you in your speech within law disputes (...) That here we can produce Organic food, with no fumigations [BK3]

6.1.3 Disadvantages of Wayra consortium’s Fair Trade Organic honey supply chain

Fair Trade certification costs

BK1 and BK2 note that fixed costs for certification are dependent on the scale of the producer. For small producers and in low production years certification costs are a constraint:

If you have a small production, Coopsol demands from you, APONA, Fair Trade, but you need to have that money [BK2]
I see it as a cost, I don’t know whether to call it a cost or an investment, paying for the certification. It depends on the moment of apiculture (...) Today I would see it as a cost because the season has been very bad. On top of the fact that I have less production, I have to continue paying for the certification [BK1]

FLO-Cert deducts up to 10% of Fair Trade certification audit fees for organisations that are also certified Organic (Fairtrade ANZ, n/d) such as APONA. Fair Trade certification costs depend greatly on the volume of honey delivered. For APONA this is generally a low one (maximum two containers of honey). On top of FLO-Cert’s fees for annual audits, APONA producers have to bear Food Safety’s audit costs for Organic certification which is described next.

**Organic certification costs**

Coopsol developed a certification scheme together with Food Safety. Under this scheme Coopsol manages Organic certification of both Coopsol and APONA’s production. The scheme allows for certification of community head producers under which small subgroups also achieve certification. Although this scheme reduces costs otherwise imposed individually on each producer, audits are still expensive. Marin and Vila Seoane (2012) stress that Organic certification national standards requirements need revision to suit group certification. This was confirmed in the interviews.

APONA has an agreement with Coopsol in which Coopsol deducts the costs of Organic certification and technical support from honey payments to APONA producers. The costs of the annual audits is included in this deduction. Regardless of the presence of any price premiums for Organic honey to overcome these costs, it ultimately impacts on small beekeepers to a larger extent than relatively larger beekeepers.

*At first it was individually. The certification costs were higher. Now, groups are certified. Today it wouldn’t be profitable to be Organic. It’s more of a personal choice, the prices of Organic honey and conventional honey are very similar [BK1]*

**Fair Trade Organic honey prices and payment conditions**

Producers are interested in achieving the highest upfront price possible for their honey. The price paid by Coopsol to APONA was always above the Fair Trade minimum price, and above the market price for conventional honey. The Fair Trade minimum price is a tool implemented by FLO to provide a safety net to producers when world markets fall below a sustainable level. It is calculated by FLO on the basis of the cost of production, cost of living and cost of complying with Fair Trade standards. The Fair Trade minimum price is not a fixed price, but should be seen as a base for price negotiations between producer and buyer. Producer organizations should actively discuss and try to negotiate a price from buyers which is higher than the Fair Trade minimum price (Fairtrade ANZ, n/d, p. 130). This does not happen in the Wayra consortium (see pp. 34 and 35). APONA producers discuss prices individually with Coopsol.
Prices of Fair Trade Organic honey are more stable than those of conventional honey although the latter can at times reach higher levels:

Two years ago conventional honey was at 3200 dollars. What happened? The market demanded, demanded, and it reached to 3800 dollars, just like Fair Trade. Those things happen. Organic [and Fair Trade] honey always has a price. The conventional one goes up and down, and can surpass the Fair Trade [GM1]

Honey certified as Fair Trade and Organic is paid for by Coopsol to APONA producers by matching payments received from the overseas buyer. Conventional honey, on the other hand, is paid for upfront by Coopsol. One of the APONA producers interviewed has sold his Fair Trade Organic honey as conventional in the past, due to cash requirements. As Coopsol pays APONA producers individually, this could have an impact on other producers’ confidence about preferential price conditions for different producers.

Organic production expenses

Organic certification entails stringent requirements relating to production practices, and also to geographical location (see Chapter 3). Because of the increasing level of agricultural production using GM crops Organic beekeeping is being pushed further into the regions. This brings additional transport costs to beekeepers who need to move their apiaries because of Organic certification requirements, or towards better yielding forests. This has a greater effect on urban beekeepers such as BK1 and BK2, who live in Santiago city:

Forests are being cleared so soybean is produced, and I have to move my beehives further away, because one of the criteria for Organic is that they need to be within a radius (...) If no ecological reserves or more severe forest clearing policies are implemented, this implies that my fuel costs are going to increase [BK1]

Sometimes talking with other producers we want to leave behind Organic production, but we are always being told that it is going to get better, that this will change (...) Because we have to go further away to find virgin forests, it’s more expensive for us [BK2]

Organic beekeeping also has lower yields than conventional production due to restrictions on products to control beehive diseases. Güemes-Ricalde, Villanueva-G, Echazarreta-González, Gómez-Alvarez, and Pat-Fernández (2006) show in a study in Mexico, that Organic beekeeping costs are calculated to be as much as 70% above those for conventional beekeeping. Some beekeeper respondents consider Organic production as a personal preference. However, the price premium for Organic production at the time of this study hardly covered the extra costs:

It has an additional cost, less production, because it’s the forest, not the meadows (...) and additional costs such as bringing water every week for [beehive] development (...) We thought the value added would justify all of
that. Which today is in serious doubt. But these are all elements to discuss [GM1]

Extraction issues
Only one of the beekeepers interviewed had access to a community-shared extraction room although it is not licensed by SENASA. This prevents him from selling his honey as Organic certified to buyers outside the consortium. Others such as BK4, who has developed his operation individually instead of with a community does not have any incentives to build an extraction room:

You can have your own extraction room but it has a lot more requirements to be licensed (…) You’d have to take your honey to a licensed extraction room, without exception. And there comes all the costs, transport, everything. I could have done it already, but you need SENASA’s license. I read in a magazine it’s two pages of requirements, which are hard to comply with [BK4]

Geographical dispersion of beekeepers and commitment
Half of the beekeepers interviewed stressed that having such a geographically dispersed group of producers plays against the purpose of APONA and ultimately, the consortium. Given the individualistic culture of the Northwest rural people, group cohesion is hard to achieve. Furthermore, although Coopsol provides technical assistance, isolated beekeepers seldom ask for advice when Organic production issues arise. Although increased mobile phone networks have allowed some members to interact with each other and with markets, there are remaining issues standing in the way of achieving greater member participation.

The board of directors and all the producers, we have some in Alberdi, others in Chaco, there’s no steady dialogue (…) I saw in Santa Fe, in a co-operative convention, they had that advantage because they were in a tight area, and every month they got together, 120 producers. We have no chance, the ones from Chaco, that are about 30, would have 10,000 pesos expenses to come over [BK3]

Institutionally, I would improve the reach to members. I think that is a disadvantage of APONA and the consortium itself. The large geography it covers. Dispersion. It’s a disadvantage because we can’t strengthen as an organisation (…) It may sound striking but I would go for quality instead of quantity of members [BK1]

BK1 suggests retaining only the most committed members. This process has been occurring naturally according to GM1. BK3 suggests sub-groups should be arranged to improve information diffusion between members, or a communicator be appointed to organise meetings in various locations if they are able to obtain funding for it.

Fair Trade Social Premium irrelevance
The Fair Trade Social Premium is not considered a critical sum of money by the beekeeper respondents. The Social Premium’s value has been updated in 2011 from US$0.15 per kg of honey to
US$0.20 per kg of honey. This small increase shows that Fair Trade’s monetary benefits (Fair Trade minimum price + Fair Trade Social Premium) are not considered a large enough benefit of Fair Trade certification for beekeepers supplying the Fair Trade Organic honey supply chain.

*I think there’s still not a large volume of Organic honey (…). If there were, then you would have more benefits with the Premium. You could do more (…) I think this year we have sold two containers, so it summed up about 32 or 33 thousand pesos. That’s why I’m telling you, it’s a low volume of honey, so it does not make a large sum. It would be good if we could make 100 thousand, or 150 thousand, that would be very good [BK3]*

In this section, an analysis of case 1 has been presented, based on the description noted in Chapter 4 and the supporting evidence given. Beekeepers’ advantages and disadvantages of being part of the Fair Trade Organic supply chain have been reported. The following section 6.2 will highlight the analysis of Case 2.

### 6.2 Case 2 analysis

Chapter 5 described Case 2, that is, Norte Grande’s Fair Trade and conventional honey supply chains. The within-case analysis of Case 2 will include the benefits of being part of Norte Grande from the perspective of small honey producers, and the advantages of delivering to the Fair Trade honey supply chain. Also, issues arising in the different steps of both honey supply chains, Fair Trade and conventional, are detailed. These issues show the disadvantages that small honey producers face when delivering honey to the Fair Trade supply chain.

#### 6.2.1 Benefits to beekeepers of being part of Norte Grande

Beekeeper respondents saw several benefits to being part of Norte Grande (see Figure 6.2 below). Training and technical advice through a close connection with INTA (mentioned by 100% of the beekeeper respondents), an assured sale channel (80%) and collective input purchases (60%) are the most important benefits highlighted by the beekeeper respondents of being part of Norte Grande. Other benefits are obtaining inputs otherwise not easily acquired in the region, access to information on the latest production techniques, and market conditions and commercial advice on when and how to sell honey. Also, some honey producers mentioned they felt safer in terms of a guaranteed market by being part of Norte Grande. Other beekeepers commented they had more time to focus on production rather than dealing with paperwork, or arranging logistics to access inputs and transport honey to buyers. Other benefits mentioned are being able to collaborate with other members by sharing technical information, getting financial advice from Norte Grande management, gaining exposure and representation to the public and other organisations or institutions in the national territory, and access to certification schemes.
BK5 and BK7 state that achieving better prices for honey sold in bulk as one of the benefits of being part of Norte Grande. All Norte Grande beekeepers interviewed said they would continue to supply honey to the cooperative. However, most mentioned their decision was subject to favourable price conditions, showing that other member benefits were not valued enough as to offset price.

6.2.2 Advantages to beekeepers of being part of Norte Grandes’ Fair Trade honey supply chain

Beekeeper respondents and managers of Norte Grande have mixed opinions about their participation in a Fair Trade supply chain. Norte Grande has not sold to Fair Trade buyers since 2012. Most beekeepers interviewed focussed on their experiences during Norte Grande’s supply to Fair Trade channels and the problems around maintaining the certification.

BK5 and BK7 emphasised the positive effects Fair Trade could have had in remote rural settlements if the channel had not been interrupted; the positive effects being increasing the participation of members in those communities, and providing them with a side activity to support their livelihoods. This is especially so if organic certification had been pursued where conditions are suitable. However, Norte Grande had only sold organic honey through Fair Trade markets on a few occasions from one specific producer.
BK7 saw advantages in ethical production standards aimed at improving labour conditions. He also highlighted that reducing the level of informality that prevents small beekeepers from accessing social services, as a positive impact of Fair Trade. He commented on the aim of developing domestic retail sales of packaged honey with a fair trade seal that guarantees credence attributes.

Other beekeepers consider Fair Trade merely an additional sales channel, and other than the Fair Trade Social Premium, see no significant price premiums achieved by selling to Fair Trade buyers. They do not foresee an immediate return to Fair Trade markets although they have agreed on maintaining certification as evidenced by BK9 and BK7:

In the last assembly we discussed that issue, of paying for certification until Fair Trade is competitive again. Because today, selling to Fair Trade or selling to any broker is the same thing. There’s no difference. What we always looked for was that, for example, if NEXCO paid 25, that Fair Trade paid 26, 27, or 28. That they cared about me so I could at least cover expenses [BK9]

I am in favor of keeping it [the Fair Trade certification] latent. I think it gives you certain security. Beyond that extra money we can receive by selling through Fair Trade (...) It’s also from the working conditions to the quality conditions. I mean aiming bit higher than just producing honey [BK7]

6.2.3 Disadvantages of Norte Grandes’ Fair Trade and conventional honey supply chains

Fair Trade certification costs
Keeping Fair Trade certification was an issue to Norte Grande members when Fair Trade sales were scarce or interrupted. Fair Trade certification costs include an annual audit cost payable to FLO-Cert. FLO-Cert has different certification cost-ranges determined by the number of registered members and whether they are active or not. Norte Grande has 157 registered members but only about 60% are active. Active members have to support the certification costs for the inactive members. In order to delist inactive members Norte Grande needs an attested communication from them. Norte Grande pays for certification costs with the Fair Trade Social Premium.

The certification is a fixed cost you have every year, whether there’s little or large sales, the cost of bringing the auditor, the certifier, everything has a large impact in your pockets (...) that’s a disadvantage. It’s not the same to pay for an audit selling one drum than selling two containers. Then you don’t feel it [BK5]

Extraction rooms
Norte Grande’s small beekeepers face issues when extracting their honey as Norte Grande has no extraction facilities. The extraction rooms that producers use are too far from some members’ locations so transport costs are too high. For this reason, Norte Grande has lobbied SENASA to adjust the standards of extraction rooms for small producers, in order to de-centralise extraction and facilitate
logistics. The existing mobile extraction rooms implemented by SENASA are not considered by GM4 to be a solution:

*Here in Argentina it’s not going to work. First, they are small producers, they need a vehicle to transport them [the mobile extraction rooms]. With all the inconveniences they have, then they need to bring drums, that’s another inconvenience. We need something they can use [GM4]*

Different extraction costs were noted by beekeeper respondents. BK8 said he had paid 5% while BK5 had paid between 10% and 11% of the honey delivered to the same extraction room. BK9 is a member of the cooperative where most Norte Grande beekeepers extract their honey and reports a 6% extraction cost. This suggests different prices according to the volume of honey delivered.

**Producers invoicing directly to buyers**

When Norte Grande members sell their honey to Norte Grande sale channels, they invoice their sales directly to the buyer. According to Norte Grande’s management, this is done to avoid double tax deductions and to facilitate payments to producers that are far from Norte Grande’s headquarters. However, producers suffer several tax deductions from their bank accounts every time they receive a payment. This makes informal sales more attractive to producers, especially to those who live close to Norte Grande’s headquarters, as their transport costs to receive cheque payments are lower than for those members who live further away.

**Tax issues**

On other occasions, producers sell surplus honey informally despite their willingness to sell it through Norte Grande’s channels. When beekeepers produce more than they can invoice in a certain tax category they usually prefer to sell the honey informally rather than move into a higher tax category. This cannot be seen as a problem of Norte Grande but rather as an issue that prevents Norte Grande from selling more honey, ultimately affecting the chances of achieving greater economies of scale.

*We would like to improve the sales component, the taxes (...) There are small producers that are left out of selling to the cooperative (...) people that are beginning, maybe they have one or two drums, and the cooperative cannot absorb this, it cannot sell those drums [BK6]*

**Value adding**

Several constraints prevent Norte Grande from adding value to its members’ honey. Although an investment in processing facilities to pack honey for domestic retail has been made, Norte Grande has made no retail sales. Funding has been received from the Ministry of Social Development’s “Manos a la obra” project (similar to Case 1’s funding for beehives). A brand has also been created. However, some beekeeper respondents argue that there is no consent among Norte Grande members to push that initiative forward. BK8 believes Norte Grande should invest in value-adding by retaining short-term
profits in order to invest for greater future earnings. BK9 argues that Norte Grande should encourage its members to give up part of the price they receive in order to fund the cooperative:

I think the members have to put a part there, to make the cooperative grow. But what happens? It is decided that the members are not charged anything so the price remains untouched. So the price can be good. Because if you say: I’m charging you 3% as commission, the price is reduced. So the producers will sell informally to whoever goes by and wants to buy from them [BK9]

According to RS1, international honey prices have made producers lose interest in developing domestic supply chains for honey and other value-added products. However, Norte Grande could profit from its close relationship to PROAPI. Part of the PROAPI programme is dedicated to development of new honey and beehive products together with other research institutes and universities. The most basic of these products is the propolis hydroalcoholic solution, which is used for medicinal purposes and is estimated to increase the price producers receive for their honey by up to 400% [RS1].

**Member commitment**

In addition to its issues regarding commitment from its current members, Norte Grande struggles to increase its active membership base. This ultimately impacts on Norte Grande’s current members as a higher number of active members would achieve economies of scale both for input provision and pooling of honey. One of the beekeepers commented that Norte Grande lacks contact in the field. Knowledge about Norte Grande’s members’ needs and capacities is considered crucial to establishing closer links with producers and to developing trust. This affects the possibility of reaching out to new potential members, or having more information and control over honey availability at the time of harvest.

Sometimes with rural people it’s difficult for them to come to you and say ‘I need this’. Instead you have to go to them and ask ‘what do you need?’ [BK9]

Importantly the development of the Fair Trade label in the domestic market for retail packaged honey is seen as a way of increasing commitment from members:

The producer doesn’t know if this is real or not, he doesn’t see it. I think that is where the system fails (…) the producer doesn’t see Fair Trade sitting in an office here, saying ‘we are also making publicity in your country so there’s more Fair Trade honey consumption [GM4]

If tomorrow we can start packaging, and we can sell that product as Fair Trade, it will impact on the honey price. So yes, in that sense we do want to belong, and see if we can make it happen [BK6]
Fair Trade honey prices
The Fair Trade minimum price level has not been reached when Norte Grande has sold to Fair Trade buyers. Fair Trade minimum prices have always been below the market price for conventional honey in Argentina [GM3].

Although now we have CLAC representing us (...) honey is left behind within the [Fair Trade] certification. There’s too much difference with the minimum price in a country in Central America (...) I believe the minimum price should be higher, although it’s only a parameter and not the final price at which you’re supposed to sell [GM3]

Norte Grande started developing sales into conventional channels after NOREVO de-certified from Fair Trade and the price gap was substantial:

We’re not selling to Fair Trade channels because the price is not good enough comparing to the non-Fair Trade channel. Fair Trade’s main importers are in Europe. And there has been a 15-20% gap between the FOB price for a Fair Trade European importer and [a conventional] one from the United States. Now we have to reassess that situation [GM3]

Hence, producers are tempted to take better bids for their honey from other buyers. Norte Grande’s management have even rejected other Fair Trade buyers’ offer to buy their honey.

Fair Trade Social Premium irrelevant
The Fair Trade Social Premium is not considered relevant for many of the beekeepers interviewed. Some were not aware of the use it has been given in the past. The manager also considered the Social Premium did not make up for a critical amount:

I think there are other organisations that make up a larger amount [of the Social Premium]. It doesn’t even help us to cover the costs of running the cooperative, there’s others that invest it in social, cultural, educational activities. We haven’t been able to use it in that way in Norte Grande [GM3]

Fair Trade pre-finance
During their Fair Trade operation, Norte Grande could not obtain pre-finance from the Fair Trade trader. FLO indicates that if required by the producer, the trader should provide pre-finance for up to 60% of a contract value (Fairtrade ANZ, n/d). As a consequence of not having an export licence Norte Grande did not have much exposure to overseas importers. This prevented them from developing long-term relationships with downstream actors. Instead, Norte Grande applied for microcredits locally to pay producers for their honey.

Who has to receive that benefit [pre-finance], who supports the chain, is the producer. But in order to get there, the trader has to have access to that benefit (...) As we did not export directly, dealing with the trader was different than dealing with the importer (...) With the trader we pushed and pushed, but unfortunately it always ended there [GM3]
Market access

Norte Grande mainly had a single buyer for its members’ honey. Their strategy was to develop a long-term relationship with a domestic buyer, and provide the best possible price to producers. Norte Grande did not export because they couldn’t find a partner to buy the darker type of honey available from its members, and because it lacked critical volume and infrastructure. Norte Grande’s managers’ entrepreneurial ambitions did not go beyond the role of pooling and bargaining that they transmitted to its members.

*What we want to maintain is a self-sustained structure so its members, the small and medium producers, can become exporters someday. We don’t want to break a scheme (...) In a way, Norte Grande helps so that the small producer member can sell at a better price. That’s what it does. For that, a commission is paid [to Norte Grande]. And this commission is used for the members’ benefits [GM4]*

In the Fair Trade market, Norte Grande’s management believes that government support and a joint strategy with other Fair Trade cooperatives in Argentina are necessary to increase Fair Trade sales of honey.

This section presented an analysis of Case 2 based on Chapter 5’s description and supporting evidence. The advantages and disadvantages to beekeepers of being part of Norte Grande’s supply chains have been stated. Section 6.3 will provide an analysis across Case 1 and Case 2.

6.3 Cross-case analysis

This section compares and contrasts Case 1 and Case 2. Advantages, disadvantages and constraints faced by small beekeepers in the Fair Trade Organic and Fair Trade and conventional honey supply chains will be compared. For this purpose, beekeeper respondents are separated into three strata (see Table 6.2 below) according to their size (i.e. number of beehives they own). This highlights the relative benefits and detriments to beekeepers of supplying these chains, depending on the scale of their operation. Also the constraints to increased smallholder participation are explored according to this criteria.

Table 6.1 Beekeeper respondents’ size strata

<table>
<thead>
<tr>
<th>Stratum</th>
<th>Size</th>
<th>Case 1 beekeepers</th>
<th>Case 2 beekeepers</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0-50 hives</td>
<td>BK2</td>
<td>BK7</td>
</tr>
<tr>
<td>B</td>
<td>51-200 hives</td>
<td>BK1, BK3</td>
<td>BK5, BK8</td>
</tr>
<tr>
<td>C</td>
<td>Over 200 hives</td>
<td>BK4</td>
<td>BK6, BK9</td>
</tr>
</tbody>
</table>

In sections 6.1 and 6.2, Case 1 and Case 2 advantages and disadvantages of being part of the organisations and of being part of the Fair Trade Organic and Fair Trade supply chains were presented. These will now be compared across the two cases according to the size of the producers.
6.3.1 Advantages

Assured sales channel
Both Wayra and Norte Grande beekeepers noted that having an assured sales channel is a benefit of being part of their organisation. However, as Norte Grande had ceased its sales to Fair Trade markets because of low prices in Europe and lack of demand for their type of honey from Fair Trade traders in Argentina, this advantage cannot be considered to be a feature of being Fair Trade certified. RS3 and Hegelund (2014) have also noted constraints in international demand for Fair Trade honey.

However, Coopsol’s management reported unmet demand for Fair Trade Organic honey in May 2015 after a bad productive season. Coopsol provides APONA beekeepers with a stable demand for the volumes they produce. Most of the interviewed honey producers sell a small share of their production into local, informal retail markets. This takes place during winter months and in small quantities due to limited demand. Larger producer respondents also sell in bulk to other channels, markedly in Case 2.

Collective input purchases
Purchasing inputs collectively is considered an advantage by half of the respondents in Case 1 and in similar proportions in Case 2 (60%). This advantage was highlighted by both of the small beekeepers from stratum A (BK2 and BK7) because they benefit relatively more than larger beekeepers who already have scale to achieve discounts on their own. This is however, an indirect benefit of supplying honey to the Fair Trade Organic chain in Case 1. In Case 2, it is considered an advantage of being part of the cooperative.

Exposure and representation
Case 1 beekeepers feel they benefit through exposure and representation from their organisation. The Wayra consortium has a registered brand name, through which some of the honey produced is sold for the domestic market with Organic but not Fair Trade certification. The domestic label for Fair Trade developed by Fundación Fortalecer, “Emprendimiento Justo Reconocido” has had limited success. The Wayra consortium has established links with a wider range of organisations within and outside Argentina than Norte Grande. Norte Grande has a different approach, with a domestic focus in the Northwest of Argentina pushed by its close contact with INTA’s PROAPI. It also has connections with Fair Trade organisations such as Cooperativas Sin Fronteras from Costa Rica, and CLAC. Norte Grande has never exported directly so its international links have always been fairly limited.

Member collaboration
All Case 1 beekeeper respondents collaborate with each other within sub-groups with common business views, or within rural communities where sale decisions are made collectively. Case 2 producers appear to work more individually. However, BK7, the smallest beekeeper, and BK5 collaborate with other beekeepers during harvest times or when controlling beehive diseases.
Convenience
Some honey producers mentioned feeling comfortable working in their organisation [BK4]. BK3 gets his and his community’s honey collected by Coopsol instead of having to deliver it. In Case 2, BK5 gained rewards from having more time available to focus on production instead of worrying about paperwork or logistics. This indirect advantage affects producers’ welfare.

6.3.2 Disadvantages and constraints

Certification costs
Both cases struggle with bearing Fair Trade certification costs. Although FLO-Cert discounts 10% off their normal audit fees for Organic certified organisations, Case 1 beekeepers still find FLO-Cert’s fees expensive at times of scarce production as prices hardly compensate for the low volume of honey. Similar concerns were identified by producers of Case 2. The Organic certification costs of Case 1 producers are deducted by Coopsol as a percentage of honey payments so all producers pay a pro rata deduction which was not clearly defined by respondents. The fee also includes technical support for Organic production. Both organisations have inactive or less committed members which means that active members have to bear the costs of their audit fees.

Extraction rooms
A similar issue was identified across the cases relating to SENASA requirements for licensing extraction rooms and the distance from extraction rooms to apiaries. The requirements are aimed at larger honey producers rather than small beekeepers. Extraction rooms are often distant from some small beekeepers’ apiaries, disadvantaging them relative to larger ones who can afford to build an extraction room, or those who live closer to their organisation’s extraction rooms. Quality issues with honey extracted in informal (non-licenced) extraction rooms is a problem faced by both cases as they sometimes do not meet the standards required by overseas buyers.

Case 1 beekeepers cannot sell their honey as certified Organic if it is not extracted in a room licenced by SENASA as Coopsol can. Case 2 managers lobbied SENASA to modify the licencing criteria and so adapt the regulation for smaller production units as surprisingly mobile rooms do not suit small producers’ needs.

Extraction issues affect smaller, more isolated producers more than larger ones. Larger volumes allow opportunities for negotiating the cost of extraction. Transport costs to reach extraction rooms can also be spread over a larger amount of honey. Stratum C (larger) producers have extraction facilities which display economies of scale in their operation that allowed the producers to undertake downstream processes.

Geographical dispersion
Geographical dispersion is an issue for both the Wayra consortium and Norte Grande. Members interaction with management and attendance at meetings are constrained because of the high travel
costs involved. Larger producers and communal producers are advantaged over smaller, more isolated ones, not only because of their ability to lower transport costs, but also because they have closer interaction with management and receive technical assistance. For larger producers, information about available quantity and quality, price discussions and input provisions are easier. This means that larger beekeepers have lower transaction costs with buyers than smaller beekeepers in both cases. Stratum A producers both noted their complications with logistics, as BK2 does not own a vehicle, and BK7 has to travel 140 km to extract his honey. On the contrary, stratum C producers all own vehicles, and either have extraction facilities [BK6, BK9] or live next to their apiaries and close to the extraction room [BK4]. Stratum B beekeeper, BK3, produces and sells his honey collectively, justifying collection from the buyer, Coopsol.

**Tax issues and informality**

Beekeepers’ informality in Argentina (GM1; Napolitano et al., 2006) affects relationships with buyers and also the honey value. In Case 1, Coopsol had difficulty convincing small beekeepers to join a newly established tax regime for rural smallholders requiring Coopsol to pay cash for their honey. In Case 2 this informality encourages side-selling. Beekeepers sell honey informally that would otherwise push them into a higher tax category. In both cases small beekeepers see few incentives to become involved in tax regimes.

Honey processors in Argentina are able to place informal conventional honey into SENASA’s traceability schemes, as outlined before. Unfortunately as a result, the traceability scheme and honey lost its value the honey could be blended with other kinds of honey.

**Value-adding**

Although brands have been developed by both Wayra and Norte Grande, they have not been used for export honey. Only the Wayra consortium has sold honey in the domestic market with its Organic brand to supermarkets and natural food stores. Norte Grande has invested in packaging to sell its honey domestically, however the project has been suspended.

In part, the lack of value-adding in Fair Trade and Fair Trade Organic honey supply chains can be attributed to European Fair Trade importers not wanting honey packed and branded for retail, as retailers use their own brands (Hegelund, 2014). Despite Argentineans’ limited consumption of honey the domestic market possibilities are not thoroughly exploited. Over 75% of the beekeeper respondents manually pack and sell a small portion of their honey into local retail, showing their willingness to adopt this channel.

**Member commitment**

Member commitment is low in both cases. Trust and confidence between management and members needs to improve [BK9]. Norte Grande’s management rely on providing better prices to gain member commitment with implications for retaining equity funds. Case 1 is similar where even the Fair Trade
Social Premium is distributed to members as part of the price. Smaller producers require the highest price achievable as they are pressed financially. This happens particularly with producers in the start-up stages. Managers in the producer organisations are aware of this. In the start-up stages a producer’s commitment is achieved by providing follow-up and building trusting relationships. For larger beekeepers, commitment is rather obtained by reduced incentives for side-selling. In both cases, members were not required to deliver all their product to their organisation. In Case 2 this prevents the organisation from selling the best product available from its members (clear honey was sometimes sold elsewhere). This problem is highlighted by the largest producer interviewed who was also a member of another cooperative.

**Market access**

Beekeepers from both cases are constrained in their market access, but in different ways. Case 1 producers can only sell their honey as certified Organic through the Wayra consortium. Their Organic certification complies with European standards but not with North American (National Organic Program USDA certification) or British standards (Soil Association certification). The North American and British stringent criteria is practically unachievable to APONA producers [GM1]. Hence, Case 1 beekeepers are restricted to European markets in order to sell their Fair Trade Organic honey. Case 2 beekeepers could only sell their honey domestically. As domestic Fair Trade sales ceased it impacted greatly on smaller producers’ intentions of maintaining Fair Trade certification. Hence Norte Grande’s Fair Trade certified honey started being sold as conventional.

This constraint in market access affects smaller producers more than larger ones. Case 2 larger producers (stratum C) sell in bulk to other sales channels. They are also the most experienced and the only ones who have apiculture as their main source of income.

**Beekeepers’ returns**

Table 6.3 below shows average prices that honey producer respondents received in the 2013-2014 and 2014-2015 seasons. Average production varies enormously between seasons and production areas. Gross income per hive is constructed in Table 6.3 to display differences between Case 1 and Case 2. To compare cases, Organic yield from Case 1 has been estimated at 23.5 kg per hive in a season based on interviews [GM1]. For the conventional hives of Case 2 beekeepers, production was estimated at 28 kg per hive [BK6, BK9]. The prices of Case 1 Fair Trade Organic honey include the Fair Trade Social Premium that was distributed among members as part of the price.
Table 6.2 Prices and estimated income per hive of beekeepers in Case 1 and Case 2, AR$ per kg.

<table>
<thead>
<tr>
<th>Season</th>
<th>Case 1-2014</th>
<th>Case 2-2014</th>
<th>Case 1-2015</th>
<th>Case 2-2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honey type</td>
<td>FT Organic</td>
<td>Conventional</td>
<td>FT Organic</td>
<td>Conventional</td>
</tr>
<tr>
<td>Price per kg.</td>
<td>AR$23.94</td>
<td>AR$15.93(b)</td>
<td>AR$25.50(a)</td>
<td>AR$23.97(b)</td>
</tr>
<tr>
<td>Gross income per hive</td>
<td>AR$562.69</td>
<td>AR$374.35(c)</td>
<td>AR$599.25</td>
<td>AR$563.29(c)</td>
</tr>
</tbody>
</table>

(a) At the time of data collection (May, 2015) producers were still waiting to receive the balance of their Fair Trade Organic honey payments from February 2015 deliveries.
(b) Price paid by Coopsol to non-member beekeepers for conventional honey.
(c) Estimated income per hive of Case 1 beekeepers for selling honey as conventional, out of the consortium (meaning no Fair Trade or Organic certification costs apply).

Fair Trade Organic honey prices have been regarded as more stable than those of conventional honey. For the 2013-2014 and 2014-2015 seasons this is displayed clearly in Table 6.3 as the price of Fair Trade Organic honey increased less than the price of conventional honey. In the 2014-2015 season prices remarkably favoured the gross income per hive of Case 2 conventional producers. Furthermore, they did not bear Organic certification costs that Case 1 producers had to bear. Separating the Social Premium from the price Case 1 beekeepers received also enlarges the gap between the 2014-2015 season prices, favouring Case 2 producers. In 2014-2015 Case 1 beekeepers would have obtained higher income if they weren’t part of the consortium and had sold their honey as conventional. Other markets were sometimes paying higher prices for conventional honey than European importers were paying for Fair Trade Organic honey. This made certification costs hard to justify for Case 1 producers. A declining membership in APONA and field evidence reveals many beekeepers had either left the association or abandoned the activity altogether. This is similar to the outcome in Santa Fe reported by RS4, where a Fair Trade and Organic certified honey cooperative has recently ceased its Fair Trade Organic honey exports. Case 2 beekeepers are struggling to keep Fair Trade certification.

Fair Trade monetary benefits irrelevant
In addition to Fair Trade’s minimum price, a tool never utilised by either organisation the Fair Trade Social Premium was not considered relevant by any respondent. In Case 2 there was little participation in the Premium discussions and knowledge about its usage. Almost all Case 1 respondents had participated in the discussions but only one knew its value. Due to the amount of honey produced by each organisation (especially in bad seasons) the Social Premium did not make up a critical amount.

Access to finance
GM1 in Case 1 highlighted financial constraints as the main reason preventing increased participation of small producers, especially lower stratum ones. However, GM1 also noted that pre-finance provided by Fair Trade importers when signing early contracts (during the harvest) is beneficial. This however can deny the possibility of achieving higher prices as the season advances. Case 2 beekeepers do not get Fair Trade’s pre-finance when they supply their Fair Trade domestic buyer. Instead they are
provided some financial support from Norte Grande through microcredit arrangements with local banks.

**Biophysical risk**
Weather conditions impact production to a large extent. Only the larger stratum beekeepers are dedicated almost exclusively to apiculture. All others have to perform additional activities to support their household. Even the largest producer, BK9, considers it risky to leave his part-time job and dedicate all his time and resources to his beekeeping venture. Getting to a scale sufficient to support his family takes time, effort and considerable re-investment. Organic beekeeping involves higher risks than conventional beekeeping because of the higher exposure of beehives to diseases.

### 6.4 Conclusion

In this chapter, a within-case analysis of Case 1 and Case 2 was performed, where the advantages and disadvantages for beekeepers delivering to the Fair Trade Organic and Fair Trade and conventional honey supply chains were identified. In section 6.3, a cross-case analysis was undertaken to highlight benefits and constraints for small beekeepers across the cases. The next chapter will provide a discussion of the findings, a comparison of them with the literature, and conclusions.
Chapter 7
Discussion and conclusions

7.1 Introduction

In this chapter the findings are discussed and compared and contrasted with the literature. A comparison with the empirical findings is presented in Section 7.2. Section 7.3 contrasts the findings with theories presented in Chapter 2. Section 7.4 summarises the key findings of this research and introduces the final chapter.

7.2 Discussion of empirical findings

7.2.1 Certified versus conventional honey

Despite some benefits of market access and stable prices, few small honey producers remained in the chains in periods of high conventional honey prices. The literature states Fair Trade certified products provide increased market access for smallholders (Ferrer et al., 2008; Johanessen & Wilhite, 2011; Renard, 1999; Raynolds, 2002; Moore, 2004). This research shows some support for this claim. Case 1 beekeepers sold most of their honey through the Fair Trade Organic honey supply chain. In 2014-2015, a low yielding season, the amount of honey produced fell short of European market demand. The demand for Fair Trade honey was found to be less stable than for Fair Trade Organic honey. This suggests that affluent honey consumers seek not only ethical but also environmental credence attributes in honey.

In Case 2, Fair Trade certification did not improve market access as certified honey was sold as conventional [RS3; RS4]. This finding is consistent with Hegelund’s (2014) finding where Fair Trade honey from another Argentine province was exported as conventional due to weak demand and high prices for conventional honey in markets other than the EU. Other authors also report large quantities of Fair Trade certified products being sold to conventional buyers (Bacon, 2005; Raynolds, 2009; Renard, 2003; Valkila, 2009; Weber, 2007). Under these conditions, there is little incentive to incur the costs of Fair Trade certification.

In the period under study market prices did not compensate beekeeper’s investments in Fair Trade and Organic certification. The analysis of Case 1 and Case 2 beekeeper returns show Fair Trade Organic honey had more stable prices than conventional honey as seen in Valkila’s (2009) study on Fair Trade Organic coffee farmers. However, conventional honey returns were higher than those brought by Fair Trade Organic honey in 2014. This suggests Fair Trade honey supply contracts are too rigid to quickly adapt to conventional honey prices.
Certification costs were considered a burden in seasons of low production or high conventional honey prices. In contrast to other Fair Trade chains (e.g. Raynolds, 2000), the producer organisations, and not the importer, bore the cost of Fair Trade certification fees. Although APONA covered 75% of the initial audit fees charged by FLO-Cert with a grant from the NGO Fundación Fortalecer [RS4], Organic audit fees were borne by beekeepers. The certification applied only for EU market’s Organic standards limiting competition from other Organic markets. Some Organic beekeepers were thinking of switching to conventional beekeeping.

Fair Trade’s minimum price tool was not utilised by beekeepers in this study. The Fair Trade minimum price should cover production, living and Fair Trade certification costs (Fairtrade ANZ, n/d). Conventional honey market prices were above the minimum price set by FLO and none of the respondents recalled witnessing the opposite situation. Hegelund (2014) found that Fair Trade minimum honey prices were outdated in Argentina. Vorley et al. (2009) also reported this as an issue. Ronchi (2002) found the minimum price did provide a safety net for producers when global market price of coffee plummeted in five out of the ten years that she studied.

The Fair Trade Social Premium was not considered relevant by the participants as it did not provide substantial community benefits. In Case 1 it was largely distributed among members as part of the honey price, and in Case 2 the Premium was mostly used to pay the manager. Both uses of the Premium were considered acceptable under FLO standards. It was evident that the application of the Premium funds to community development facilities was not easily achievable. This was due to both the small amount it represented and the geographical dispersion of members. Case 1 used part of the Premium to fund travel costs of board members to visit isolated producers. However, the benefits of this were not apparent to respondents. There was no evidence of the Social Premium used to finance facilities to produce inputs (Ronchi, 2002), or as collateral for loans or counterpart for funding from donors to benefit the community (Ruben et al., 2009). Johannessen and Wilhite (2010) were critical of Fair Trade’s economic and social contribution to farmers. They found the Social Premium accounted for just 0.01% of the product’s shelf price and was the only additional economic benefit Fair Trade producer organisations received. Although FLO had increased the value of the Social Premium by USD0.05 per kg. of honey, it remained trivial to the beekeepers interviewed.

The monetary benefits of Fair Trade had a minor impact on small honey producers welfare in this research. This is consistent with Becchetti and Castriota’s (2008) findings about Fair Trade certification for Chilean beekeepers. They found along with Ruben et al. (2009) benefits other than price were more important in improving the welfare of producers. Similarly, Valkila (2009) found price premiums from Fair Trade Organic coffee farmers in Nicaragua to be perceptible only when prices of conventional coffee were very low. Bacon et al. (2008) reported small or inexistent price premiums in some cases of Fair Trade coffee. All of these studies support the findings in this research.
7.2.2 Certification benefits

The case study beekeepers benefited from commercial exposure and institutional representation when certified as Fair Trade or Fair Trade Organic producers. Representation at domestic and international meetings and conferences was increased by being part of these chains. Fair Trade’s database linked producer organisations with Fair Trade buyers worldwide.

Some Case 1 respondents felt better represented in their land tenure disputes with local authorities by producing under Fair Trade and Organic protocols. Land tenure issues in the Santiago del Estero province were frequent. Rural communities occupying marginal lands (sometimes illegally) were displaced as these became productive. Where smallholders lacked organisational structures, Fair Trade and Organic certifications raised their profile and improved their recognition by local authorities. This is consistent with Bacon’s (2005) finding that coffee producers in Northern Nicaragua delivering to Fair Trade, Organic and Specialty coffee markets felt more secure in their land tenure. Case 2 producers had institutional representation within Argentina through their association with INTA and less significantly through Fair Trade. FLO had a low profile in Argentina with only one liaison officer [RS4] in the study area. Moreover, Fundación Fortalecer’s domestic fair trade label project had ended.

Case 1 respondents identified with their organisation more than those in Case 2. In Case 2 there was less knowledge about Fair Trade and less discussion about the use of the Social Premium. This is consistent with Ruben et al.’s. (2009) conclusion that ‘organisational identification’ was low amongst Fair Trade producers. Ruben et al. (2009) attributed this, in part, to low involvement in decision-making, scarce diffusion of information and limited knowledge about Fair Trade standards and uses of the Social Premium. This research finds support for Ruben et al’s (2009) suggestion, especially since few Case 2 respondents had been involved in Social Premium use discussions.

7.2.3 Geographical dispersion

Although some small honey producers developed more convenient and stable livelihoods in rural areas due to certification, geographical dispersion largely undermined their participation in the supply chains. Most Case 1 Organic honey producers were able to develop a stable livelihood throughout the year instead of moving into cities to look for work. This was more so for rural beekeepers that had their apiaries very close to their homes. Ronchi (2002) also found that farmer migration to towns was reduced when engaged in Fair Trade coffee production. However, beekeeping was considered a complementary activity by most beekeeper respondents. Case 2 beekeepers often worked in town to supplement apiculture, or provided apiculture-related services to other producers for additional income.

Case 1 managers suggest that interacting with Fair Trade honey importers was easier than dealing with conventional importers. Some Case 1 beekeepers also felt comfortable working in the consortium. However, it was evident that certain producers were advantaged over others in their production and
marketing mainly due to their location. The advantaged had greater access to services such as information and training. Closer relationships between beekeepers and their buyer were evident under Fair Trade and Organic conditions in Case 1. However, in Case 1 these can be attributed to asset-specific investments in Organic rather than Fair Trade certification. Close relationships between producers and buyers partially protected against opportunism through internal enforcement mechanisms such as repeat transactions. Case 2 struggled to maintain a stable Fair Trade channel.

Geographical dispersion of beekeepers made collective action difficult. As a consequence, beekeeper organisations made slow progress in gaining critical mass. Geographical dispersion discouraged smaller producers from interacting with the organisations as they found travelling costs hard to justify. Spatial dispersion delayed technical assistance, constrained access to inputs, increased transport costs for honey extraction and disrupted information flows. Minten, Koru, and Stifel (2013) refer to smallholders’ ‘last mile’ costs resulting in high average transport and transaction costs for remote farmers that lack scale and accessibility. The evidence in this research suggests that smaller beekeepers from both cases faced larger per-unit transaction costs than did larger or communal beekeepers. Although subgroups of beekeepers from isolated rural communities achieved a degree of horizontal coordination, it was not sufficient to offset the high transport and transaction costs in the supply chains.

7.2.4 Information and power asymmetry

Information and power asymmetry between producers and downstream actors undermined small honey producers’ participation in the supply chains. Although the introduction of mobile phones increased communication between beekeepers and buyers, in remote areas poor reception created problems regarding the timeliness of information. Knowledge about the global honey market was unavailable to some beekeepers who also mistrusted information from their buyer. This is consistent with Bhattarai et al. (2013) findings where mobile telephones only partially addressed information asymmetry.

Power asymmetry arose from the dependency that beekeepers had of buyers, despite Fair Trade’s underlying goal of empowering smallholder producers (Fairtrade ANZ, n/d). Wayra beekeepers financed their beekeeping operations with advance payments made by Fair Trade Organic buyers in Europe to Coopsol. This benefit of Fair Trade was reported by Ruben and Fort (2012) and Raynolds and Ngewangu (2010). Conversely, when Norte Grande sold into the Fair Trade channel it had to obtain capital elsewhere to finance its members. Johannessen and Wilhite (2010) describe similar setbacks for other first level cooperatives that did not supply affluent export markets. Raynolds (2009) reported claims of Fair Trade commercial traders not following FLO criteria, particularly with regard to financing farmers. Some European Fair Trade buyers sought to purchase close to the harvest date to gain lower prices in exchange for pre-finance. Case 1 beekeepers were exposed to opportunistic behaviour from downstream actors as smallholder financial constraints were evident. Opportunistic
pricing from buyers due to financial limitations has been documented by others in conventional supply chains (Bhattarai et al., 2013; Wheatley & Peters, 2004).

Informality of honey producers prevented wide access to private sources of credit. RENAPA (National Registry of Apiculture Producers) was established in 2001 by the National Secretariat of Agriculture, Livestock, Fisheries and Nutrition to keep accurate data of honey production and reduce informality in Argentine apiculture. However, respondents noted there were still large amounts of honey produced and purchased informally and then “formalised” into the domestic supply chain by processors. As Mogni (2008) outlined, small beekeepers had few incentives to adhere to tax regimes. The Argentine government’s involvement and interaction with small beekeepers in the honey supply chains was low, as were improvements in infrastructure, access to finance and marketing extension services.

### 7.2.5 Biophysical risk

Biophysical risk undermined small honey producers’ participation in the supply chains. Honey production’s high susceptibility to weather conditions had differing implications for beekeepers in this study. First, there were financial repercussions as re-investments were necessary to scale up honey production to a sustainable level after weather events, having had a bad season. These investments were considered high risk by producers. Biophysical risk reduced the beekeepers’ willingness to invest and slowed the expansion of their operations. Secondly, Organic honey producers suffered weather risk to a greater extent than conventional producers. In Case 1, producing under Organic protocols was a requirement to join the organisation which made its members more vulnerable than those of Case 2. The study showed some beekeepers suffering drastic inter-season decreases in production, in one case reaching 83% (BK1). This issue was also observed by Hegelund (2014) in the East Argentina province of Santa Fe.

Production decreases were not only related to weather conditions. Environmental degradation also prevented the development of beekeeping. The advance of GM agriculture and consequent use of agro-chemicals and reduced biodiversity was identified by many participants as a constraint to increased honey production. This is consistent with Napolitano (2006) and Hegelund (2014) findings for some regions of Argentina. In a large part of the study territory, lands previously left idle were being claimed and utilised by large cattle producers. The latter were being pushed by the advance of GM crops. This was reported by IICA (2009) and is supported by the findings of Marin and Vila Seoane (2012). Technical issues related to nutrition for beehives being affected by the loss of biodiversity were a challenge for R&D bodies like PROAPI.

Honey production, mainly through pollination, is regarded as a beneficial activity for the environment. Bees are efficient pollinators and help maintain biodiversity in natural and agricultural ecosystems (Devillers & Pham-Delègue, 2003). Fair Trade honey standards exclude the use of certain products of chemical synthesis. Organic processes undertaken by Case 1 producers were even more stringent.
Marin and Vila Seoane (2012) found strong evidence of environmental benefits flowing from the Organic beekeeping practices of Case 1 producers in their study of Cooperative Coopsol. However, these benefits were attributed largely to the partial displacement of informal forest clearing practices for charcoal production. Direct environmental benefits produced by Case 1 beekeepers were constrained by their small production scale. RS1 commented that it made more sense to generate environmental benefits from larger initiatives intended to benefit smallholders. For example, Organic apiculture was being incorporated by INTA into traditional silvopasture production systems practised in the Chaco semiarid region of Northern Argentina.

7.2.6 Producer organisations’ financial limitations

Fair Trade promotes collective action amongst smallholders (Fairtrade ANZ, n/d). Collective action was beneficial to honey producers in this research. However institutional problems in producer organisations undermined small honey producers’ participation in the supply chains. Case 1 beekeepers noted that being part of the Fair Trade Organic chain helped attain lower prices for inputs. But Case 2 beekeepers attributed similar successes to their organisation even though they were not supplying Fair Trade markets. The Ruben et al. (2009) conclusion that Fair Trade certification positively influenced farmers’ perceptions of their organisations’ bargaining power was partially supported by these findings. The benefits of collective action appear to have fostered horizontal coordination despite the individualistic attitudes of rural people in Northwest Argentina (Marin and Vila Seoane, 2012).

Both cases had made some investments in value adding activities. Coopsol had built its honey processing plant and offices with funding received from national and international donors and one of its Fair Trade buyers. Norte Grande’s unsuccessful value-adding project was also financed by donors. Donor funding allowed Coopsol to purchase assets that served as collateral for private financing from commercial banks, ultimately benefiting the consortium. Ronchi (2002) also found that Fair Trade certified smallholders were better able to finance value-adding assets and processing operations.

However, both Fair Trade Organic and Fair Trade honey were sold in bulk in Argentina (Hegelund, 2014), unlike Fair Trade Rooibos tea growers in South Africa who had collectively integrated into processing and packaging shelf-ready products for export markets (Raynolds and Ngcwangu, 2010). An importer assisted Case 1 with value-adding labelling but packaging was done overseas. Coopsol added value through packaging and branding of small quantities sold into the domestic market where Organic, but not Fair Trade certification was recognised. Case 2 managers had little focus on value adding activities. In both cases, managers stated the need for infrastructure such as warehousing before being able to move into processing and packaging. Respondents noted the problems smallholders confronted in meeting SENASA standards for honey extraction rooms. Similar problems were described by Hegelund (2014) and Mogni (2008). Mogni (2008) argues small and medium beekeepers lack the scale to invest in an extraction room compliant with SENASA requirements. It was difficult
for the cases’ producer organisations to raise equity capital from members or strategic partners, or in acquiring debt capital from lenders to finance value-adding assets.

7.3 Comparison to theory

In sections 7.3.1 and 7.3.2, the findings are compared with theoretical propositions stemming from Transaction Cost Economics and Agency Theory (see Chapter 2).

7.3.1 Transaction Cost Economics

Table 7.1 summarises evidence from this research of transaction cost drivers proposed by Williamson (1979) as determinants of relationships between trading parties. The evidence is presented separately for each case with positive (negative) symbols indicating the presence (absence) of drivers that raise transaction costs (i.e. asset specificity, uncertainty, frequency and complexity). Williamson (1979) argues that trading parties are more likely to enter into contractual relationships when these drivers are present as contracts help to reduce transaction costs. The preponderance of positive (negative) signs in Table 7.1 implies that the evidence ‘matches’ TCE theory prediction that the chain is characterised by contractual relationships (spot market transactions).

Respondents had high transaction-specific investments in both physical and human assets leading to high asset specificity. Beekeepers owned beehives, wax, bees and equipment and had to follow specific requirements for traceability and/or certification purposes. They also applied specialised production techniques. Buyers had capital investments in extraction and processing facilities, and in customised training courses. The transaction-specific investments were greater in Case 1 than in Case 2. Case 1 beekeepers were required to immediately transition to Organic certification to join the organisation. This exposed beekeepers to production losses caused by Organic processes (e.g. higher exposure to diseases such as varroosis). The Case 1 buyer (Coopsol) had significant physical and human resources assigned to running the Wayra consortium but was less exposed to hold-up problems (Chaddad & Cook, 2000) than the small Organic beekeepers as the buyer’s facilities were also used to process conventional honey. Case 2 members and buyers had relatively less transaction-specific assets than Case 1.

Uncertainty (Williamson, 1979) of honey quality and quantity was attributed primarily to variable environmental conditions. Production process issues and weak supplier commitment also prevented an accurate understanding of honey availability. Honey demand was fairly stable for all beekeepers interviewed. Price, however, was highly dependent on volatile international market conditions and product characteristics. Buyers faced less uncertainty in Case 1 than in Case 2 as Organic certification premiums could be earned only on honey delivered to the consortium. Case 2 buyers had to contend with a high incidence of side-selling in times of high prices for conventional honey. Income taxes imposed on poor farmers also encouraged side-selling into informal markets. These markets did not value credence attributes, had volatile prices due to thin trading, and its high transaction costs often
limited producers to cash-based and highly personalised forms of trading. As a result, Norte Grande struggled to forecast volumes and honey quality, hindering long-term commitments with buyers.

Producers also faced less price uncertainty in Case 1 as they had access to export markets that valued Organic attributes. Case 2 producers confronted a domestic market with little demand for Fair Trade honey and highly volatile prices for honey in conventional markets. Norte Grande did not export their Fair Trade honey due to high ex-ante (search and negotiation) transaction costs that they were unable to offset at its limited scale. Ex-ante transaction costs were associated with searching for trading partners for their kind of honey and establishing a viable structure to enable export sales.

Credence attributes increased complexity due to higher monitoring and negotiation costs of contracts (Hobbs & Young, 2001). A laboratory analysis was required to confirm compliance with regulation and accreditation bodies. Case 1 transactions were clearly more complex than Case 2. In Case 2, honey was - in many cases - analysed after high transport costs had been incurred by the processor.

Vieira and Maia (2009) and Hegelund (2014) reported what Gereffi et al. (2005) termed ‘captive’ value chains for Fair Trade honey producers from Brazil and Santa Fe province (Argentina) respectively. Due to the presence of asset specificity, some uncertainty, recurrence, and complexity, TCE theory predicts a degree of contracting (“governance”) will be present to reduce transaction costs between parties (Williamson, 1985). As Case 1 beekeepers were reliant on information, credit and logistical support from their buyer and had no other channels to sell their value-added honey (hence their recurrence of transactions) this research finds the presence of ‘captive relational’ contracting (Bhattarai et al., 2013) in Case 1. Conversely, Case 2 showed uncertainty, and low levels of complexity, recurrence and asset specificity. These conditions suggest ‘competition’ as the contracting process (Williamson, 1985). Honey deliveries through the cooperative were arranged according to beekeeper’s willingness to supply at a given price showing such competition was solely price-based and over an undifferentiated product. This allowed spot market transactions (Williamson, 1979) between beekeepers and buyer despite sharing characteristics of informal markets such as volatile prices.
<table>
<thead>
<tr>
<th>TC driver</th>
<th>Case 1</th>
<th>Case 2</th>
<th>Evidence</th>
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<tbody>
<tr>
<td>Asset specificity</td>
<td></td>
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<tr>
<td><strong>Buyer</strong></td>
<td>+ This is the agreement in the consortium. It includes the management of Organic (...) warehousing and traceability are done here [in Coopsol], plant processing, all of that. Today a limiting factor to export is to have the facilities [GM2]</td>
<td>- To lose a drum means a lot of money for Norte Grande. We collect drums in delivery spots (...) in Lules there is also a warehouse from a member, we make-do, we don't own a warehouse, we adjust to our structure [GM3]</td>
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<tr>
<td><strong>Producer</strong></td>
<td>+ Yes, they sell all their honey [through the consortium]. It's a matter related to Organic, I mean receiving a price. The organisation is Organic. And that's an entry barrier, but also establishes an exit barrier for producers [GM2]</td>
<td>- I don't have the capital to make an important investment to dedicate exclusively to it [apiculture] (...) I have it as a complementary activity [BK7]</td>
<td></td>
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<tr>
<td>Uncertainty</td>
<td></td>
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<tr>
<td><strong>Product quality uncertainty</strong></td>
<td>+ One [container] had to be sold as only Organic, not Fair Trade. Because that honey was a disaster in HMF quality, which is the one coming from Chaco province [GM2]</td>
<td>+ The clear one is the most wanted so they [informal buyers] desperately go looking for it. And then for the rest of the honey they don't come looking for it that often (...) but we always have to save some for the cooperative, if not when we go to them with the darker ones they say: No, wait, you sold the clear ones [BK7]</td>
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<td><strong>Supply uncertainty</strong></td>
<td>- The agreement says that if they decide not to sell it [to the consortium] they can collect the honey drum. They've never done it [GM2]</td>
<td>+ In many cases we had a batch confirmed and within the week of analyses for the eighty-something drums that a truckload entails, some desisted from selling or they were side-sold informally [GM3]. Luckily, there's no current contracts with anyone, not even with banks, or credits, anything. There's neither written contracts nor commitments [BK5]</td>
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<tr>
<td><strong>Demand uncertainty</strong></td>
<td>- There's always demand. Always more and more, in five years we have never kept any drums. We have always negotiated that way, its impressive how much is sold [BK3]</td>
<td>+ We had COSAR as a possible buyer [of Fair Trade honey], but they had developed markets in which our type of honey wouldn't access, our dark honey, amber to dark-amber honey. So it was almost like asking them to develop a specific market for us [GM3]. Luckily, there's no current contracts with anyone, not even with banks, or credits, anything. There's neither written contracts nor commitments [BK5]</td>
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<td><strong>Price uncertainty</strong></td>
<td>- Every year we sell to CTM (...) they were the first labelling it [Atamisqui honey] as monofloral and took a chance. I used to sell it at the same price, now I sell it at a differential price because they also sell it at a differential price [GM1]. Organic [and Fair Trade] honey always has a price. The conventional one goes up and down, and can surpass the Fair Trade [GM1]</td>
<td>+ What needs to be done is differentiation. That is value-added. Something we don't do. Why? Because nobody guarantees us that we are going to get paid a better price for doing that work [GM4]</td>
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<td><strong>Producer</strong></td>
<td>- In my case I have sold to Coopsol honey as conventional because I needed the cash urgently and didn’t want to wait until the price of Organic honey was settled [BK1]. Other buyers pay less, $23, $22, we haven’t sold to them. Everything has been delivered as Organic to the consortium. There’s no other company that pays more than the consortium, there hasn’t been yet [BK5]</td>
<td>+ The cooperative manager calls and says, there is a purchase order, and this is the price. If the producer agrees… [BK5]</td>
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<tr>
<td>Recurrence</td>
<td>Recurrence: What we do as locals is a heavy work in developing the producer even economically during the season when they need working capital. If it's a good production year (...) they repair their vehicle, increase apiaries, buy materials, and they quickly run out of funds. When the new season starts they need a hand desperately (...) We have a financial fund, capacity. [GM1]</td>
<td>I have done the bulk sales in very specific opportunities through the cooperative [BK7]</td>
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<tr>
<td>Complexity</td>
<td>Complexity: Our activity is informal because only the large producer invoices. But the small producer doesn't want to be visible (...) So it's an issue to formalise that honey. Because when volumes are large and from small producers, it's tiring to find out how to make everything look formal [GM1]</td>
<td>- We talk to the buyer, achieve the best price, we contact the producers to see if they agree (...) they pay the cooperative, they load the truck, and the cooperative pays the producers. The system is very simple, through cheque or bank transfer [GM4]</td>
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| Predicted governance structure (Williamson, 1985, p. 31) | Governance | Competition |
| Predicted governance structure | ‘Captive’ relational | Spot market |
Case study institutional problems
As property rights in the producer organisations were vaguely defined, institutional problems were visible, raising transaction costs in the decision-making process and affecting the willingness to invest. Free-rider and horizon problems were evident, discouraging member or strategic partner investment in assets such as a communal extraction rooms.

Free-rider issues (Cook, 1995) regarding certification costs were identified in both cases. Both organisations had a number of less committed or idle members for which the active ones were paying FLO-Cert audit fees. Free riding was also found in pricing in Case 2 where non-members were being paid the same price as members for conventional honey (although not for Fair Trade honey). This affected participants’ willingness to invest as benefits would accrue to non-members to the same extent that members.

Horizon problems (Cook, 1995) were evident. Smaller beekeepers were unwilling to reinvest profits to grow the business. An example of this is a portion of the Fair Trade Social Premium was distributed as part of the price in Case 1. In Case 2, BK9, the largest producer interviewed, was discouraged by the performance of the organisation due to lack of capital.

These issues had value-adding implications, making the organisations even more reliant on donor funding. The traditional institutional arrangements observed made members act opportunistically when prices or payment conditions weren’t as favourable because they could not achieve capital gains through their organisation. Producers then sold honey as conventional on the spot market. Even high quality honey was side-sold by beekeepers in informal markets rather than maintaining relational contracts with their buyer. This is consistent with Beverlands’ (2007) findings where New Generation Cooperatives’ (NGCs) developed value-adding through branding, whereas traditional cooperatives were unable to sustain brands. Evidence of successful cooperatives informally operating with alternative arrangements such as NGCs’ closed-membership has been documented in Argentina, although no legislation has been put forward to formally allow these arrangements (Formento & Giuffré, 2010). This suggests hybrid producer organisations with the ability to raise more equity capital from members and/or external investors could alleviate the institutional problems found in this research.

A NGC or PIC model (see Section 2.1) would face lower transaction costs than a traditional cooperative due to proportionality between honey supply and investment (Harris et al., 1996). An ISC could rapidly raise equity capital from non-members. However, an ISC may suffer from conflicts of interest between members (or patrons) and non-member investors, as control of the organisation would remain with patrons. These conflicts may arise as patrons would prefer high honey prices while
investors would favor high returns to equity capital (Bekkum & Bijman, 2006) emphasising the need for sound supply contracts in order to reduce transaction costs.

### 7.3.2 Agency Theory

Agency theory (Harris & Raviv, 1979; Jensen & Meckling, 1976) explains the beekeepers’ governance relationships in this research. This theory’s predictions of incentives and risk-sharing had relevance in both cases and led to recommendations for the reduction of agency costs. Table 7.3 displays evidence for each case study, where the relative presence (absence) of agency cost drivers is displayed with a positive (negative) symbol. According to agency theory, the relative presence or absence of these drivers will determine the less costly governance structure to be adopted between principal and agent.

As supply contracts were not well defined or enforced and information asymmetry was present, both cases presented some level of opportunism. This occurred in relationships within the producer organisations and also between producers and buyers. Self-interested behaviour was especially evident when beekeepers sold high quality honey into informal markets despite having confirmed their supply to the cooperative. Monitoring costs were high for honey producers to oversee organisation managers’ and buyers’ behaviour because of geographical dispersion and weak communication and transport infrastructure. High monitoring costs coupled with weak supply contracts brought opportunities for moral hazard such as side-selling in the study chains.

Although Fair Trade protocols partially mitigated the information asymmetry problem, beekeepers suffered from limited access to adequate information about markets. Access to timely market information (not only from Fair Trade markets) would enable producers’ decisions to match their risk profiles. The information systems in place for production and marketing (e.g. traceability-related field reports, AGMs, mobile phones, internet access) were flawed and managers could not predict member supply. As a consequence, both buyers and more entrepreneurial beekeepers were discouraged from negotiating long-term contracts.

Beekeeper respondents were risk-averse principally due to uncertainty with weather. Staatz (1987) suggests producers can deal better with risk by organising in cooperatives and pursuing downstream processes. This is especially true in a highly weather-dependant activity like beekeeping. As Staatz noted “the potential for opportunistic appropriation of quasi-rents from farmers is exacerbated by the risk inherent in agriculture being taken advantage of from opportunistic agents” (as cited in Royer, 1999, p. 54).

An improved incentive structure brought by an innovative cooperative model and better designed and enforced supply contracts would increase the investment of members and/or strategic partners in the producer organisations. These incentives would also take the role of monitoring due to the prohibitively high supervision costs brought by geographical dispersion and flawed infrastructure.
Moreover, the risk bore by beekeepers in the supply chains would be minimised. As a consequence, agency costs could be reduced not only within organisations but also between beekeepers and buyers, due to a better alignment of objectives.
### Table 7.2 Agency theory concepts in Case 1 and Case 2

<table>
<thead>
<tr>
<th>Agency theory concept</th>
<th>Case 1 Evidence</th>
<th>Case 2 Evidence</th>
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<tr>
<td><strong>Opportunism</strong></td>
<td>About Organic honey, they keep on sweet talking to us about it and we keep striving (...) They [the buyers] should ask for a good price [from importers] so we can remain unconcerned and comfortable, because sometimes you can’t make ends meet [BK2]</td>
<td>This year we have sold a portion informally, that has been all clear honey, about twenty drums, and the rest, another twenty drums, to the cooperative. All the dark honey was taken by the cooperative [BK6]</td>
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<tr>
<td><strong>Information asymmetry</strong></td>
<td>May be we need to be more involved, look for more markets, and be more aware of everything. It’s a challenge because in the future if we achieve a critical amount we have to see if APONA can export. We’ll see what happens [BK3]</td>
<td>I think the cooperative lacks knowledge on the field. It lacks having more contact with members hand in hand. It lacks attracting more members, knowing who is who, where and when. In this regard the cooperative falls short [BK9]</td>
</tr>
<tr>
<td><strong>Risk aversion</strong></td>
<td>The money they make through apiculture, not all of them can invest it in new hives, just a part (...) they take credits that they cover with production but all of this slows down their growth [GM2]</td>
<td>I’d like to leave the public job but I don’t dare to. I don’t have a security, predictability for the future. Neither price nor quantity are predictable, for example this has been a bad year [BK9]</td>
</tr>
<tr>
<td><strong>Moral hazard</strong></td>
<td>We obviously live from conventional honey, we want the Organic to grow to 80, 90%, I think it will. But the term is not what we expected [GM2]</td>
<td>Norte Grande has a way of work that is our advantage but also maybe what doesn’t allow us to increase our own funding. We don’t speculate and we don’t trade non-members’ honey (...) Although it is still latent because Norte Grande has to sustain itself. So far we haven’t done that, in part because we also don’t have the funding for it [GM3]</td>
</tr>
<tr>
<td><strong>Outcome uncertainty</strong></td>
<td>The only sale channel I have opted for is either through Wayra, or to sell to Coopsol. Because of the confidence they give me, in price, that my honey will reach a good destination, the way of working (...) a circle of trust has been created with Coopsol and they also belong to the consortium, so I have only sold to them [BK1]</td>
<td>Although Norte Grande is consolidating its hard in the short term, less likely that it can export directly. Because of volume, because of commitment issues [GM3]</td>
</tr>
<tr>
<td></td>
<td>Out of the twenty drums in that container, there’s only one of Atamisqui, because the season didn’t yield that kind of honey [GM1]</td>
<td>Because we had instability or less predictability we signed a tentative supply plan with the trader [GM3]</td>
</tr>
</tbody>
</table>
7.4 Summary of key findings

This research found little evidence of sustainable long-term relationships in Fair Trade chains in contrast with Kocken (2002) and Ronchi (2002). The membership base in both cases was either stagnant or declining.

The Fair Trade and Fair Trade Organic honey supply chains under study developed in different ways. The Fair Trade honey supply chain in Tucuman developed with high government agency involvement. This is in contrast with Case 1 where Coopsol, a workers’ cooperative, acted as the chain coordinator. Coopsol played an active role liaising between producers and government agencies, NGOs and donors.

Beekeepers across both cases benefited from improved market access, commercial exposure, institutional representation, and collective input purchases in their relationships with their producer organisations. Additionally, Case 1 honey producers benefited from stable prices, and developed a sustainable occupation in rural areas. However, information and power asymmetries, biophysical risk, geographical dispersion and institutional problems in the producer organisations raised transaction and agency costs. These costs, coupled with low prices paid by European Fair Trade importers hindered the participation of small honey producers in the supply chains. In Case 2, ex-ante transaction costs and high international prices for conventional honey forced honey producers to exit Fair Trade markets. As a consequence Cooperativa Norte Grande sold Fair Trade honey as conventional honey.

In Case 1 captive relational contracts limited small producers marketing choices due to a heavy reliance on credit, information and logistic support from one buyer. Asset specificity due to Organic processes exposed beekeepers to hold-up problems and high biophysical risk. The inability to finance assets to undertake downstream activities (e.g. honey extraction) following certification protocols only increased producers’ dependence on donors and/or their buyer.

In Case 2, spot markets do not support the asset-specific investment and consistent supply of quality product required by consumers willing and able to pay a premium for credence attributes. The honey sold through spot markets continued to be blended with other honeys downstream. This was at the expense of developing value-adding through relational contracts.

This research suggests that small beekeepers did gain from greater access to niche markets that value ethical (Fair Trade) and environmental (Organic) credence attributes. The evidence strongly indicates that beekeepers would be better off supplying different, complementary chains under conditions where transaction and agency costs can be reduced. Beekeepers could then match their sales decisions with their own risk preferences. These complementary chains would be: (i) long-term relational contracts in which credence attributes are valued and downstream activities can be pursued, and (ii) efficient spot markets with well-defined and enforced grades and standards. However, conditions in these chains should be improved in order to prevent small beekeepers from being locked into captive relational
contracts, or utilising spot or informal markets to the detriment of pursuing product differentiation or value-adding with strategic partners. The following chapter will recommend interventions at various levels of the supply chains to alleviate the most binding constraints.
Chapter 8

Recommendations and implications for further research

8.1 Introduction

This research had three objectives (see section 1.2). The first was to understand how the Fair Trade Organic and Fair Trade honey supply chains had developed in Tucuman and Santiago del Estero provinces of Northwest Argentina. The origin, structure, main participants and interactions of these chains were described in Chapters 4 and 5. Chapter 6 presented findings relevant to the second and third research objectives. These findings identified the advantages and disadvantages that small beekeepers faced when supplying the Fair Trade Organic and Fair Trade honey supply chain as well as their willingness to continue supplying these chains, and constraints for increased participation. Sections 7.2 and 7.3 compared these findings with empirical studies and theory respectively. Section 7.4 summarised the key findings in order to make recommendations. Section 8.2 below provides policy implications, and recommendations at various levels of the honey supply chain in Argentina to improve the welfare of small beekeepers.

8.2 Recommendations

There is a need for a unified Argentine apiculture industry body. It could be initially supported in its operation by the Ministry of Agroindustry for a limited period of time. This body could provide an overarching framework for the industry, and would replace the obsolete national apiculture plan developed in 2009. A key objective should be to assist the stakeholders to formulate and carry out actions for apiculture development, especially in less advantaged regions of Argentina.

Challenges still remain due to asymmetric market information. Mobile telephone networks have certainly improved the flow of information but these services do not extend to beekeepers in remote locations. Government subsidies for infrastructure required by telecommunication services providers to develop networks in distant areas of Northwest Argentina would help alleviate this issue. Additionally, extension services with a strong marketing focus and increased presence in the field would be beneficial. Updated market information could be disseminated through village extension agents in order to reach isolated producers, complementing the existing internet bulletins that currently have limited scope. Marketing-focused extension services would reduce information asymmetries and help beekeepers to make better informed marketing choices.

Grades and standards for search and credence attributes such as colour or origin could be better defined by the abovementioned industry body in agreement with honey processors and producer organisations. Product differentiation through labels such as Indicación Geográfica (Geographical Indication) or Denominación de Origen (Origin Denomination) could also be promoted by this body to
expand the domestic market for high quality honeys that carry credence attributes. The introduction of a public price scale for honey colour grading would be beneficial. It could be coupled with an affordable measurement device for small beekeepers to ascertain the quality of their honey at the time of harvest, reducing complexity in transactions. The government should provide the physical and legal infrastructure to facilitate the diffusion and enforcement of these grades and standards. These measures would help in providing a conducive environment where efficient spot market transactions can be carried out.

Publicly-funded research and development for apiculture has been undertaken by INTA’s PROAPI through its platforms of “competitiveness” and “equity” to solve technical and value distribution issues along the honey supply chain. However, special emphasis should be placed on extension services and research into reducing production risk, especially for organic production. Also, research and development should focus on technologies to lower establishment costs for production. A more divisible honey extraction technology would reduce installation costs and provide small beekeepers with greater control over downstream processes. Lastly, the development of new honey and beehive products by research institutions (e.g. CONICET, universities, etc.) should be maintained in order to create new and preferred marketing opportunities for small beekeepers in periods of low international prices for honey.

The study cases struggled to finance their operations and assets to pursue downstream activities. This research suggests innovative marketing cooperative models that attract equity capital from members and/or strategic partners could provide a solution to heavy reliance on donors or buyers for finance. Access to finance is important to small beekeepers. By attracting equity capital, producer organisations could also attract debt capital and extend credit to members through loan products. This would allow financial independence of beekeepers from buyers, releasing them from captive relational contracts. Due to the investment constraints of poor rural beekeepers in Northwest Argentina an investor-share cooperative (ISC) could be a viable structure. This would require the Argentine government to amend its legislation relating to cooperative societies. Extension staff would need to provide support and follow-up in setting up these kind of institutions, and assist in identifying strategic partners. An ISC would be able to incorporate a strategic partner’s investment through preferred stock (voting rights would remain with the beekeepers). In this way, vertical integration of processing and marketing activities, as well as relational contracts, could be established. More value (e.g. incorporating downstream activities such as packing, labelling, new product development, etc.) could then be captured by producers. This kind of structure would also help in covering costly certification fees allowing participation in markets that value credence attributes. This research suggests that issuing preference shares for strategic partners together with better designed supply contracts for members would also alleviate the horizon and external free rider problems found in the study. Sound supply contracts would help in solving the misalignment of incentives between producers and investors commonly found in ISCs (see pp. 88 and 89). These contracts should include contingency
terms that discourage side-selling of honey, such as price adjustments in sympathy with prices in alternative markets. Provided that there is a legal infrastructure that allows these contracts to be externally enforced, these measures would assist the downstream operators to predict the quantity and quality of honey supply. Mutual dependence between the cooperative and smallholders would foster longer commitments of the parties to invest in specific assets.

Organic certification and accreditation costs could be subsidised for a limited timeframe (e.g. first three-year period) by the government, as small producer organisations still suffer hurdles in facing the costs to adopt these systems. This could be enhanced with extension staff assistance. Organic certification currently follows international IFOAM standards in Argentina. A protocol designed for domestic markets could be a first step towards achieving IFOAM standards and eventually exporting. Accreditation to other organic standards (e.g. National Organic Program in the USA, and Soil Association in the UK) would be beneficial to increase market access for Argentine honey. The evidence from this research suggests that consumers are looking for not only environmental but also social credence attributes. Fair Trade Organic markets for honey could be expanded to regions other than Europe to promote competition and overcome market access constraints for small beekeepers.

The need for increased marketing efforts from FLO in order to promote honey within their product range was emphasised in this and previous research. The Standards and Pricing Unit of FLO are attempting to solve the issue of Fair Trade honey being sold as conventional through a revision of the standards in 2015. FLO intends to fix volumes of honey that are Fair Trade Eligible (FLO, 2015). At the time of this research it was not clear whether this standard revision had been approved. This research also recommends that well-designed contracts which allow Fair Trade prices to move in sympathy with conventional honey prices are developed in order to help solve this issue. In this way, Fair Trade’s monetary benefits could be more discernible to producers.

In conclusion, small beekeepers would benefit from (i) increased access to market information (ii) better defined grades and standards, (iii) better access to finance, (iv) public research and development to cope with weather risks, to create divisible extraction technology and to promote new honey and beehive products, (vi) a change in traditional cooperative legislation to promote innovative marketing cooperative models, coupled with more explicit and incentive-based supply contracts, (vii) subsidies for Organic certification schemes, and (viii) increased marketing for Fair Trade honey by Fair Trade labels to increase participation in Fair Trade and Fair Trade Organic chains, coupled with supply contracts where Fair Trade prices quickly follow conventional honey’s price trends. These recommendations are key to advance the environment in which Northwest Argentina small beekeepers and their markets operate. However, this research finds that the most binding constraints to advancing the welfare of small beekeepers are those related to horizontal coordination. Of particular concern is the ability of producer organisations to finance value-adding assets and to extend production credit to small, geographically dispersed beekeepers in remote parts of the country. The empirical data and
analysis suggests that innovative marketing cooperatives like ISCs will mitigate these issues. ISCs will facilitate investment from strategic partners to finance value-adding assets, but these structures will need to be coupled with well-designed, explicit supply contracts that provide incentives for beekeepers through adjustable prices to alternative markets. These activities will encourage relational contracts with buyers that trade products with credence attributes into affluent markets. For this to happen, extension services should assist producers in setting up these institutions and in identifying strategic partners. Better telecommunications and extension services with a strong marketing focus will also help in improving information flows and in adopting definitive quality standards. These standards will promote spot markets, providing small beekeepers and their organisations with more alternatives to informal markets and captive relational contracts.

8.3 Limitations of the study and implications for further research

The findings in this study resulted from data collected from interviewing a limited number of researchers, producers, managers and buyers of two supply chains over a limited period of time. Their views and opinions were relevant to provide insights to the study. Although these views were triangulated with other sources of data a possibility for bias was present. The methodology used in this research requires caution in generalising these findings to other geographic areas in Argentina, or to other products.

The study cases in this research were the honey chains. A different study could have producer organisations as the primary unit of analysis. The effect of different institutional arrangements under Fair Trade, Organic and other third-party certification schemes could be explored. This would allow an assessment of the organisations’ ability of financing value-adding practices and paying for certification costs.

This research was undertaken during a period of high prices for conventional honey. The respondents did not expect this to persist. Performing the research over a longer time span as Ronchi (2002) did would have given greater validity to the results. A longitudinal study would give price dynamics at different times allowing an enhanced analysis on the small beekeeper’s returns over time. It would also provide a better assessment of the costs of compliance with Fair Trade and Organic certifications, and the worth of the Fair Trade minimum price tool.

Given these findings there exists the possibility of quantitative analysis. Surveys could be implemented to capture data from a larger group of honey producers to ensure these findings are representative of the total beekeeper population in the study area. This study focussed in certified honey chains in Northwest Argentina, although there are numerous beekeeper cooperatives throughout Argentina supplying conventional honey to traders and processors. Comparing several honey value chains in Argentina could also provide a more informed view of constraints for smallholder participation in markets.
Honey value chain analysis through quantitative methods could also be performed. A simulation to evaluate the policy impact could be performed. Modelling approaches such as system dynamics that integrate various areas such as production, markets, economics, and the environment from a holistic policy perspective could be helpful to identify the impact of policies aimed at increasing smallholder participation.
References


doi:http://dx.doi.org/10.1016/j.worlddev.2004.07.007


Appendix A
Research Information Sheet

You are invited to participate in a project entitled “The value of Fair Trade and Fair Trade Organic chains to small honey producers in the Tucumán and Santiago del Estero provinces of Argentina”

The aim of this project is to understand how the Fair Trade and Fair Trade Organic honey supply chains in Tucumán and Santiago del Estero are organised, and their effects on the well-being of small honey producers. We would like to hear about your experiences in the supply chain.

Participation in this project involves completing an interview with the researcher. The interview will take no longer than 90 minutes and will be voice recorded. This voice recording will be deleted once the notes have been written up. You will remain anonymous. Each participant will be given a number that will be used in place of your name on all the data received by the researchers. Your name will not appear anywhere apart from the consent form, which will be securely stored and then destroyed once the project is complete.

Taking part in this research is voluntary. You do not have to answer any or all of the questions. You can withdraw your information from the study by getting in contact with one of the researchers below before June 25th, 2015.

If you require more information or wish to withdraw from the study, please contact either of the researchers below:

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Appendix B

Consent Form

Project title: The Fair Trade and Fair Trade Organic chains for small honey producers in the Tucumán and Santiago del Estero provinces of Northwest Argentina

- I have read and understood the description of this project;
- I agree to take part in the project;
- I understand that the information I have provided can be withdrawn at any time before June 25th, 2015;
- I understand the results of this study will be published, but my identity will remain anonymous.

Name:
Signed:
Date:Participant Identification Number:
Appendix C

Interview Questions Checklist

C.1 Respondent categories

RS: Researchers

GM: General Managers

BK: Beekeepers

C.2 Topics covered in the interview schedules

- Fair Trade / Fair Trade Organic chains descriptions and effect on beekeepers’ welfare

- Apiculture R&D programmes and relationship with Fair Trade/Fair Trade Organic honey chains

- Honey production, extraction, costs and constraints for increased production

- Producer organisation membership, membership conditions, advantages and disadvantages of membership

- Honey sales and purchases, contracts, sale channel preferences, prices, payment terms

- Fair Trade certification information and costs, Social Premium administration and discussions, perceived advantages and disadvantages

- Organic production processes and trends, certification information and costs, perceived advantages and disadvantages

- Honey processes, regulations, buyer and seller requirements, traceability systems in place and information flows

- Small beekeepers’ household conditions, main economic activities

- Constraints to increased small beekeeper participation in Fair Trade/Fair Trade Organic chains, and how to alleviate them