

How sustainable is fair trade?

A review of the sector

Student: Johannes Matthijs Bart Schmal
Student ID: 09025991

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“Writing stopped being fun when I discovered the difference between good writing and bad and, even more terrifying, the difference between it and true art. And after that, the whip came down”

Truman Capote, American Novelist, (1924–1984)

The beauty of writing and reading is well known, but to realise that as Capote did is even more stunning. That is my reason to thank many people for their advice and feedback during the process to see the beauty of working at this thesis. Special thanks to the following persons: my Kate for her critical reading, Dick for the useful contacts and feedback, Richard for the advice in the process and, last but not least, Laurent for controlling the used data.

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List of Abbreviations

AAFN	Alternative Agri-Food Network
FLO	Fairtrade Labelling Organisation
FOB	Free On Board price
ISO	International Organisation for Standardisation
GATT	General Agreement on Tariffs and Trade
NGO	Non-Governmental Organisation
WFTO	World Fair Trade Organisation
WTO	World Trade Organisation

Abstract

How sustainable is the system of fair trade and how valid is it for the growing needs of fair trade in civil society? In helicopter view, the major problems are found in the non-transparent structure of the Fairtrade organisation, which has a monopoly on the certification of fair traders and focuses on the rights of labourers above other factors such as environment and education – factors which, if given their due attention, would increase the sustainability of fair trade. Fairtrade challenges the existing trade relations in the world. The same trade system is used to provide the organisational structure as in regular trade, but the financial chain is different and shows a disturbing view of the power of Fairtrade-certified co-operations.

Many multinationals are using Fairtrade certification to create a greener and labour-friendly image; however, this has given rise to the non-transparent practice of ‘green washing’, wherein no minimum amount fair trade ingredients are guaranteed for products labelled ‘Fairtrade’.

This brings the conclusion that although fair trade is a social initiative that can provide small groups with a better environment, the non-transparent financial chain, the disturbance of trade flows, and the lack of control of sustainability in Fairtrade certification means that fair trade is less sustainable for the world than promoted.

1. Introduction

1.1 Background

In general, fair trade is an alternative for conventional trade; it is based on the principal of partnerships between producers in a co-operation agreement to deliver their product for a minimum price to the Fairtrade label: “Our mission is to connect disadvantaged producers and consumers, promote fairer trading conditions and empower producers to combat poverty, strengthen their position and take more control over their lives (FLO, 2010)”. Furthermore, Fairtrade aims to develop economies in developing areas by improving the labour standards of small farms.

The Fairtrade Labelling Organisation (FLO) is responsible for coordinating Fairtrade labelling at an international level – in this report, FLO and its associate members are collectively known as the ‘Fairtrade’ organisation.

This research examines the sustainability of fair trade by studying the Fairtrade programme, sustainability and certification, promotional literature and the general field of fair trade, with a practical case study of juice production.

“There is no other area of international cooperation and negotiation where economy and legal aspects are so much intertwined as in trade.”

Arthur Dunkel, Director General GATT in Bhagwati (1997)

On the surface, this account of Arthur Dunkel has no connection with the title of this dissertation ‘How sustainable is fair trade?’ yet the relatively new development of fair trade needs essential progress in the interaction of trade in order to develop

further. The fair trade market is relatively small, in terms of its impact on world trade, and this shows that the co-operation and the legal aspects are still in the developmental stage. Non-governmental organisations (NGOs), such as FLO, show an intense belief in the power and success of fair trade (FLO, 2010).

1.1.1 Fair trade

The orientation of fair trade is based on communication with consumers, to create a situation where they are prepared to pay more for similar goods and similar quality, using the argument that the products provide a guaranteed premium fee for the primary producer. This ‘symbolic relationship’ between producers in the south and consumers in the north creates a goal in an invisible market and is the aim of the Fairtrade organisation (Renard, 2005).

According to World Fair Trade Organisation (WFTO) in 2009, Fairtrade is based on the following principles:

1. Creating opportunities for economically disadvantaged producers, by buying for a minimum price and organising knowledge and people in a co-operation.
2. Transparency and accountability, by introducing certification and administration in the co-operation and their members.
3. Trading practices, by educating members and involving them in the buying process.
4. Payment of a fair price, a minimum price and when possible a premium (the prices are paid for the whole chain).
5. Child labour and forced labour are banned, and more is invested in the education and social welfare of families including children.

6. Non-discrimination, gender equity and freedom of association are regulated in the certification.
7. Working conditions are regulated by the introduction of safety acts and by guiding maximum labour and minimal conditions.
8. Capacity building, by improving the production and creating better logistics.
9. Promotion of Fairtrade, as core business of the local NGOs in partnership with companies such as Nestlé.
10. Environment, integrating of environment to obtain better life conditions for employees/members.

(WFTO, 2009)

The attention of social science on this small niche market has increased recently, mostly on the power and morals of the Fairtrade organisation (Goodman, 2004 and Renard, 2005). According to Lindsey (2003), Goodman (2004), Harrison et al. (2005), Hayes & More (2005), Renard (2005), Mann (2008), McEwan and Bek (2009) and Verbrugge (2010), their main concerns regarding Fairtrade are: the lack of self-reflection within the organisation; the lack of transparency in the certification awarded by Fairtrade; and the organisation's fixation on labour and minimum price.

According to McEwan and Bek (2009), fair trade is a market that is best known for higher-priced products without extra services. However, as mentioned in Harrison et al. (2005) and Mann (2008), the perception of consumers includes environmental and sustainable attributes.

Self-reflection from the Fairtrade organisation is nil; nevertheless, critics of the market are recently stronger (Lindsey, 2003, Hayes & More, 2005 and Mann, 2008). Despite these criticisms, the transparency in the market of fair trade is still low.

For example, the level of sustainability included in documents of Fairtrade organisations still underestimates the impacts in relation to labour and fixed pricing.

The payment structure of the Fairtrade organisation will also be looked at in this research. The Fairtrade organisation distributes the price and the premium to the co-operation, which is responsible for paying the chain from farmer to export. Verbrugge (2010) suggests that the power of the co-operation [‘co-operative’ – the group of producers cooperating with the Fairtrade organisation] should be reduced and the supply chain should be redesigned. Azevedo and Chaddad (2006) conclude that redesigning the supply chain will improve trade, particularly the distribution of goods. Nelson and Edsvik (1990) state that redesigning the supply chain will improve the distribution of goods and contribute to changing the trade barriers and increasing the capital flow. The lack of a collective definition of supply chain is partly due to historical growth, but it can be considered as a chain where the power is concentrated at the top (Chroom et al. 2000).

1.1.2 Sustainability

Sustainability is a word widely used but the definition has changed and become empty at the same time (Frankental, 2001). During the 1960s and 1970s, ‘sustainability’ and ‘environmentally friendly’ were used when a product was repaired rather than replaced. In the 1980s and 1990s ‘eco-efficiency’ became the word to characterise sustainability. At the beginning of the twenty-first century, sustainability changed again to become the ‘identification of green opportunities’ (Hauschild, 2005). From repair, to solution, to opportunity; the market of sustainability has changed rapidly, as has the awareness by consumers.

Many historians define sustainability as first being shaped in the Brudtland report of 1983 (Hauff, 1987), others, such as Bosshard (2000), promote German legislation as being the introducer of Nachhaltigkeit [sustainability]. Hauschild (2005) shows that many companies are still in the phase of restoring products; however, sustainable visions today are based on social and economic impact. In the view of Bosshard (2000) and Hauschild (2005), the creation of fair trade needs to have more economic affects in order to create a more balanced, modern use of sustainability, e.g. long-term investments to reduce natural resources.

The permanent focus of the Fairtrade organisation on labour and minimum price has taken away the attention from environmental and sustainability issues, but focusing on sustainability is a useful way to improve the labour and environmental conditions of people in the developing world (Clement, 2010). Secondly, improving sustainability is not only positive for developing areas, it improves the ecological footprint of the whole world.

The key point of sustainability is development ‘that meets the needs’, in other words, using products in a re-cycle of one generation. Further, not only is decreasing the length of the production cycle essential but also the improvement of distribution (Nelson and Edsvik, 1990): “Though the issue is not merely one of population size but the distribution of resources, sustainable development can only be pursued if demographic developments are in harmony with the changing productive potential of the ecosystem”. According to Raynolds and Ngcwangu (2010), this is one of the points where Fairtrade can improve its statement on strategic goals.

To conclude, the development of sustainability needs difficult changes to happen in order to improve the quality of water, air and other natural elements, plus

an overall improvement of the ecosystem with the essential goal of using less than a person can make in their lifecycle (Nelson and Edsvik, 1990).

1.1.3 Certification

The introduction of fair trade ISO standards in 1996 and FLO certification in 2003 created more transparency in the supply chain; however, the effect of the certification is underestimated in the reviews of the power of the Fairtrade organisation (see Goodman, 2004 and Renard, 2005). Most food standards are developed in the top of the supply chain; the British supermarkets with British Retail Consortium (BRC) are a strong example of this process. In most certification systems, traceability is the key point. However, the standard of fair trade ISO 65:1996 has a different approach – it focuses on labour rights and minimum price rather than the focussing on the product as in the ISO 9000 series, the quality management version, and the ISO 14000 series, the environmental version.

1.1.4 Case study

The differences in trade and behaviour, as described above, with the straight focus on labour and the chosen paying system, are major problems first experienced by the author in Nicaragua. The way the system operates has been reviewed in the following case study on the production of fruit juice.

The juice sector is ideal to study – whereas the production of most fair trade products, such as coffee and bananas, is concentrated in developing areas, the juice sector is widely spread over the world, with production established in the western world and in developing areas (Hui et al. 2006). The combined production of the

United States of America (USA) and Brazil is responsible for 85% of the world's concentrated orange juice (Azevedo and Chaddad, 2000).

Structurally, the juice market is an oligopoly; four big producers of juice dominate the market in Brazil. Recently, the big four of Brazil harmonized their activities with twin companies in the USA to decrease the amount of import tax they pay and increase the market percentage.

The structure of the market means that it is difficult for fair trade to enter – the production is technically advanced and the major players are less labour intensive in production. The aims of Fairtrade to improve working conditions and supply at a minimum price are difficult to meet here.

Azevedo and Chaddad (2000) addressed the historical development of the high concentration of the juice industry into a few companies and showed that the majority of the market development was invested in the knowledge and technology of orange juice production, processing and distribution. FLO shows that in 2007 only 0.3% of the fruit juices in the world had a fair trade source.

1.2 Aims and objectives

The aim of this investigation is to illustrate the sustainability of fair trade by showing the links between theory and practice in a case study. We will ask the question, 'Will differences in trading behaviour caused by using sustainability as a measuring tool change the approach of fair trade from ethical motives towards technical motives?'

The report begins by describing the selection of research and underlining the selection criteria. The data is then analysed by splitting it into Fairtrade, historical beliefs, finance, and problems as put forward by the actors in the chain. The second

component of the results presents the background of sustainability in technical terms and analyses the way forward. The third part studies the supply chain and the risks. The fourth section looks at Fairtrade certification and analyses the recent changes in the system. The fifth element of the results considers issues of green washing and how this is enabled by the weak structure of Fairtrade; this is further analysed with an example of chocolate production. Finally, there is the case study of orange juice. The discussion sets these issues in context and looks for ways forward.

2. Procedure

This project evaluated the sustainability of fair trade, and the literature and field of activity of trade; the data was assessed to show the differences in sustainability and environmental benefits of normal trade versus fair trade.

A selection of literature was made to obtain the information on the topic of this thesis, and this selection was made according to the guidelines of London Metropolitan University. A minority of the collected data was removed because the lack of references in sources could not reproduce the input and reflection.

In addition to the literature review, the field of activity of Fairtrade was examined in a dialogue to obtain the most recent opinions of trade and, in particular, fair trade. Different actors in the field of activity were consulted in order to obtain a greater level of accuracy and reliability.

It was decided to interpret the data in a very technical way, which excluded the personal feelings of respondents and their interpretations without multiple resources. Therefore, subjects were excluded when their level of independency and technical level were deemed to be unreliable, as many were drawing their conclusions from reports of a Fairtrade source.

The data collection was based on several interviews and investigations in databases. The contacts for the interviews were collected with help of Foodlog founder Dick Veerman, which resulted in interviews with the Dutch importer of Fairtrade juices, Gerard Verbrugge; Rainforest Alliance manager in Sustainable Value Chains Europe, Marcel Clement; and Graham Thompson from Greenpeace UK Supporter Services. The journals were obtained by reviewing the library catalogues; key documents which were used as foundation sources to function as a resources hub where, in alphabetic order: Croom et al. (2000), Goodman (2004), Hayes & Moore

(2005), Lindsey (2003), Mann, (2008) and Raynolds et al. (2007). The library catalogue is linked to Elsevier Science Direct and Wiley Blackwell science.

Despite the undertakings for scientific approaches – for objectivity and comprehensibility – sources contain implicit elements. To improve the approach, sources were included only when references were found in the ‘hub resources’, with the addition that the references in the resources were detailed enough to reproduce.

3. Results

3.1 Fairtrade

The profile for fair trade as a niche market is relatively high. No other ethical trade initiative has had this amount of research, but more research also means that more problems are identified. Several problems have arisen since the start of Fairtrade – the economical structure and ideological aims face major difficulties under the immense structure of the organisation. To understand the controversy within Fairtrade and, in the process, create an observable evaluation of sustainability, the key concerns of the research field based on fair trade businesses were considered, including the concerns from fair trade organisations such as the FLO.

3.1.1 Knowledge of fair trade

The common consumer's knowledge of fair trade is based on the higher prices paid to the producers in developing countries. As suggested by Mann (2008), the operation of fair trade needs to be visible in the whole chain; the trader needs to pay the Fairtrade NGO, whilst the Fairtrade organisation will supply the cash flow for the supply chain below the wholesaler. This results in a world price and a Fairtrade price.

Although this may indicate more wealth for the producers of the goods in principle (in many cases the farmer), several components were found to be disturbing this system. The derivation of the market, which is assumed by Yanchus and de Vanssay (2003) as a niche area of trade, is expressed by Mann (2008) in an example of the micro-economical theory. The first rule of the theory proposes that fair trade products are different from the original market products, and the second rule proposes that the products provide an alternative benefit, i.e. give environmental

improvements. It can be assumed that the hypothesis of Yanchus and de Vanssay (2003) fits with the first rule, although the second rule still applies and this leads to the conclusion that fair trade provides an alternative civil service in the society. Nevertheless, the products do not deliver extended or different experiences to the end user in the chain. So this does not change or create better or different products than those produced under normal trade, which suggests that the overall economic benefits of fair trade are nil.

3.1.2 History

The first introduction of Fairtrade to consumers was by the Fairtrade organisation Max Havelaar in 1988, with the launch of coffee under the Fairtrade Label in the Netherlands. Between 1988 and 2003 the Fairtrade movement grew with the introduction of national Fairtrade organisations all over Europe and Northern America, and this rapidly increased the total of producers in the southern hemisphere. In 2003, 24 national Fairtrade organisations amalgamated into the Fairtrade Label Organisation (FLO) to share knowledge and to create a worldwide network of Fairtrade organisations with the specific focus on the Fairtrade label conditions and certification.

The shrinkage of 24 fair trade actors to one has changed the control of Fairtrade, from the ideological beginnings of Max Havelaar until the present multinational FLO, and this amalgamation has caused a loss of transparency (Lindsey, 2003).

The responsibility and the power of the Fairtrade organisation has changed since the early days when the Dutch organisation, Max Havelaar, started with (fair)

trade in coffee until the introduction of FLO in 2003. The fundamental concern is found in the restructure of Fairtrade and the achieved power,

Goodman (2004), Renard (2005) and Mann (2008) all conclude that the history of products being sold by volunteers for a specific group is totally different from the practice today. Renard (2005) put the concept of fair trade in picture: “Products from Southern countries, mainly artisan and coffee products, with little industrial content, were sold in Northern cities in special stores managed by non-governmental organizations and staffed by volunteers”.

The orientation of Fairtrade nowadays may sound ambitious and difficult, nevertheless van der Hoff (2002) put forward that “the original project (...) proposed to use the power of consumers to exert pressure on the dominant market players”. The consumer is not reflected in the organisation picture of FLO. Unfortunately, history has shown that Fairtrade is not a major player in the world trade market and is not changing the power in the chain, even by the involvement of critical consumers.

3.1.3 Market discount

The third point of criticism is ignoring the reality of the market – Lindsey (2003) stated this as one of the most critical points within Fairtrade (Hayes and Moore, 2005). His major concerns were that Fairtrade pricing ignores the reality of the market, with prices of Fairtrade products more than double those of the regular equivalent products, and that there is stigmatisation in the selection of producers with small groups of ‘lucky ones’.

Lindsey (2003) illustrates this blind approach by referring to the over-production in the coffee area: “a reduction in supply is therefore the most obvious way out of the slump”. To reduce the slump of the fair trade market, changes need to

be made in the Fairtrade organisation; cutting, redeveloping the benefits, and decreasing the stigmatisation between groups are named as having the most potential to turn the critics (Lindsey, 2003, Goodman, 2004, Hayes and Moore, 2005).

Ignoring the market is a prime example of negative globalisation. For example, Haynes (2008) states that the negative conditions of fair trade have led to NGOs ignoring the reality of the market. Communication has become a weapon to promote the ideas of fair trade by those NGOs involved because of the lack of critics and impact studies. It is the aim of Fairtrade to give northern civil society the idea that normal trade has a greater negative impact than fair trade on the world production and life standards all over the world (Lindsey, 2003, Goodman, 2004).

Cutting means more people jobless and less income, but on the other hand prices will increase and a more efficient process can produce for a lower price, which in turn makes farmers more competitive (Lindsey, 2003). To summarise, Lindsey (2003) promotes the open economy system with weak players being removed and a healthier trade system developing. An open system includes the free market; it is doubtful that an open market will bring the essential benefits to decrease the negative impact of ignoring the market.

Fairtrade has disturbed the 'natural' process of trading by using ethically orientated consumers to buy products without any extra material value. Nevertheless, this only applies to the markets in free trade (trade without any economical intervention from governments), but free trade is a theory – in practise most of the markets in the world are controlled/regulated by governments, which is called a mixed economy. This controlling/regulating includes subsidies, import taxes and limiting legislation e.g. environmental. Thus Fairtrade may disturb the economy by changing consumers' attitudes; 'normal' trade disturbed the markets with import

taxes, subsidies and other regulations of a superior government. To summarise, the critics of the fair trade market are limited, but revision of the regular trade system and revision of Fairtrade towards a system with equal opportunities is essential.

3.1.4 Financial knowledge

The fourth concern is the knowledge in the Fairtrade organisation of the financial and knowledgeable transfers through the whole organisation. Two examples show that the influence of Fairtrade on the chain is small. “10p extra on a jar of coffee and the price the individual farmer actually receives for the green coffee beans is likely to be somewhat tenuous” (Hayes and Moore, 2005). Or “For 50 bags of Ceylon tea, the respective difference [regular and fair trade tea] lies between 0.90 Fr. and 2.30 Fr. While it has been argued that fair trade prices deviate from the market equilibrium, very little is known about how they can be explained at all” (Mann 2008). These two examples show the negative position of fair trade regarding transparency and efficiency. These concerns are, even with the best knowledge of the Fairtrade organisation, impossible to answer because the financial control lies with the co-operatives and not in the actual Fairtrade organisation.

An extra source of problems is FLO itself: in the most recent price update in August 2010, there are many categories without the well-promoted minimum price, for example cane sugar and the fruit juice subgroup (FLO, 2010a). This shows that some Fairtrade products are not different in financial rewards than ‘normal’ trade products, and this means that the alternative platform of Fairtrade is nil.

The sustained demand in the northern hemisphere has given fair trade the opportunity to grow steadily in the southern hemisphere; however, the resources

cannot show that the growth is related to the efficiency and fairness of Fairtrade as the organisation's own research is doubtful.

In 2004, evidence was mounting that producers needed to pay for Fairtrade certification, “potentially making this a moot point and altering the moral economy of Fairtrade in interesting and complex ways” (Goodman, 2004). Now in 2010, more evidence comes from the certification body itself (FLO-CERT, 2010) to show a visible decrease in fairness from Fairtrade. The Fairtrade organisation shows an absurd difference between the wages of farmers; one particular banana farmer received around €945 in 2007, whilst the average farmer received €36 for that year (2007) (FLO, 2010). This difference in wages is caused by the payment structure of Fairtrade.

Mann (2008) concludes that “Fair trading would be more transparent, more efficient and more equitable if price were to be re-established as the decisive criterion for buying decisions”, rather than the structure of Fairtrade today where consumers are paying inflated prices for ethical reasons. Transparency is what Fairtrade needs to get it back on track in its relations and even-handedness in trading. For this, the organisation needs to restructure the management of finance.

Critics, for example Hayes and Moore (2005), show that in the partnership of Fairtrade with local organisations (co-operative or local fair trade), the local organisations are not knowledgeable enough to trade independently and the Fairtrade NGO in the northern hemisphere is not equipped to control and train the local organisation in the south: this split is an extraordinary example of how the knowledge of both hemispheres doesn't lead to a sustainable communication.

3.1.5 Problems facing juice producers

In addition to the concerns around the organisation of Fairtrade mentioned thus far are the needs of the farmers. The problems can be generalised, however, for this report they are presented through the more detailed case study of the specific problems of juice producers and fruit farmers.

The fruit sector is based mainly on seasonal harvest times and this indicates that most plantations employ temporary workers. FLO (2010) has seen a price drop in the last few years for fruit, with the result that more farmers are facing difficulties in creating an acceptable standard of living for their family and employees. In the case of oranges, the structure of the concentrated juice market has instantly decreased the opportunities for small farmers and new starters. Medium and small enterprises cannot cover the production costs. The main reason for this is the structure of the sector: the oligopoly of orange concentrate production.

The main aim of the FLO is to establish minimum wages for employers. The FLO promotes better social conditions, including better working conditions for temporary staff and increased income of the small farm. In reflection on the critical writers, (Lindsey, 2003, Goodman, 2004, Hayes & Moore, 2005 and Mann, 2008) all these concerns are shared but different ways to solve these problems are proposed: where Lindsey (2003) promotes the elimination of the whole fair trade idea, Goodman (2004) shows the awareness of economic explanation. Mann (2008) put forward that fair trade markets must be improved in terms of efficiency and fairness. The reflection of Hayes & Moore (2005) promotes that the consumer relationship is fake and needs to be changed. However, they agree that information provided to create awareness in consumers is paramount. Nevertheless, the role of the Fairtrade organisation as market director is too ambitious and does not work.

3.1.6 Environment

According to the FLO (2010), fair trade uses the term ‘environmental’, which covers sustainability in general and, specifically, environmental sustainability. This may indicate responsibility from the farmers to obtain a certain level. However, as stated in the ‘ten Fairtrade standards’ of the WFTO (2009): “Organisations which produce Fairtrade products maximize the use of raw materials from sustainable managed sources (...) when possible” – the last two words being key here.

FLO (2010) promotes the environment as its answer to sustainability, which, according to the perspective of Fairtrade, is directed towards the organisation’s values of labour, minimum salary and safe working conditions. However, other factors than environmental impact are unmentioned in the studies by FLO. An interview with Rainforest Alliance in July 2010 showed that the organisation and standardisation of environment rules and environmental certifications at Fairtrade is underestimated, for example the certification doesn’t indicate any commitment to the minimum ecological balance. Although Rainforest Alliance sees points where the Fairtrade organisation can be improved, they did not want to put these in public. Greenpeace gave a clear opinion of Fairtrade: “It’s quite possible for a product to be produced in an environmentally damaging manner and still be Fairtrade, although the Fairtrade certifiers are starting to include ‘green’ criteria. However, as their main focus is not on the environment but on workers’ conditions, Greenpeace aren’t qualified to comment on them” (Thomson, 2010). This may sound as though Fairtrade is not involved in the environment but this is not true either. The Fairtrade organisation [based on FLO] has different goals to Rainforest Alliance and Greenpeace, but in common they aim to deliver an environment that is sustainable and promotes living standards.

As reviewed in 2010 the aims of fair trade concerning the environment are:

1. Protect the environment in which they [workers] work and live. This includes areas of natural water, virgin forest and other important land areas, and dealing with problems of erosion and waste management.
2. Develop, implement and monitor an operations plan on their farming and techniques. This needs to reflect a balance between protecting the environment and good business results.
3. Follow national and international standards for the handling of chemicals. There is a list of chemicals that they [farmers] must not use.
4. Not, intentionally, use products that include genetically modified organisms (GMO).
5. Work out and monitor what affect their [farmers'] activities are having on the environment. Then they must make a plan of how they can lessen the impacts and keep checking that this plan is carried out.

(FLO, 2010)

Other 'green' NGOs, such as Greenpeace and Rainforest Alliance, seem to support the environmental aims of Fairtrade, but point also to more rules and more control.

3.2 Sustainability

The awareness in society, and the interest of individuals in creating a better balance in resource use and reducing the self-made destruction of the world, for example global warming, has increased the influence of the idea of sustainability in the world. Sustainability is seen by critics as the solution but it also seems, by those

same critics, to be a word for green washing (Bosshard, 2000). (See Chapter 3.5 on green washing.) It is ironic that the use of sustainability makes the word both empty and full of expression at the same time.

Bosshard (2000) developed five criteria to consider to reduce the impact of self-made destruction and create awareness in society:

1. Abiotic environment, physical surroundings.
2. Biotic environment, including animal welfare.
3. Cultural values, defined as human emotional and mental wellbeing and creativity of society.
4. Sociology.
5. Economy.

(Bosshard, 2000)

The step model of Bosshard (2000) could bring a better vision to the whole market, although the model is more suitable for rural planning. Weiss (1996) acknowledged that missing clear characteristics to balance a product [in social, economical, cultural biotic and Abiotic values] is the main reason for the lack of success of awarding the definition of sustainability to the impact of a product on the environment.

Furthermore, the value of the impact on consumer attitude and the behavioural change of companies are not underlined in the available empirical studies. Selfa et al. (2008) raises these criticisms in the alternative agri-food network (AAFN). “Perhaps more importantly, in contrast to the extensive research examining the conservation behaviour of agricultural producers, there has been little research examining the

complexity of factors that may influence (sometimes conflicting) consumer attitudes and behaviours regarding sustainable consumption practices” (Selfa et al. 2008). The examination of data and case studies shows there is insufficient information to make any conclusion in relation to the value of the alternative agriculture and to the level of sustainability.

3.2.1 LCA

In contrast to the behavioural move of green trade alternatives and the five-point system of Bosshard (2000) is the more established study of Life Cycle Analysis (LCA). Established in western society, LCA is quite rare in developing countries (Hauschild, 2005). It is an analytical method used to evaluate the consumption of resources and environmental burdens associated with a product, process, or activity. Following the line of the industry, the definition of LCA is a developing method to “evaluate the mass balance of inputs and outputs of systems and to organise and convert those inputs and outputs into environmental themes or categories relative to resource use, human health and ecological areas” (Procter and Gamble, 2010). The method can be used to develop a balance of energy use for raw materials, production, processing, logistics, packaging, and the use and the recycling of a product.

There are many ways to express and develop an LCA; existing techniques may seem different but they have the same goal, i.e. to reduce the environmental impact. Hauschild (2005) identified European legislation as the main driver of the introduction of LCA in Europe. In the review by the United Nations in 2002, it is reported that the introduction of LCA depends on the level of money transfer and business in general.

Aside from the benefits of the knowledge and financial possibilities identified in the LCA method there are also problems, for example, it is a bottleneck for small retailers (Sleeswijk et al. 1996). The amount of information required and the high number of evaluations are difficult to undertake in a small company. It could be argued that lack of time and the lack of knowledge needed to analyse data are reasons for this bottleneck. Fair trade has all the problems of a weak infrastructure, e.g. shortage of electricity and limited demographics (Hauschild, 2005), and a lack of knowledge to implement LCA successfully (Sleeswijk et al., 1996).

3.2.2 Determination of actors with orange juice example

To answer the question ‘How sustainable is fair trade?’ it is chosen to focus on one product, orange juice. To obtain the input, the actors in the chain need to be determined with LCA. To determine the hypothesis that Fairtrade is less sustainable than normal trade, all the actors in the process need to be determined – farmers involved in harvesting, all the factory workers, the production and packaging, and all the producers of packaging need to be analysed.

One of the products under fair trade is the orange juice of Max Havelaar (a Fairtrade label available in the Netherlands, Belgium and Switzerland, and member of FLO); this specific product was sold in Switzerland in 2001. To determine the LCA of one litre of this juice, the input and output need to be set, and calculated to obtain the environmental impact of one litre of orange juice bought in 2001 in Switzerland under the label of Fairtrade (Frischknecht, 2002).

The Institute for Environment and Sustainability (IES) accomplished an inventory to analyse the LCA base before an LCA analysis, and this resulted in four points of concern in determining LCA.

- ‘The previously included and excluded activities, processes and elementary flows may need to be adjusted.’
- ‘Also the initial specific provisions for solving multi-functionality may need to be further detailed or revised.’
- ‘In few cases newly identified and potentially relevant elementary flows may require to develop additional impact characterisation factors.’
- ‘In rare cases newly identified kinds of relevant environmental impacts may even require to add new impact categories and models.’

(IES, 2010)

With the four points of concern of IES (2010) it is possible to determine the possible lack in Fairtrade LCA.

Firstly there are more actors in Fairtrade, this includes the difficult structure of the co-operations as an extra actor. More actors makes the product less sustainable in theory, because it involves more parties which results in more labour (Lindsey, 2003). Labour is counted as more energy and is less sustainable in theory, but from a socio-economic perspective it is sustainable (Goodman, 2004).

Secondly, the provision of multi-functionality encounters difficulties in developing countries, for example the energy demand is weak and this results in less sustainable process operations and indicates less possibility to create a frequent LCA system. Sleeswijk et al. (1996) states that the analysis for small companies can create a bottleneck; Fairtrade works mostly with small and medium enterprises that may experience these difficulties. Frischknecht (2002) comes to the same conclusion. LCA is suited to deliver a near approximation of the environmental impact, though the relevance to the Fairtrade structure at this moment is doubtful.

Thirdly, the classification LCA model, developed by Heijungs (1997), expressed the life cycle in qualities that determine the responsibility of the different actors. This classification of LCA could bring transparency in the fair trade chain; however, there is no research that describes the use of this system.

3.3 Supply chain

The terrorist attacks on the World Trade Centre on September 11, 2001, and the swine flu outbreak in 2009 are examples of many catastrophes that show the weaknesses of the supply chain (Raynolds et al. 2007). This shows the difficulties in creating one's own trade system, as in Fairtrade's intention to trade as a separate entity. In actual trade, Fairtrade goods are shipped together with regular products (Verbrugge, 2010). In other words, the Fairtrade products we buy can be fair trade but, because they are mixed in with other shipped goods, it is possible that your product is from an unsustainable and non fair trade source; although, from the perspective of sustainability, this is a positive opportunity to reduce energy during transportation because less energy is used.

3.3.1 Risk of payment system

A better understanding of the supply chain provides the crucial points in the creation of a risk analysis and in the understanding of the cost of the supply chain. In their review, Wagner & Bode (2006) conclude that the risk to the supply chain is arguable and not restricted to the production and total number of actors in the chain. However, Wagner & Bode (2006), argue too that the reduction of risk can be made by a reduction in the number or amount of goods. Fairtrade's approach of investing in

small parties and creating an additional actor in the chain has increased the risk in the supply chain (Chroom et al. 2000, Wagner & Bode, 2006).

Then there is the problem of the payment system used by Fairtrade. This payment system is based on the Free On Board price (FOB). The FOB is the price paid by the Fairtrade retailer to the Fairtrade organisation. The Fairtrade organisation will then transfer the money in the chain (Hayes & Moore, 2005; Verbrugge, 2010). This is a non-transparent system and creates disorientation in the payment flow (Figure. 1). The distribution of money gives power to the actors in the beginning of the chain, but this power is uncontrolled as the payment is made by the Fairtrade organisation, which is not a participating actor in the supply chain. As a trader in juices, Verbrugge (2010) would prefer more transparency, with more accountable payments so that fraud within the chain decreases.

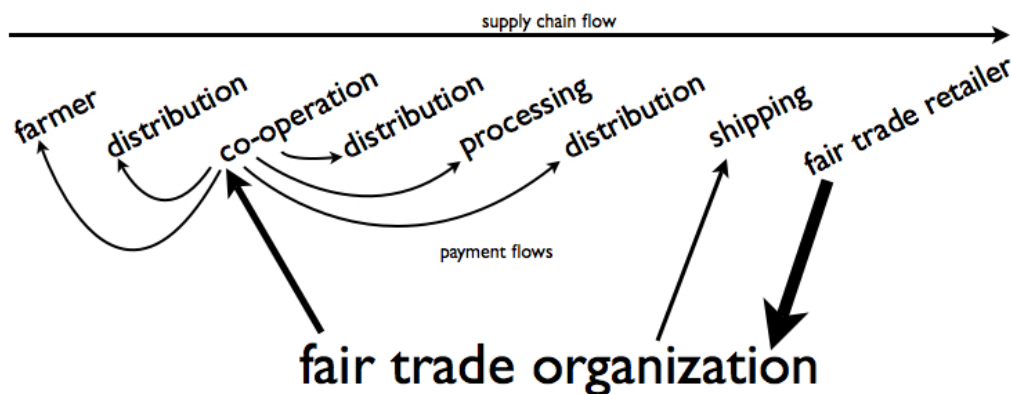


Figure. 1. Supply chain of Fairtrade; regular supply chains show a payment flow opposite of the supply chain arrow¹

¹ Figure one only applies on products that are processed in the country of origin, such as orange concentrate

3.4 Certification

Standardisation is essential when creating a transparent supply chain and the introduction of standards has increased the traceability of goods and the investment in reliable administration. “Certification is a governance tool used by powerful actors in commodity networks to discipline less powerful actors by exerting ‘control at a distance’ (Ponte & Gibbon, 2005, p. 22)”. There has been significant commitment made since the introduction of certification but we are not comparing and discussing a better method of certification, rather the role of the different certification bodies that are suitable for the food industry and, in particular, the fair trade industry.

3.4.1 Review of ISO 65

The integration of the national Fairtrade organisations into FLO in 2003 has resulted in FLO-CERT being established. FLO-CERT is a separate body that accredits the activities of Fairtrade producers in order to avoid conflicts of interest. To remain independent, FLO-CERT received in 2007 from the International Standard Organisation (ISO) the right to accredit organisations with ISO 65. With right of accreditation, FLO-CERT is independent from the licence holder (Fairtrade organisation). Transparency must be obtained by expanding information before inspection, and all producers must be treated equally (FLO-CERT, 2010).

ISO 65 is the first worldwide social certification system, and it promotes the fair trade ideas created by the Fairtrade organisation (Steidle, 2005). From a critical point of view, the foundation of ISO 65 is based in the Fairtrade organisation but Fairtrade has also got the role of inventor, seller and buyer. The major concern of this widespread influence of Fairtrade is again the lack of transparency in the assessments of ISO 65 certification, which makes the role of Fairtrade in creating independent certification doubtful.

The second point of concern is the payment required in order to use a Fairtrade logo. A medium enterprise with 200 employees/members needs to pay a €2,200 annual fee for certification by FLO-CERT (FLO-CERT, 2010). With respect to the financial risk for the members and the possibility that the minimum price of a Fairtrade product is similar to the market price, there are sufficient material factors that impact on the sustainability of the certification structure, and the payment for the certification. For example, in Nicaragua, certification of small farms is too expensive and this has resulted in an alternative trade with the Kosher logo as a guarantee of the sustainable development of the group (Schmal, 2009).

3.4.2 Control at distance

Through the WTO public forum in 2007, Friedrich Ebert Stiftung (FES) promoted the relationship between social standards, such as ISO 65, and international trade. FES (2007) states: “Consumers are becoming increasingly aware of their power to influence production processes by their purchasing decisions”. Governments and enterprises in developed and developing countries have realised that the awareness of consumers can transform concerns when a lack of transparency is established (FES, 2007).

Fairtrade producers are facing the same problems of lack of transparency, for example the Kit Kat bar with Fairtrade logo. This product contains ingredients other than the Fairtrade sugar that are not from fair trade sources. Other NGOs have raised these concerns in the media, which has resulted in the promotion of their own name and improved their commitment, as Greenpeace did with their intention to create a greener globe with palm oil (Greenpeace, 2010).

‘Control at distance’, as pointed out by Ponte & Gibbon (2005), is the fundamental need to control the chain from the top [the retailer] and to reduce the risks [of product damage]. This generates evidence of the commitment companies when seen by the ‘critical consumer’.

As well as ISO 65, the Fairtrade market has other certification systems to work towards the goals in a more visible way. For example, the Codex Alimentarius produced by the WTO. This is not a certification body, such as ISO or BRC, the Codex is the guideline of trade facilitation. The guidelines are applied globally and are equal for all members (97% of the world population is represented under the Codex) (Dawson, 1995). “Codex Alimentarius are developed so that governments can accept that products complying with those standards can move in international trade without jeopardizing the health or interests of consumers” (Dawson, 1995). In summary, the intention of the Codex is to increase trade and lower barriers, with better and more equal trade being the result, plus an increase of environmental standards worldwide.

However, the intention of certification in general, to improve the quality of production and to provide transparency to consumers, is overestimated. Certification won’t improve quality and transparency of the supply chain, but changes in ‘attitudes, identities and practices’ will (McEwan & Bek, 2009).

The conclusion of McEwan & Bek (2009) is that the importance of consumer attitude towards the production method is an underestimated study area, but one that has recently increased. Consumer attitude is an underestimated area within the Fairtrade organisation; a change is needed, with a focus from production towards consumption, in order to maximise the consumer attitude into a sustainable relationship.

3.5 Green washing

The most suitable definition of green washing comes from the Oxford Dictionary: “from green [not ecologically harmful] on the pattern of whitewash” (Oxford dictionary, 2009).

The tremendous growth of the Fairtrade organisation, since its beginnings in 1988 to the current multinational organisation with its wide range of fair trade products, has raised many questions by many writers. Most of the growth is achieved by the corporations (such as Nestlé), whereas the primary idea of fair trade was to develop trade with small farmers and co-operatives on the ideals of Fairtrade (Tallontire & Vorley, 2005, Reed, 2009).

Reed (2009) raised concerns about fair trade becoming a tool of big corporations to green wash their products, which “may even be undermining its long-term survival”. Some businesses are attracted to improve their fair trade scheme to become a Fairtrade retailer. However, the time between entering the fair trade market and the marketing of Fairtrade must be a time to underpin the story and the research of the benefits; PepsiCo, for example, promote the statement to improve first before acting as the ‘green company’ (PepsiCo 2009).

Tallontire & Vorley (2005) summarise that the concerns are that “green wash is already a feature of Fairtrade, through no fault of its own; retailers when challenged will point to their Fairtrade products”. Tallontire & Vorley (2005) view the retailers’ green washing tool, Fairtrade, as result of a stressed market. Frankental (2001) stated that the misunderstanding of sustainability and social responsibility has made them ‘buzzwords’; the same happens with Fairtrade in products from Nestlé and Cadbury.

3.5.1 Kit Kat and Dairy Milk case

Green washing is one of the concerns of the ethical consumer (Harrison et al. 2005) and not without reason. In a small survey around the recently introduced Nestlé Kit Kat bar and Cadbury's Dairy Milk bar with Fairtrade chocolate, green washing was found. The text on each bar shows the statement of the Fairtrade guarantee: "all ingredients that can be Fairtrade are fair trade". The Kit Kat bar from Nestlé and the Dairy Milk bar from Cadbury show that the companies are quite generous in presenting their product as Fairtrade. In answer to the question of how much is Fairtrade in the bar, both companies answered via their consumer info line: "100% Fairtrade". However, according to the Fair-trade Mark Ireland report, the milk bar of Kit Kat contains only 57.6% of Fairtrade ingredients. The Fairtrade organisations are not sure what the maximum level of possible Fairtrade ingredients are in their products.

Nevertheless, it is strange that a product composed of several ingredients relies on Fairtrade producers sourcing ingredients from the south when local products, such as sugar, are available. Another concern, of in particular the Kit Kat bar from Nestlé, is the selective use of Fairtrade products. The vegetable fat, sourced from palm oil, is a point of discussion by Greenpeace. That organisation writes that "Nestlé use unsustainable palm oil in their chocolate bars. (...) Palm oil is a key driver of deforestation which is destroying the apes' habitat" (Greenpeace, 2010a).

Recently, Nestlé announced a change in their policy and that they would search for more sustainable sources (Greenpeace, 2010b). The fact that Nestlé tries to make its product appear greener than it is in reality is a good example of green washing. A critical society can further help to push these food giants in a sustainable direction.

3.6 Case study of Orange Juice

Orange juice and in particular orange juice concentrate is produced in both developed and developing countries. This gives an insight into the difficulties in the process, because differences in the process between developed and developing countries are easy to find. Making juice is a straightforward process, in which oranges are picked by hand or with equipment, transported to the factory, squeezed, pasteurised and packed (Figure. 2).

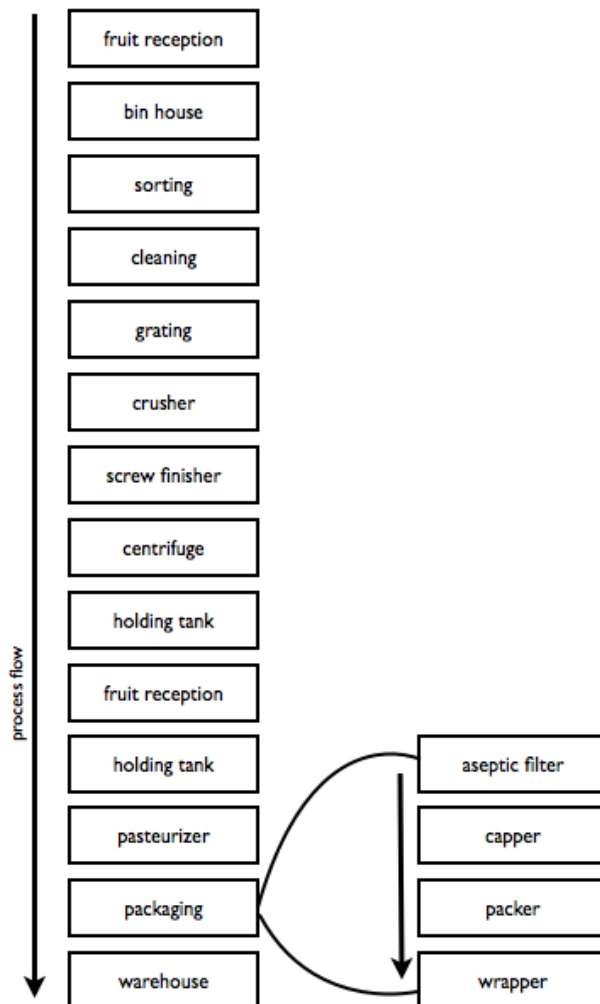


Figure 2. Flow diagram of fruit processing (Waheed et al. 2008)

Analysis shows the difference in trading conditions without the label of Fairtrade, though if we measure the sustainability side of its social part in a more technical way we can see that juice production varies in different parts of the world. Orange juice is concentrated to increase the shelf life, reduce the volume during shipping and control the supply during the year. All these technical treatments promote the flexibility and show importantly that whereas coffee and chocolate are mostly processed in developed countries, orange juice is concentrated in the developing countries. This also indicates that a Fairtrade organisation must be involved in the process. Even though the technical understanding and knowledge of the Fairtrade organisation is arguably limited in some areas, it is not with respect to juice production.

3.6.2 Technical possibilities in concentration

There are many ways to remove water from the juice to create a concentrated juice. Most popular methods are: mechanical with centrifugation; chemical with, for example, reverse osmosis; freeze concentration using reverse energy and a semi-permeable membrane; and heat application to create evaporation. Freeze concentration is used to decrease the amount of water in orange juice: “Freeze concentration of liquid foods is a technology that minimises losses of volatiles and thermo labile components” (Sánchez et al. 2010). The quality of the final product is better with freeze concentration than the conventional process of evaporation and membrane concentration. This results in a concentrated product that has a shelf life of over 14 months.

Energy is an important resource for industrial and human conduct; the production of energy is based on two forms: renewable (energy source is unlimited or can be created within a generation) and non-renewable (the cycle is too long to create the same amount of energy within a generation). From a sustainable perspective the use of renewable energy sources is essential. Most industries depend heavily on the energy demand. Waheed et al. (2008) states that within the juice industry, non-renewable energy sources have played a key role in its development.

Moreover, in countries such as Nigeria, the energy distribution is poor because of the lack of a transmission system. “Consequently most companies in the country now rely mainly on the use of a heavy-duty generating plant for the supply of their electrical energy, which is used for operations such as air conditioning, lighting and some machining processes” (Waheed et al. 2008). So in many developing countries, non-renewable energy is used in production and the author’s own experience in Central America supports this.

The energy use for the concentration of orange juice was estimated by Sánchez et al. 2010. The equipment used (constructed at the Technical University of Catalonia) is designed to concentrate under freezing conditions, “based on freezing the water content of fluids in direct contact with a cold surface. A layer of ice is formed on the exchange surface, made up of stainless steel plates through which a refrigerant fluid circulates (...) The main limitations of the process are the concentrations used appear to be related to mass transfer” (Sánchez et al. 2010).

3.6.2 Orange juice case study

At the production plant in Nigeria, one batch of 10.000kg fruit produced an overall result of 1.12 MJ/kg orange juice. 89.4% of the energy is used for the juicing and pasteurising and approximately 10% for the packaging (Waheed et al. 2008). The major energy loss occurred in the inefficient pasteurizer, which was more than 90% inefficient. Analysis of the energy source showed that the majority of production is with energy supplied from a diesel generator, with the average hourly production using 160 litres of diesel fuel. This generated 419kgCO₂eq compared to brown electricity with a calculated impact of 244kgCO₂eq (International Energy Agency, 2009).

Therefore, the production of orange juice is not sustainable at all when the energy source is non-renewable fuel. In social terms, it decreases the cash flow into life; in economic terms, the price of production is increased; and in environmental terms, the amount of CO₂ is increased by 58%.

In contrast, the case study in Florida by Filho et al. in 1984 shows that the initial energy consumption was 1.49 MJ/kg orange juice concentrate. However this includes storage and concentration of the orange juice, thus the two studies are different in technical detail and thus in the data obtained. Nevertheless, the Florida study and the Nigeria study show energy losses in the heat treatment, and both show that the initial energy for this heat treatment is 90% of the total energy consumption.

The Florida case study shows that 17% of the total heat treatment energy consumption is used efficiently (Filho et al. 1984). Whereas the Nigeria case study shows that only 10% of the heat is used efficiently. From this we can see that the installation in the developed world 25 years ago was more efficient in energy use than a plant in a developing country now.

4. Conclusions

Fairtrade challenges the existing trade relations in the world. The creation of Fairtrade has promoted awareness of trade and in particular the movement of goods from developing to developed countries. Many questions can be put about the effectiveness and the underlying aims of Fairtrade, for example the lack of self-reflection, the blind fixation on labour rights and the fixed role in certification; from the introduction of certification by third parties to the use of the Fairtrade trademark for unsustainable products such as the Kit Kat chocolate bar.

Sustainability is a tool that brings to the foreground the difference in trading behaviour between fair trade and regular trade, whereby the latter acts according to governmental legislation and fair trade acts according to its own aims. However, although sustainability is important to the Fairtrade organisation, it has been shown that it is not a fundamental aim and it is not necessarily being achieved.

In the recent history of the Fairtrade organisation, issues are found that conflict with the original idea of fair trade. The fixation on labour rights has made Fairtrade an open target for critics and other NGOs, nevertheless this open target gives a strong example of the aims of the organisation focusing on labour and in particular peoples' working environment.

The price setting and the creative use of the supply chain is another point that has received criticism from many researchers. Juice exporters disagree with the unbalanced power in the supply chain, and many well-established writers have shown that redesigning the food chain into the Fairtrade perception does not work, although the regular food chain also needs improvement. The distribution of money gives power to the actors at the beginning of the Fairtrade supply chain. However, this power is uncontrolled because the payment is FOB based, and made by the

organisation that is not a real part of the supply chain. Although the FLO guarantees a minimum price, material from FLO shows that the minimum price for many products cannot be guaranteed and so the financial incentive for farmers in the developing world is reduced.

From a social perspective, harm could be inflicted on the image of fair trade, the farmers and the employers in developing countries, because only a select group of producers benefit from fair trade and this may be seen as unjust. The local fair trade producers could not survive in regular trade and this problem has many origins. On the technical side, the lack of case studies available demonstrates that developing areas do not have the technology or infrastructure in place to support sustainability in trade.

From the micro-economical perspective comes the impression that the Fairtrade organisation is different from its stated aims and objectives. The aim of Fairtrade is to give civil society in the developed world the idea that normal trade has a greater negative impact than fair trade on the world production and life standards, but in truth, Fairtrade has disturbed the natural trade process where the best quality is provided for the best price, and this is supported by ethically orientated consumers. It is strange that the products are more expensive and have no guaranteed better standards at the end of the food chain. Nevertheless, this alternative trade system does not affect regular trade as intended in the original approach of Fairtrade, but only a minority of producers with weak positions in world trade.

The partners of Fairtrade in the southern region are not knowledgeable enough to up-skill local producers to supply their own goods as independent actors, and the Fairtrade NGOs in the northern region are not equipped to control and train the local

organisations in the south. The Fairtrade organisation cannot provide both trade independence and control of the market.

The lack of transparency in the assessments of ISO 65 certification makes the role of Fairtrade in creating independent certification doubtful. ISO 65 was developed through Fairtrade initiatives and FLO-CERT has a monopoly on certification. Furthermore, the certification cost can, in some cases, have a negative impact. For example, when the commercial price is similar to the Fairtrade price it is difficult to get the cost of the certification fee out of the process.

The fact that corporations try to make their products appear greener than they are in reality through green washing is not ideal, but partnership with Fairtrade does raise consumer awareness and a critical social society can help to push these food giants in a sustainable direction.

In conclusion, Fairtrade can, in many cases, provide a better environment for individuals directly involved; however, the non-transparent chain that disturbs trade flows, the lack of control of sustainability in the certification process, and the promotion of ethics in place of technical expertise means that Fairtrade is no more sustainable than other trade systems, and in particular cases, such as where processing is involved, could even be less sustainable than regular trade.

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