

AN ANALYSIS OF THE IMPACT OF FAIR
TRADE:
A CASE STUDY OF TEA PRODUCERS IN THE
CENTRAL PROVINCE OF SRI LANKA

H L HOLMES
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TRADE:
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HANNAH LOUISE HOLMES

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This thesis is dedicated to Judith Tomkins for her friendship, words of encouragement and belief in me.

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DECLARATION

I hereby declare, to the best of my knowledge, that no part of this thesis has been submitted for another award either at this or another University

Abbreviations

ATO	Alternative Trading Organisations
DAC	Development Assistance Committee
EFTA	European Fair Trade Association
FINE	FLO, IFAT, NEWS, EFTA
FLO	Fairtrade Labelling Organisations International
FLO-CERT	Fairtrade Labelling Organisation Certification
FTO	Fair Trade Organisation
FTRG	Fair Trade Research Group
GDI	Gender Related Development Index (United Nations)
GDP	Gross Domestic Product
IFAT	International Fair Trade Association
HDI	Human Development Index (United Nations)
HPI	Human Poverty Index (United Nations)
ICO	International Coffee Organisation
ILO	International Labour Organisation
IMF	International Monetary Fund
IPA	Interpretative Phenomenological Analysis
NEWS!	Network of European World Shops
NGO	Non-Government Organisations
OECD	Organisation for Economic Co-operation and Development
QDA	Qualitative Data Analysis
RRA	Rapid Rural Appraisal
SIA	Social Impact Assessments
SOFA	Small Organic Farmers Organisation
SWOT	Strengths, Weaknesses, Opportunities and Threats
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
U.S.A.I.D.	United States Agency for International Development
WTO	World Trade Organisation

Abstract

This thesis investigates the impact of fair trade on tea producers in the Central Province of Sri Lanka. A comparison study is undertaken between fair and conventional trade farmers to investigate the monetary and non-monetary benefits of fair trade involvement.

The study of 7 villages in the Central Province, incorporates 40 fair trade tea producers, who are members of a cooperative, and 40 conventional trade tea producers selling to a local buyer. Undertaken in July 2009, the research analyses quantitative and qualitative data gathered by means of questionnaires and interviews, to examine the different experiences of the two types of producers in terms of monetary and non-monetary benefits. Monetary benefits examined include factors such as improved income, income sufficiency, secondary income activities, pre-finance measures and excess money. Non-monetary benefits examined include education gains, household development and labour hours on tea production. The results are compared with other impact studies with similarities and differences analysed.

The empirical results presented suggest that there are no significant differences in tea income between the two groups. However, fair trade producers work fewer hours in tea production and are more likely to report both an improved and excess income. Furthermore, the fair trade producers report improved spending on food and savings and have a more diversified crop. The results are due to the increased productivity, the provision of loans and saving schemes and the increased time available to work on secondary income generating activities either on or off the farm resulting in an overall improvement in living standards.

This study contributes to the existing literature on whether and how fair trade is able to improve the well-being of small producers by offering new insights into the importance of cooperative management, working hours, productivity improvement, effective savings schemes and pre-finance arrangements. These findings are considered important to the success of the cooperative and hence to fair trade producers extracting the full benefits of fair trade and as such they are recommended as focus areas for fair trade. New data is included from tea producers in the Central Province of Sri Lanka, a new region for in-depth study and a new context, as the majority of existing studies focus on coffee and banana production.

Chapter One

Introduction

1.1 Introduction

Evaluating the impact of fair trade is becoming increasingly important in order to establish the measurable benefits to small-scale producers given the growth in fair trade sales, and the increasing engagement by workers and farmers reported in recent years. In 2013, UK sales of fair trade products increased by 14% to £1.78bn, with associated fair trade premiums of over £23m. Globally, sales in 2011/12 were €4.8bn, with over 1.4m workers and farmers and over 1,140 producer cooperatives (Fairtrade, 2013). According to the Fairtrade Foundation (2014d), consumer awareness of fair trade has increased to 78% in the UK as a result of the annual campaign, Fairtrade Fortnight, and the increasing availability of products from mainstream retailers.

Fair trade is an alternative trading system intended to aid development and reduce poverty for small, marginalised producers. In the context of a growing market, performing an evaluation of fair trade from the perspective of the producers' can inform the end consumer of the true impact of their decision to purchase a fair trade product. Ethical consumers purchase these products in the belief that there are real benefits arising to small producers, and hence demonstrating whether this is the case is an important tool in the continuance of sales growth and market share. Secondly, from the perspective of the fair trade system itself, impact studies provide essential information on the experiences of the producers within the system, leading to appropriately informed policy development. Furthermore, measuring the impact of fair trade in areas such as household development, incomes and educational standards, establishes a stronger defence to criticism that may arise from opponents of the fair trade system, such as Lindsey (2004) and Sidwell (2008)

since evidence of impact can be clearly presented. Thirdly, for the producers' themselves, it is important to demonstrate the benefits of the fair trade system beyond the potential increase in incomes to include non-monetary gains. This information may encourage new members to join local fair trade cooperatives, and provide an incentive to current fair trade producers to remain loyal to their cooperative during the times when world prices are above the minimum guaranteed price. Finally, for the cooperatives themselves, impact studies which assess their performance, and systems of support for producers, provide vital information for improvement as well as facilitating the sharing of any observed good practice. Therefore, a wider examination of fair trade impacts both monetary and non-monetary is essential to provide information to each of the key stakeholders.

The remainder of this chapter provides an overview of the research and its context and is organised as follows. The research problem is presented in section 1.2 followed by an outline of aims and objectives in section 1.3. A profile of Sri Lanka and within this, the Gampola region, is provided in section 1.4. Section 1.5 details what is meant by fair trade, and how the movement has developed from its early stages. This section briefly introduces some of the principal arguments from classical and alternative trade advocates as well as outlining the organisations involved and the processes used to select fair trade producers. Finally, the remaining section provides a brief summary of the structure of the thesis.

1.2 The Research Problem

The rising importance of, and interest in, the growth and viability of fair trade in assisting with the alleviation of poverty for small-holding farmers, and in promoting the development of poorer countries, increases the importance of establishing measurable fair

trade impacts. From 2009 to 2011, fair trade producers report a 22% increase in the value of fair trade sales, and a 19% increase in the fair trade premium (Fairtrade, 2014c).

Research carried out by Moore (2004) identifies a number of areas where research into aspects of fair trade will further academic and public understanding of key issues. Amongst other recommendations Moore highlights the need to carry out research on the “mainstreaming of Fair Trade, and the associated issues of labelling and branding” (Moore, 2004, p12) along with a further study into the “impact of Fair Trade on the Southern producers and countries which are its *raison d’être*. [This] would lead to a greater understanding of the benefits of Fair Trade” (Moore, 2004, p12). Also, with the exception of Becchetti and Costantino (2005), the discussion of the effects of fair trade on non-fair trade producers is limited (Schmelzer, 2006, p16). It is argued that this limits the findings of the models considered, as they cannot distinguish between the effects of fair trade, and the impact of actions from other sources.

This research seeks to investigate the effectiveness of fair trade in assisting with the developmental process of countries in the Southern hemisphere, herein referred to as the South or Southern countries. Research on fair trade has expanded in recent years across a variety of disciplines including economics, business management, sociology, marketing and developmental studies. There has also been growing coverage of fair trade in popular media such as television documentaries and newspaper articles. Expanding the focus of fair trade impact analysis to include tea producers and hence broadening the debate beyond merely coffee and banana production, which currently dominates the literature, as well as examining the impacts in a new country context, Sri Lanka, adds useful insights into the replication of any costs and benefits observed in other studies. The study of tea producers in Sri Lanka also assists in developing product and country specific policies since differences

with previous studies, attributable to product type and country, can be drawn out for further consideration. Furthermore, to ensure continued relevance in a dynamic global economy, impact studies need to be carried out on an ongoing basis to evaluate the impact of changing conditions on observed outcomes. In some previous studies, world prices have been below the guaranteed minimum price and hence income support has been a central part of the study. With commodity prices above the guaranteed minimum prices, a broader range of impacts can be examined.

Against this background, this research explores the monetary and non-monetary impacts of fair trade in Gampola, an area within the Central province of Sri Lanka. Focusing on tea producers, the study compares fair and conventional trade farmers responses to quantitative and qualitative questions to investigate any measurable gains from fair trade involvement. In addition, an evaluation of the long-run viability of the fair trade model is performed with a view to making policy recommendations, which can be adapted to enhance the impact of fair trade in both the short and the long run.

1.3 Aims and Objectives

This research addresses a number of questions about the impact of fair trade on individual producers and on the wider community. The focus is on three main areas, firstly, whether fair trade participation has a greater monetary impact on tea farmers' incomes relative to conventional trade producers. A statistical analysis is undertaken to identify any measurable gains, with a focus on income from tea, the existence of secondary income, satisfaction with income and the availability of excess money.

Secondly, non-monetary gains from trade are examined to investigate differences between fair and conventional trade producers' educational achievement, family size, household development and diets.

Thirdly, this thesis evaluates whether fair trade generates any negative or positive spillover effects on local farmers who are not involved in the movement. These negative effects can take the form of greater exposure to commodity price volatility, lower educational achievements for family members and comparatively lower advances in cultivation and livelihoods. It may also be the case that positive externalities are gained from local social projects funded by the social premium associated with fair trade, such as improved roads.

The study uses a mixed-method mode of analysis incorporating quantitative and qualitative information gained from both pre-existing impact studies and field research, involving questionnaires, interviews and focus groups.

The specific research questions are as follows:

1. Does fair trade participation result in any direct monetary gains for tea producers in comparison with conventional trade tea farmers?
2. Does fair trade participation lead to non-monetary gains for tea producers in comparison with conventional trade tea farmers?
3. Are there any positive effects for conventional trade farmers from producing in a region where fair trade takes place?
4. How does the Sri Lankan cooperative, the Small Organic Farmers Association (SOFA) perform against the four criteria Fairtrade (2013) considers critical to deepen the

contribution of fair trade to rural development in agrarian communities. Specifically these include:

- “The level of information and knowledge among farmers and workers about the fact that their organisation is Fairtrade certified, and how Fairtrade works;
- The quality of organisational structures in the producer organisation, particularly where these contribute to transparent and non-hierarchical ways of communicating and working;
- The motivation of the leadership and management of Fairtrade certified producer organisations;
- The share of sales into the Fairtrade market. A significant share of sales ensures that the organisation has the means to earn Fairtrade premium income, which can be used for investments in development projects” (Fairtrade, 2013).

In summary, the main objectives of this research are to undertake a quantitative and qualitative impact study of tea producers in Gampola, who operate within either fair or conventional trade markets. This study is carried out in order to measure the monetary and non-monetary gains from fair trade to draw out policy recommendations relating to the cooperatives and producers. Furthermore, the results of the study will be compared with those of previous impact studies to highlight any common themes and differences in order to inform policy recommendations for the wider fair trade system.

1.4 Overview of the Geographical Areas of Study

The villages selected for study: Samarakoohena; Deenside; Nawa Gurukelle; Gurukele Village; Oruwel; Nillambe and Dewita are based in Gampola within the Central Province of Sri Lanka. They are widely associated with the production of tea, one of Sri Lanka’s main

exports. Sri Lanka's exports (mainly apparel, tea, rubber, gems and jewellery) have been estimated at \$9.8 billion and imports (mainly oil, textiles, food, and machinery) were estimated at \$19.1 billion for 2012 (US Department of State, 2013).

The Central Province is located in the central hills of Sri Lanka and consists of the three Districts, Kandy, Matale and Nuwara Eliya. It is predominantly agricultural and has a land area of 5575 square kilometers which is 8.6% of the total land area of Sri Lanka (Central Bank of Sri Lanka, 2013). The elevation in the Province ranges from 600 feet to over 6000 feet above sea level in the central hills (Central Provincial Council, 2011).

The mean temperature ranges from 16°C to 28°C in the Province where lower temperatures are recorded in hills, in the Nuwara Eliya District. In the Central Province, 52% of the land has been cultivated, whilst another 6.3% has been identified as land which can be cultivated. In the cultivated area, more than 35% has been planted with tea, whilst 14.8% has been cultivated with paddy. The percentage of land allocated to coconut and rubber is 4.8% and 2.3% respectively (Central Provincial Council, 2011).

The population of Sri Lanka is 20.2 million (Census and Statistics, 2013). The Central Bank of Sri Lanka (2013) reports the total population of Central province in 2012 as 2,569,000, (12.7% of the national population) with a population density of 461 persons per square kilometre. According to the Household Income and Expenditure Survey (2013) 78%, 17% and 5% of the population are classified as rural, urban and estate respectively.

The Sri Lankan Department of Census and Statistics (2013) states that "Age Specific fertility Rates (ASFR) are generally falling over the years. However, during 1975 and 1987 the

decline is mainly confined to women aged 30 and over. However, significant declines in ASFR's for women aged below 30 years as well was recorded after 1993. As a result of falling ASFR's total fertility rates too, show a substantial decline from 5.0 to 1.9 during 1963 – 2000. That is in 2000, an average woman in Sri Lanka would have 1.9 children by the end of her child bearing period, if current age specific fertility rates remain unchanged in the future" (Fertility, 2013).

In 2012, GDP at current prices for the country as a whole grew by 6.4% per cent to reach Sri Lankan Rupees (Rs) 7,582 billion, with a per capita income of Rs. 373,001 that is equivalent to US\$ 2,923. The Central province accounts for 9.8% of GDP (Central Bank of Sri Lanka, 2013). Agriculture, industry, and services account for 11.1%, 30.4% and 58.5% of national GDP respectively, with 4% of the labour force unemployed, and an 8.9% poverty head count ratio. The Central Province has a poverty head count ratio of 9.7% in 2009/10 a substantial decrease from the 2006/7 figure of 22.3%, and now ranks 3rd out of a total of 9 Provinces in Sri Lanka. The lowest poverty head count ratio is found in the Western Province at 4.2% and the highest is in the Eastern Province at 14.8%. On average in Sri Lanka, 7% of households are classified as poor and therefore despite falling from 18.2% in 2006/7, the Central Province remains above the average with 8.2% of households in this region classified as poor. The highest and lowest Provinces are the same as those for the poverty head count ratio, Western and Eastern at 3% and 12.4% respectively with the Central Province ranked 3rd (Census and Statistics, 2014).

Per capita income by Province is shown in Table 1.1. The Central Province shows mean per capita income rates of Rs. 10,104 in 2012/13. The Central Province is ranked 5th out of 9

Provinces and lies below the national average of Rs. 11,819. The highest mean per capita income is in the Western province at Rs. 16,124 (Census and Statistics, 2014).

Median household per capita income in the Central Province is Rs. 7,150 compared to a national average of Rs. 7,881. Table 1.1. shows the Central Province ranks 6th out of the 9 Provinces (Census and Statistics, 2014). The 6th position ranking for median per capita household income indicates that the poverty head count reported previously is marginal since the median income is comparatively low. Indeed, the Southern and Sabaragamuwa Provinces have poverty head count ratios of 9.8% and 10.6% respectively which is compared with 9.7% for the Central Province thus there is only a small difference between those Provinces ranked 3, 4 and 5.

Table 1.1 Average household per capita income per month by province 2012/13

Province	Mean per capita income (Rs.)	Median per capita income (Rs.)
Sri Lanka	11,819	7,881
Western Province	16,124	10,567
Central	10,104	7,150
Southern	10,973	7,624
Northern	8,339	5,540
Eastern	7,622	5,385
North-western	11,596	7,927
North-central	9,877	7,824
Uva	9,382	6,110
Sabaragamuwa	10,718	7,229

Source: Census and Statistics, (2014).

The Central Province has an average performance within the context of each of the other regions with similar results to the Southern and Sabaragamuwa Provinces. All provinces lag behind the Western Province where the capital, Colombo, is situated.

1.5 What is Fair Trade?

The origins of fair trade as a model to assist with poverty reduction and to aid development gained much ground during the coffee crisis of the late 1990s and early 2000's. A report by Oxfam into the coffee crisis shows that "In 1997 [*coffee prices*] started on a steep decline, hitting a 30-year low at the end of 2001 and still hovering around that level in June 2002" (Oxfam, 2002, p9). According to Oxfam, in 2002, coffee bean real prices were just 25% of their 1960 level (Oxfam, 2002, p9). This caused a substantial reduction in farmers' quality of life and was one of the key drivers underlying the fair trade movement. However, the coffee crisis is also one of the main areas of contention in the free versus fair trade debate. While fair trade advocates see this decline in the price of coffee beans as evidence of failings in the free market system, opponents claim it results from the natural workings of the free market. It is suggested that increased productivity and efficiency led to this fall in price (see Lindsey, 2004; Sidwell, 2008). However productivity and efficiency gains cannot explain why, in 2002, farmers were not receiving a price for their products which covered the costs of production. Oxfam claim that in the Dak Lak province of Vietnam, for example, farmers were receiving just 60% of their production costs (Oxfam, 2002, p9).

Despite its global rise, fair trade has been widely criticised, especially by economists who favour the classical free trade models attributed to Adam Smith and David Ricardo. According to Lindsey (2004), interventionist schemes such as fair trade are "doomed to end

in failure – or to offer cures that are worse than the disease” (Lindsey, 2004, p1). Lindsey argues that the problems experienced by the coffee market are not a sign of failings within the free trade system but rather a consequence of the “market’s doing what it is supposed to do: improve productivity and reduce costs” (Lindsey, 2004, p2). Lindsey argues that the coffee market is, by its very nature, subject to supply lags and unsophisticated forecasts of long-term market conditions. Coffee producers are often small-scale farmers who respond to price rises in coffee by planting more coffee trees. With a lack of information on the decisions of other farmers, this leads to a flood of coffee onto the market in five years when the trees have matured. This sudden increase in supply naturally leads to a fall in world prices. Furthermore, small-scale producers tend to be risk averse and, having invested heavily in their coffee plants, are unlikely to be willing or able to diversify into other products during periods when prices are low. Furthermore, according to Lindsey “there is a limited market of politically motivated purchasers who will purchase fair trade coffee” (Lindsey, 2004, p6). This implies that there is no viable long run market for fair trade as there is only a limited market share they can capture before sales stagnate.

In order to understand the debate, one of the confusions which must be addressed is the meaning of fair trade as the term is used in two different ways. The first embodies a protectionist standpoint where fair trade is used as an argument against the importation of goods from developing countries at prices that developed countries cannot match due to their differing economic structures, and principally their higher wages (Maseland and De Vaal, 2003). The second definition of fair trade (and the one used here) is that of paying guaranteed minimum prices, above market levels, to marginalised producers under a set of criteria as defined by a conglomerate of alternative trade institutions and Non-Government Organisations (NGOs).

Fair trade is arguably characterised by collective action on the part of NGOs rather than trade unions and political parties. The central argument is that prices should be determined, not by demand and supply, but by costs of production and minimum living standards (Wilkinson, 2007). It is also argued that the system of fair trade is aimed at ensuring we fulfil our “moral obligation to pay decent prices for products that have been produced under decent conditions” (Maseland and De Vaal, 2002, p2). Interestingly, the movement is able to refer to economists, such as Keynes, who makes a case for prices to be fair, stating that “Proper economic prices should be fixed not at the lowest possible level, but at the level sufficient to provide producers with proper nutritional and other standards in the conditions in which they live....and it is in the interests of all producers alike that the price of a commodity should not be depressed below this level, and consumers are not entitled to expect that it should” (Keynes, 1946, p167).

It has been argued that poverty not only has negative impacts on the marginalised producers in the South through the exploitation of workers, but also involves much wider global implications in the form of “encouraging economic migration, breeding terrorism, and increasing environmental degradation” (Gould, 2003, p344). This view is held by advocates of fair trade who believe also that the trade model of comparative advantage (the basis of a free trade regime) acts only to serve the interests of rich consumers in the Northern hemisphere (hereinafter referred to as the North or Northern countries) at the expense of developing countries in the South.

Moreover, it is argued that the increasing poverty of farmers has a negative impact on women in their households. Male members of the family are often forced off their land to work away from the family for extended periods, leaving women to continue the farm

work. In addition, small farmers are becoming less reliant on casual labour as it is too costly. This forces women and children onto the land and to abandon schooling (Oxfam, 2002, p10). Fair trade has thus risen out of a growing concern over the apparent failings of free trade and its alleged inability to benefit Southern producers to a sufficient degree. Indeed, it is argued that, in some cases, free trade can be harmful to marginalised Southern producers (Nicholls and Opal, 2006).

The fair trade movement has been developed from a collaboration between a number of interested parties. FINE is a cooperative organisation set up by the Fairtrade Labelling Organisation (FLO), International Fair Trade Association (IFAT), Network of European Worldshops (NEWS!) and European Fair Trade Association (EFTA) with the first letters of each making up the acronym "FINE". Representatives of these four international networks hold regular meetings to coordinate their work. They are particularly concerned with developing an integrated monitoring system for the whole fair trade movement. Since April 2004, FINE has run the fair trade advocacy office in Brussels which coordinates the advocacy activities of fair trade proponents at both European and international levels. The aim of the office is to "step up public support for Fair Trade and to speak out for trade justice" (FLO, 2008a).

The definition of fair trade used in this thesis is the widely accepted FINE definition: "fair trade is a trading partnership, based on dialogue, transparency and respect, which 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, raising awareness, and in campaigning for changes in the rules and practice of conventional international trade” (FINE, 2001)

The International Fair Trade Association (IFAT) was created in 1989 and is represented in the FINE group. As an individual body, it unites Alternative Trading Organisations (ATOs) and producer organisations in Africa, Asia, Europe, Latin America, North America and the Pacific Rim. The aim of IFAT is to “improve the livelihoods and wellbeing of disadvantaged handicraft and agricultural producers by linking and promoting Fair Trade Organisations in both Northern and developing countries, and speaking out for greater justice in world trade” (FLO, 2008a).

The Network of European Worldshops (NEWS!) was established in 1994 and coordinates the cooperation of Worldshops in Europe. Worldshops are specialised retail outlets offering and promoting fair trade products. NEWS! represents 2,500 shops in thirteen member countries and initiates European-wide joint campaigns and awareness raising activities. The aim of NEWS! is “to promote Fair Trade in general and the development of the Worldshops movement in particular” (FLO, 2008a).

The European Fair Trade Association (EFTA) was established in 1990 and is an association of eleven fair trade importers in nine European countries. EFTA’s aim is “to support its member organisations in their work and encourage cooperation and coordination” (FLO, 2008a).

The Fairtrade Labelling Organisation (FLO) is an umbrella organisation of 20 labelling initiatives in twenty-one countries representing Fairtrade Certified Producer Organisations

in Latin America, Africa and Asia. FLO claims to be “the leading standard setting and certification organization for labelled fair-trade” (FLO, 2008b). The FLO certification is carried out by an independent international certification company, FLO-CERT GMBH, which ensures that producers and traders comply with Fairtrade standards and that producers invest the benefit received from Fairtrade into their own development. FLO-CERT’s key responsibilities are:

- to certify production to the pre-defined Fairtrade standards (in order to ensure this occurs FLO-CERT work with 60 independent inspectors who make regular visits to all producer organisations).
- to undertake trade audits (this enables FLO-CERT to monitor traders’ and retailers’ compliance with Fairtrade standards).

The structure of the FLO is based on “transparency and credibility and membership is open to labelling initiatives and producer networks” (FLO, 2008c). The board is elected by the General Assembly and includes:

- 5 representatives from the labelling initiatives
- 4 representatives from Fairtrade Certified Producer Organisations
- 2 representatives from Fairtrade Certified Traders
- 2 external board members

The FLO board also appoints members to its three committees, the Standards, Finance and Nominations Committees (FLO, 2008c).

The overall impact of these institutional developments is that the Fairtrade label has experienced significant growth both in terms of sales volumes and the number of producer organisations which have joined the FLO system. By the end of 2012, there were 1,139

Fairtrade certified producer organisations across 125 countries representing 1.4 million farmers and workers (Fairtrade, 2013).

Whilst Fair trade initially took the form of a solidarity and charity based movement, directly aimed at helping marginalised producers, it has grown and changed significantly from its original operational structure. The initiative has become more mainstream, with labelled products now available from conventional shopping outlets as opposed to specific charitable locations, such as Worldshops and church-based institutions. It has also taken a much more central position in political discussions following the second United Nations Conference on Trade and Development (UNCTAD) conference in 1968 when the phrase 'trade not aid' became dominant in development policy discussions. The introduction of fair trade labelled products initially assumed the existence of demand for such products from ethically minded consumers. The growth of fair trade sales in recent years indicates such demand does exist. However, in some cases, the retailer defines the consumption decision by supplying only fair trade products (Mayoux, 2012). For example, in the UK, the Sainsbury supermarket chain sources all bananas, Red Label tea and own-brand sugar via Fairtrade. Similarly, in the cooperative chain the Co-op, all own-brand hot beverages are Fairtrade, and in Waitrose supermarkets all bananas are Fairtrade.

There are two types of fair trade organisation: alternative trade organisations (ATO) and fair trade labelled organisations (FLO). The first of these, ATOs, began to operate in the 1950s and 1960s, working directly with marginalised producers in the South and selling their produce through small charity and church based groups in the North. In recent years, fair trade labelling initiatives have emerged. Coffee was the first commodity to be traded under fair trade certification and accounts for the majority of fair trade sales. In 2011, fair

trade sales of coffee in the UK were £194m within a market worth £831m (Fairtrade, 2012b). The coffee was initially imported by Max Havaalar, a certification body formed by an organisation comprised of a church-based NGO in the Netherlands and a Mexican smallholder coffee cooperative (Bacon, 2005, p500). Since the launch of Max Havaalar the growth of fair trade has been significant with various organisations promoting the interests of Southern producers to Northern consumers. Max Havaalar now operates in the Netherlands, Belgium, France and Switzerland, and the Fairtrade Foundation operates in the UK and 'Transfair' in North America. Over thirty years after the first sales of fair trade coffee there are 660,700 coffee farmers working to the standards of FLO (Fairtrade, 2013). Since its inception, the list of fairly traded products has expanded beyond coffee to include cocoa, tea, fruits, wine, sugar, honey, bananas, rice and crafts.

The role of the Fairtrade Foundation is to "audit the commercial activities related to the purchase and sale of Fairtrade products in the UK" (Fairtrade, 2008a). The Foundation receives its funding from the sale of Fairtrade licences payable at 1.8% of the net wholesale value of goods. At the launch of the 2014 Fairtrade fortnight, it was announced that the value of UK retail sales of Fairtrade products was 1.5bn in 2012, making the UK the biggest market for fair trade sales. Fairtrade bananas sales accounted for £200m, making them the Foundation's bestselling product with 35% of the market (Fairtrade, 2014c).

A report funded by the Heinrich Böll Foundation and undertaken by Krier (2007) provides a full survey of fair trade in terms of sales, profits and availability throughout 25 European countries. The survey concludes that the fair trade market depends upon a strong fair trade movement typically organised by volunteers who organise events and encourage organisations or towns to become 'fair trade'. In addition, retailers and public institutions

play a key role in the future of fair trade in terms of promoting sales and raising public awareness.

In 2011/12, the global retail sales value of Fairtrade labelled and non-labelled products was €4.8bn and reported premium receipts rose by 41% to €86.2m (Fairtrade, 2013). As the institutions and extent of fair trade have evolved over time, it has become characterised by a number of key practices (Nicholls and Opal, 2006, p6):

- *Agreed minimum prices, usually set ahead of market price minimums.* This minimum price allows consumers to make a living wage from their work based on local economic conditions. In the case of small scale producers the fair trade minimum price is set by the FLO and takes into account costs of production, provision for family members, and farm improvements. The minimum price is paid by importers when the world market price falls below this level, otherwise the world price supersedes it. This fair trade agreement guarantees that the International Labour Organisation (ILO) standards are being met.
- *Farmers and workers are organised democratically.* Small-scale fair trade farmers must belong to a democratically organised cooperative which is structured with a one-farmer, one-vote system. On larger fair trade estates and plantations, farm workers are organised into democratically controlled groups which decide how the social premium is spent.
- *Focus on development and technical assistance via the payment to suppliers of an agreed social premium (often 10% or more of the cost price of goods).* This social premium is paid to local democratic cooperatives made up of small-holder producers and farm workers. The cooperatives decide how the premium is to be spent, such as on schools, business investment or trade show participation.

- *Direct purchasing from producers.* The aim of fair trade is to reduce the number of agents acting in the supply chain, thereby reducing the number of margins extracted from the value chain and ensuring more of the final price is returned to the producer.
- *Transparent and long term trading partnerships.* Fair trade makes certain that producers are able to plan ahead and invest in new technology by ensuring that importers sign long-term contracts.
- *Cooperative, not competitive, dealings.* Fair trade fosters buyer-producer relationships built on mutual respect.
- *Provision of credit when requested.* In order to smooth income streams, importers are required to pre-finance up to 60% of the total purchase of seasonal crops if requested by the producer.
- *Provision of market information to producers.* Fair trade producers are kept informed of movements in market prices via their transactions. This information is especially useful in the producers' negotiations with buyers outside of the fair trade system which is still currently where the bulk of their product is sold.
- *Sustainable production is practised.* On fair trade farms, certain pesticides are banned and farmers are encouraged to invest the social premium in funding organic production, allowing them to demand a higher floor price for their produce.
- *No labour abuses are allowed during the production process.* Child and slave labour is banned in all fair trade production and workers must be allowed to participate in unions.

The selection of countries in which fair trade can operate are based around a strict set of criteria (as submitted to the United Kingdom Parliament Fair Trade Inquiry in 2006). The

FLO certifies producer organisations based on five widely accepted indicators of human development including, the Organisation for Economic Cooperation and Development's (OECD) Development Assistance Committee's (DAC) list of Aid Recipients, the United Nations Human Development Index (HDI), the United Nations Human Poverty Index for Developing Countries (HPI), the United Nations Gender Related Development Index (GDI) and the United Nations Richest 10% to Poorest 10% ratio (R10% to P10%). Using these definitions, the geographical scope of the FLO encompasses almost all countries in Africa, Asia and Latin America and the poorest countries in Central Asia (Fair Trade Inquiry, 2006, p1).

The selection of producers within these countries is based on the degree of marginality, their being part of a democratically organised cooperative, restraints on the use of prohibited materials and also their ability to meet the FLO criteria. The FLO has a separate set of generic criteria for small farmer organisations and for hired labour situations.

The FLO small-holder criteria include requirements based around social and environmental development, non-discrimination, and labour standards. Apart from meeting the minimum standards, there are progress requirements to promote continuous development. Amongst other points, the producers are required to adhere to the following (FLO, 2007):

- *Fair trade must add development potential.* Producers must promote the social and economic development of farmers, and as a progressive issue, they must develop a monitored plan under which the benefits of fair trade are shared on a democratic basis.
- *Members are small producers.* The majority of members in the organisation are small producers and they account for over 50% of the volume traded. As a

progressive requirement, special attention must be paid to ensure these small producers receive a cost-covering price for their product.

- *Democracy, Participation and Transparency.* The organisational structure must enable control by members, with an annual General Assembly to which reports and accounts are presented. As a progressive issue, participation of members is promoted through training and education. Transparent planning must be implemented.
- *Non-discrimination.* Restrictions on new membership cannot contribute to discrimination against particular groups and in the long-term programs must be in place to improve the position of disadvantaged groups through recruitment, staff and committee membership.
- *Fair trade premium.* The use of the fair trade premium must be decided by the General Assembly. Premiums must be used transparently. In the long-run there must be a yearly 'premium plan' and budget.
- *Forced labour and child labour.* Children are not to be employed (contracted) below the age of 15, and working must not jeopardise either schooling or the social, moral or physical development of a child. In addition, employment of any individual is not conditioned by employment of the spouse who has the right to seek off-farm employment.
- *Freedom of association and collective bargaining.* The organisation must recognise in writing the rights of all employees to join an independent trade union and cannot discriminate based on union membership.
- *Conditions of employment.* Minimum salaries must be in line with, or exceed, any official minimum wage for similar occupations and must be paid regularly in legal tender. As a progressive requirement, provisions are to be laid out in the Collective

Bargaining Agreement with respect to maternity leave and social security benefits.
Adequate sick leave must be provided and working hours monitored and regulated.
Over time, salaries should gradually be increased above the regional average and official minimum.

Fair trade is thus based on an overarching set of principles and regulations which are designed to underpin, and add validity, to the movement in the eyes of producers and consumers. The cooperation between interested parties, along with transparent enforcement and management of the principles, is essential to the growth and viability of the movement.

1.6 Chapter Synopsis

The remainder of the thesis is organised into 5 chapters. Chapter two presents an overview of the existing fair trade literature. This contains several strands, such as how fair trade prices are determined (Le Velly, 2007; Lyon, 2006), and the processes in place used to calculate the fair trade minimum price and development premium. Furthermore, a review of the literature on the impact of the social premium (Schmelzer, 2006; Oxfam, 2002) and the income benefits from various market conditions cooperatives may operate in is included in this chapter (Milford, 2004).

Secondly, some of the literature examines the perceived failings of fair trade in relation to its ability to assist with development in poorer regions. LeClair, 2002 and Maseland and De Vaal, 2002 see fair trade as inferior to other forms of aid such as direct transfer payments to producers. Difficulties of straddling conventional and fair trade markets are examined

(Renard, 2003) and of managing in areas of general economic and political volatility, characteristic of many developing countries (Rodrik, 2002).

An important aspect of fair trade literature is concerned with the traditional free trade and comparative advantage theories of trade, for which fair trade has emerged, as an alternative. The perceived failings of free trade are also examined (Alam, 2006; Fairtrade, 2008). The ability of fair trade to correct for the inability of developing countries to satisfy free trade assumptions, through the use of minimum pricing and premiums, is examined in this section.

Research on fair trade that is set wholly within mainstream economics is limited. However, producer utility optimisation, and the argument for the existence of a distinct market equilibrium for fair trade output, is detailed in Mann, 2008; LeClair, 2002; and Hayes, 2008. LeClair and Hayes consider the ability of fair trade to improve producer welfare and compare fair trade outcomes with the transfer of direct payments e.g. aid, to producers.

Some fair trade literature is concerned with the controversy over fair trade's long run viability. There are potential conflicts arising from fair trade's continuing growth, involving increasing supply, mainstreaming, attaining quality standards, increasing and satisfying market demand, poverty alleviation, stakeholder understanding and gender issues. The growth of fair trade sales may actually shift fair trade away from its founding principles of assisting the smallest and most marginalised producers, and lead to an increasing reliance on those who are able to satisfy both the quantity and quality demanded by mainstream retailers (Murray and Raynold, 2000; Wilkinson, 2007; Le Velly, 2007). It is further argued that fair trade may also be undermined by the limited awareness some producers seem to

have of fair trade principles, leading to uncertainty about their long term commitment, in the face of rising commodity prices (Lyon, 2002; Murray *et al*, 2003).

Chapter two of the thesis also discusses the empirical evidence gathered in previous impact studies, such as those undertaken in Costa Rica (Ronchi, 2002), Guatemala (Lyon, 2002), Northern Nicaragua (Bacon, 2004) and Nicaragua (Utting-Chamorro, 2005). The findings are used as points of comparison for the Sri Lankan case studies which are discussed in subsequent chapters. Common themes which are examined relate to income benefits, increased well-being of producers, the benefits of organisational production, benefits to the wider community, identification of persisting inequalities, limited stakeholder awareness of fair trade, poor producer price and premium experiences, and limited sales and finance guarantees. The methodological underpinnings of each study are also considered, and provide a further point of comparison for the present research. Finally, the theoretical framework is provided at the end of this chapter.

Chapter three details the methodological approach to research design adopted in the thesis, and demonstrates how the existing literature and previous impact studies have informed the research. As previously noted, a concurrent mixed method approach is adopted, and draws on the literature currently in existence on the design of qualitative and quantitative research through interviews and questionnaires.

With regard to the methodological approaches that have been employed in previous impact studies (Ronchi, 2002; Lyon, 2002; Bacon, 2004; and Utting-Chamorro, 2005) these have used targeted interviews with closed-ended questions, targeted surveys, participatory monitoring and observation. The variety of techniques involved in previous

impact studies has benefitted researchers through the range of data and information made available, thus allowing for a broad understanding of issues affecting fair trade producers. However, a disadvantage of this variety of approaches to field research is that comparisons between studies are problematic as it is difficult to control for the varying factors across studies, and hence to draw conclusions applicable to the whole population.

The final part of chapter three considers the design of the Sri Lankan impact study, in the context of the previous discussion on methodology. Thus, the issues involved in designing the questionnaires used in the study and the approach to interviews are outlined again with reference to the relevant literature and previous empirical studies. Sample size and the choice of areas within which samples are taken is also discussed.

Chapter four analyses the findings from the field study undertaken in July 2009 in Gampola, which falls within the Central Province of Sri Lanka. A quantitative analysis is undertaken to establish the monetary and non-monetary benefits that contribute to producers' lives. The analysis is divided into broad interdependent groups around the following themes: income; local development and social premium; access to pre-finance; well-being; education; children; organisational capacity; and awareness of fair trade.

Chapter five discusses the qualitative findings of interviews carried out with member and non-member producers in Gampola, in the context of the findings in chapter four. The discussion on the results is organised into two broad categories of monetary and non-monetary impacts from fair trade for the two producer groups. In addition, this chapter draws out policy implications in relation to management, supply and productivity improvements for both the case study and the wider fair trade system.

The final chapter summarises the main findings of the research, limitations of the study and areas for future research. The contribution to the field of research is outlined to include factors such as the in-depth study of Sri Lankan tea producers, original data and the breadth of the study to include both monetary and non-monetary factors. Indeed, these non-monetary factors have proved critical to the evaluation, along with the qualitative findings since, even where these cannot easily be monetarised, they should not be underestimated.

Chapter Two

Literary Review

2.1 Introduction

This chapter provides a cohesive overview of the current field of research on fair trade, which covers a wide range of disciplines including sociology, geography, politics and economics. The fair trade movement has gained notable press coverage as well as being the focus of academic research and this chapter attempts to bring together the various strands of analysis and commentary on the range of issues which have been explored in the literature. Section 2.2 examines the critiques of fair trade pricing and its social premium (Milford, 2004; Nicholls and Opal, 2006; Lyon, 2006; and Le Velly, 2007), whilst sections 2.3, 2.4 and 2.5 review the literature on the conventional free trade system and its perceived failings. An overview of the economic research is provided in section 2.6 with reference to LeClair (2002), Hayes (2008), and Mann (2008) who examine fair trade using traditional welfare models and supply and demand theory. The impact of fair trade on GDP is the subject of section 2.7 using research undertaken by Mayoux (2012) and Oxfam (2002). section 2.8 outlines the existing research on the long run viability of fair trade with an analysis of potential difficulties in light of steadily increasing growth rates and reliance on mainstream retailers for sales and expansion and 2.9 outlines gender issues. Sections 2.10 to 2.13 review the impact studies which have been undertaken to evaluate the effects of fair trade since its inception. Finally, the theoretical framework is presented in section 2.14.

2.2 Overview of Fair Trade Pricing

The essential basis of fair trade pricing is a 'floor' or minimum price which is calculated based on three costing factors. Firstly, the cost of production, covering land, labour and capital, is based on the results of a survey of producers within a region. The second element

is the cost of living, which includes a daily minimum wage estimated from data collected on worker's actual expenses within "thee 'baskets' of costs: nutritious food, decent housing and other essential needs [*medical, education, transport*] (Fairtrade, 2014b). Finally, there is the cost of complying with fair trade standards, which includes such things as paperwork, reporting to FLO and attending assemblies (Nicholls and Opal, 2006, p41).

There is much debate about how this price is determined and whether it is in fact a 'fair' price. Adriani and Becchetti (2004) suggest that setting a price different from the market price may sometimes be justified from a microeconomic viewpoint. The authors argue that the prices which result from traditional trade of primary products (i.e. where a monopolistic/oligopolistic company buys from small producers) are established by the bargaining power of the two counterparts which is clearly greater for the company. They therefore reason that the fair trade price might actually "be considered as the market price which would prevail if the two counterparts had equal bargaining power" (Adriani and Becchetti, 2004, p6). Arguably, "fair trade re-embeds the market by internalizing the social and environmental cost of production into the price" (Schmelzer, 2006, p44), and therefore sets a price which is reflective of the true economic cost of production rather than the power of one party over another to push prices down as low as possible.

Le Velly (2007) briefly examines the conflicts which emerge in the setting of fair trade prices. The price, as set by FLO criteria, should cover costs of production, costs of convergence¹ and a profit to allow producers to improve their activities and standard of living. According to Le Velly (2007), this price should not take account of global production

¹ Costs of convergence include the costs associated with achieving and maintaining certification and attendance at seminars and training.

volumes or consumer market prices since the FLO strives to establish minimum prices independently of market forces. Le Velly (2007) also cites situations where the fair trade minimum price strategy is undermined. For example, in some cases, there are no minimum prices set for tea where the importer and producer negotiate a market price to which a social premium is then added, as determined by the FLO. Similarly, there are no minimum prices set for craftwork imported by EFTA members, where purchase prices are set on a case-by-case basis. Such prices take account not only of the costs of production but also of the products' retail value in the North. As a result, some craft items are considered too expensive and are not traded despite potential gains from such developmental projects including greater empowerment of females within the community². In the case of other craft products a round of bargaining may be launched to get lower rates. "Consequently, it happens that the purchase prices paid by fair trade importers are the same as those paid by conventional trade buyers" (Le Velly, 2007, p8). The existence of these price setting activities within the fair trade model is difficult for many people to accept, notably proponents of free trade, since there is an expectation that fair trade embodies a minimum price, set above market levels.

However, for the majority of Fairtrade products a minimum price has been set based on the three costing factors discussed above. This process is praised for its inclusion of a social premium (Ronchi, 2002; Lyon, 2002) which is to be spent on projects decided by the producer cooperative or prevailing union. Often this premium is spent on improving health care and education provision or providing credit to farmers but may also be spent on improving infrastructure to make it easier for farmers to transport their produce. These improvements are especially beneficial for farmers in rural areas where the costs per

² This is because it is predominantly females who produce craftwork

kilometre may be high. Research by Oxfam in Uganda found that the cost of transporting a bag of coffee just 15km on rural roads to the local milling station was not much cheaper than transporting the same bag 100km along better roads from the milling station to Kampala (Oxfam, 2002, p35). Thus, the social premium allows investment in projects to help the whole community and it is this premium which creates the largest positive externalities from the fair trade system, as conventional trade producers also benefit equally from the improved roads, schools and health care. Indeed, the income generated by the premium can be substantial when one looks at aggregate numbers. In 2004, “out of US\$100 billion consumers spent on fair trade products an extra income of almost US\$100 on average was transferred to more than one million farmers” (Schmelzer, 2006, p17).

The fair trade floor prices were initially agreed in 1998 following field research into production and living costs and have, at time, been below the market price. Sixteen years after being introduced, despite inflationary changes and the disparities which exist between the production costs of different countries, the fair trade price had been raised only once (Lyon, 2006). Since 2006, prices have been reviewed by the Fairtrade Foundation and the minimum prices for the period up to October 2014 are outlined below and vary depending on the product (Fairtrade, 2014a)³;

- *Arabica coffee (conventional⁴, natural)*: the minimum price paid to farmers’ cooperatives as valid from 1st April 2011 is 135 cents/lb, including a 20 cents/lb premium. This is set against an average international price of 65 cents/lb in 2003, just over 120 cents/lb at the start of 2005⁵ and 212 cents/lb in 2014 (Coffee Prices, 2014a).

³ All prices are in US\$

⁴ Conventional refers to products which are not organic

⁵ This was the first time in five years the world price had gone over 120 cents (Fairtrade, 2008a)

- *Robusta coffee (conventional, natural)*: receives a minimum price, valid from 1st April 2011, of 110 cents/lb, including 20 cents/lb premium. The average international price was around 35 cents/lb in 2003, 51 cents in 2005 and 105 cents/lb in 2014 (Coffee Prices, 2014b).
- *Cocoa (conventional beans)*: has a minimum price, valid from 1st October 2012, of \$2,000/metric tonne, including \$200/metric tonne premium. The international price fell to a 27-year low of \$724 in 2000 but fears of a shortage saw prices surge to a 16-year high of \$2000 in October 2002 (Fairtrade 2008a). The price has continued to rise to the current level of \$3222/metric tonne (Cocoa Bean Prices, 2014).
- *Bananas (conventional, fresh)*: have various export prices depending on the country of origin and market conditions. The minimum Fairtrade price paid to farmers in Ecuador, valid from 1st January 2014, is \$8.85/18.4kg including a \$1.00 premium. Conventional prices in Ecuador during 2002/03 fluctuated between \$3.65 and \$6.64 a box (Fairtrade 2008a) and more recently trade at \$17.02/18.4kg (Banana Prices, 2014).

Dragusanu *et al.* (2014) examine the relationship between the guaranteed minimum price and the market price between 1989 and 2014. The comparison shows that despite market prices exceeding the minimum fair trade floor price in recent years, during price crashes such as 1989 and 2000, the floor price provides significant protection from risk for fair trade farmers.

It is difficult to calculate the additional income a farmer receives as a consequence of fair trade participation due to the various ways that cooperatives recoup debt repayments and

combine fair trade and non-fair trade sales of produce. Given debt payments are sometimes taken out before payments are made to farmers or a proportion of produce is sold via conventional markets, the amount received may be lower than a simple output times price calculation would indicate. However, Murray (2003) found the “revenue for Fair Trade coffee to be twice the street price for conventional coffee, even after deductions were made for cooperative management and other expenses” (Murray *et al.* 2003, p7).

2.3 Trade Models: Free Trade and Comparative Advantage

Before the appearance of free trade, the policy of mercantilism had developed across Europe in the 1500s. Mercantilism promoted governmental regulation of a nation's economy for the purpose of boosting state power at the expense of rival national powers. Early economists opposed to mercantilism were Adam Smith (1772) and David Ricardo (1817) among others. Smith stated that the “importation of gold and silver is not the principal, much less the sole benefit which a nation derives from its foreign trade. Between whatever places foreign trade is carried on, they all of them derive two distinct benefits from it. It carries out that surplus part of the produce of their land and labour for which there is no demand among them, and brings back in return for it something else for which there is a demand” (Smith, 1776, Book IV, section i, p446). Moreover, Smith argues that whilst the importation of gold and silver into countries with no mines, despite being wanted and a part of foreign commerce, is an insignificant part and states “a country which carried on foreign trade merely upon this account, could scarce have occasion to freight a ship in a century” (Smith, Book IV, section i, p447). Smith did not attribute the enrichment of Europe to the trade of gold and silver but to trade in commodities.

The logic that free trade could be advantageous for countries was based on the theory of absolute advantage put forward by Adam Smith in the *Wealth of Nations*. Smith stated, “if a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it off them with some part of the produce of our own industry, employed in a way which we have some advantage”, (Smith, 1776, Book IV, section ii, p457). Smith argued that protectionist policies would reduce the benefits of trade.

Following Smith’s logic, both countries may gain from trade by exchanging their lowest cost commodity with those of another country. The model of absolute advantage was adapted by Ricardo in 1817 to become the theory of comparative costs or comparative advantage. This theory, put forward in chapter 7 of *Principles of Political Economy and Taxation*, stated that countries will specialise in, and export, those products which intensively use the factors of production with which they are most endowed. Under Ricardo’s assumptions, “even countries that are superior in producing *all* goods in comparison with potential trading partners will benefit from trade” (Went, 2002, p12). Ricardo’s model invokes certain simplifying assumptions that can be modified to reflect the real world. In its simplest form it is assumed that two countries are producing two goods with one factor of production (no capital, land or other resources are needed for production) and fixed labour productivity. Under these assumptions, total output and economic welfare can be increased provided countries specialise in the production of those goods and services in which they have an advantage and then trade their produce with each other. The adaptation to Smith’s work of differing productivity levels between countries, enabled Ricardo to demonstrate that, because there is always something that can be traded, free trade is in the interest of every country. Smith and Ricardo agreed that free trade will “very

powerfully contribute to increase the mass of commodities, and therefore the sum of enjoyments” (Ricardo, 1996, p89).

2.4 Disadvantages of Free Trade

Free trade models are promoted by the World Bank, International Monetary Fund (IMF) and World Trade Organisation (WTO) as the most effective approach to global growth and, importantly, to economic development in the South. Indeed, these global bodies have supported free trade despite events such as in Mexico in 1994 when a crisis broke out. The IMF failed to predict this crisis and the subsequent South-East Asian crash which followed but had in fact reported how impressed they were with South Korea three months prior to the crisis. Mexico, and S.E. Asia had adopted *laissez-faire* free trade policies before the collapse and these cases arguably can be seen as a 21st century crisis of globalisation (Went, 2002, p36). Opponents of free trade argue that continuous rounds of talks aimed at moving the world towards free trade, including the Doha Round which lasted seven years before its collapse in 2008, have failed to provide sufficient support to poorer countries and that, in practice, free trade does not actually exist. For example, it is argued that the vast majority of trade takes place amongst developed countries which impose tariffs on exports from developing countries. Alam (2000) is extremely critical of the free trade regime and states that “for nearly two hundred years, economists from advanced countries have taught us that what was good for them, *a la* trade policy, was good for everyone else. They scarcely took notice of the growing polarization between advanced and lagging countries neither did they recognise that this was a problem for the theory of comparative advantage. Was this social science or ideology?” (Alam, 2000, p66).

Economists have disagreed for centuries over whether Smith and Ricardo's free trade theories are entirely viable and why, if they are superior to any alternatives, protectionism has remained prevalent through all periods and countries. It has been argued by many (Viner, 1955; Emmanuel 1972; Nicholls and Opal, 2006) that it is the assumptions of the models which can be challenged. In fact, Ricardo himself is clear that the theory of comparative advantage will not hold if capital is mobile. In this case, "international specialization will be determined by absolute costs, like specialization in one country" (Went, 2002, p15). Thus, in modern markets where capital moves freely, with limited regulation, the argument for an alternative trading system which is more suitable to the real world is strengthened. Moreover, free trade theory has been criticised for assuming that benefits will be realised by each and every country (Marx, 1848; Sideri 1970; List, 1841). Sideri investigated Ricardo's example of trade in English cloth and Portuguese wine and concluded that "when the international division of labour resulting from the classical but 'highly simplified model'....is analyzed in a more realistic setting which includes international power relations, socio-political national structures, and type of trade, then Ricardo's 'welfare proposition that trade is beneficial', in other words that 'a poor country does better to trade with a rich country', appears mainly as a long term generalization of what is correct for the most powerful manufacturing countries. Consequently, the free trade policy when utilized to produce a country's specialization in primary products really becomes 'a chain prepared for the simple....,an excellent doctrine for the strong against the weak' (Sideri, 1970, p215 [quoted in Went, 2002, p19]). This argument is mirrored by fair trade advocates such as Nicholls and Opal (2006) as discussed in section 2.5.

Marx demonstrates a mixed view on free trade. His argument against it is based on its impact on workers, claiming that this is the only criterion by which free trade should be

assessed. Marx argues that “we have shown what sort of brotherhood free trade begets between the different classes of one and the same nation. The brotherhood which free trade would establish between the nations of the earth would hardly be more fraternal. To call cosmopolitan exploitation universal brotherhood is an idea that could only be engendered in the brain of the bourgeoisie. All the destructive phenomena which unlimited competition gives rise to within one country are reproduced in more gigantic proportions on the world market” (Marx, 1848, p251). On the other hand, Marx was also opposed to protectionism and did in fact favour free trade for the single reason, “he expected such a policy to facilitate the replacement of capitalism by socialism” (Went, 2002, p27).

It is evident that criticism of free trade is not a new phenomenon put forward by those involved in fair trade. There has in fact been much discussion about the failings of the theory since its inception and many of these arguments are very similar to those raised in modern debates. Notwithstanding, free trade remains the preferred approach amongst many economists, policy makers and international bodies such as the World Bank and IMF in spite of the lack of realism in the assumptions. Friedman (1953) argues that “the relevant question to ask about the “assumptions” of a theory is not if they are descriptively ‘realistic’, for they never are, but whether they are sufficiently good approximations for the world in hand” (Friedman, 1953, p15). Bhagwati (1997) argues that “the increased internationalization and interdependence of economies in this era of globalization in no way lessens the fundamental importance of comparative advantage theory” (Went, 2002, p28). The idea of ‘kaleidoscopic comparative advantages’ is introduced by Bhagwati (1997) in order to make the theory applicable to the reality of global economies and interaction. He argues that globalisation has led to increased competition and that slight shifts in costs can now lead to movements in comparative advantage. Therefore, Bhagwati argues that

there is a need to “reject the folly of including a Social Clause and eco-dumping varieties of trade and environmental agendas into the world trade regime” (Bhagwati, 1997, pp281) because of the impact on costs. However, the proponents of free trade fail to address how to alleviate the problems of redistributing the gains from trade to the less-well off. “In what quantities and how the welfare gains of free trade are divided *among* countries is an open question in free trade theory, and the standard remedy to the inequalities caused by international trade *inside* countries is to require that the winners share some of their gains with the losers through some form of compensation” (Went, 2002, pp28-29).

2.5 Fair Trade as an Alternative Model of Trade

Alternative forms of trade, such as fair trade, have grown in opposition to the perceived failings of the free trade system. The Fairtrade Foundation argues that, with trade as an engine of economic development, better management of international trade is needed to provide the best opportunities to people in developing countries to help them escape from poverty and build sustainable livelihoods. They argue that the current model of trade limits the potential of poorer countries to achieve the gains from trade due to several factors (Fairtrade, 2008c):

- The dependency of many countries on a narrow range of primary export commodities. These products are mainly processed and marketed by companies in the North who retain most of the value. Even when developing countries do manage to undertake part of the production process they are prevented from accessing the developed markets by a series of trade barriers such as tariffs.
- Protectionist policies by richer countries prevent producers in the South accessing markets in developed countries through tariffs, but also undermine their domestic market through export subsidies, such as the EU sugar regime.

- The power of a few dominant traders in most agricultural commodities is in stark contrast to the position of the many producers operating individually across many countries. For example, several million small-scale coffee farmers sell into a market where just four companies buy 40% of global output. This is reflected in the bargaining model of price discussed earlier (Adriani and Becchetti, 2004)

The Fairtrade Foundation argues that these, and other, factors mean that agricultural commodities markets do not operate in an efficient way. Indeed, when prices for commodities such as coffee, tea and bananas fall, supply fails to reduce in line with this. This is mainly because with staple food products, demand is relatively price inelastic so that lower prices do not necessarily encourage higher consumption and producers, reliant on these products, are unlikely to cut back on production to a significant degree, favouring prices below the cost of production rather than no income at all. In fact, the lower price can result in some producers actually increasing output to sustain their incomes. The fair trade movement is seen as helping these farmers to achieve a sustainable standard of living and addressing the problems arising from the dominance of free trade and free markets.

The perceived failures of the free trade system, discussed above, can be categorised into macroeconomic and microeconomic failings. Nicholls and Opal (2006) claim that “the absence of these microeconomic conditions can nullify or even reverse the potential gains to producers from trade” (Nicholls and Opal, 2006, p18). The microeconomic conditions to which the authors refer are defined as the absence of “perfect market information, perfect access to markets and credit, and the ability to switch production techniques and outputs in response to market information” (Nicholls and Opal, 2006, p18). It is noted, that these conditions are the fundamental assumptions underlying the classical and neo-liberal

theories and hence it is inferred that without these key conditions developing countries are not able to achieve the gains from trade as put forward in these theories. The notable absence of these economic assumptions has led organisations to seek an alternative trading system that acts more in the interest of Southern producers.

In addition to the absence of key microeconomic conditions, there are a number of macroeconomic effects that have led to unevenness in international gains from trade. These macroeconomic factors have been identified as “high levels of indebtedness [*causing*] countries to rely on export-intensive industries and to exploit resources in the short term....colonial and development legacies have resulted in export earnings being highly concentrated in just a few, often primary commodity, industries, leaving countries’ national incomes exposed to world price fluctuations....corruption in many developing countries can result in a failure to distribute export income equitably” (Nicholls and Opal, 2006, p18). These issues demonstrate that there is a need to support producers directly rather than through channels open to corruption. In addition, systems designed to support and encourage product diversification will, in conjunction with the minimum guaranteed price, reduce their exposure to price volatility.

Fair trade has emerged in response to perceived failings in current trade models, especially failings in the liberalisation policies supported and adopted by many developing countries. The term fair trade automatically leads to comparisons and debate about its role and relationship to free trade, and this is evident in the literature where opinions vary between fair trade as a form of protectionism to fair trade as a “third way” (LeClair 2002; Maseland and De Vaal 2002). Furthermore, fair trade faces internal and external tension from its operational procedures such as the supply chain which means it works both “inside and

outside” the conventional market (Renard, 2003, p92). The EFTA states “the ‘invisible hand’ has given way to the idea of working ‘hand in hand’ with the market regulated by democratic authorities” (EFTA, 2001a, pp1-2).

During the 1980s, 42 countries received loans from the World Bank to support the reform of their trade regimes (World Bank, 1989). Specifically these were to allow for greater trade liberalisation. Rodrik (1992) argues that it is “paradoxical that the 1980s should have become the decade of trade liberalization in the developing countries. Thanks to the debt crisis, the 1980s were also a decade of intense macroeconomic instability” (Rodrik 1992, p88). Rodrik argues macroeconomic instability can negate the benefits of trade liberalisation.

One of the many arguments put forward by fair trade advocates is that developing countries often face macroeconomic instability and therefore are not able to benefit fully from free trade. Macroeconomic instability is identified as the presence of high and variable inflation, in parallel with fiscal and balance of payments crises (Rodrik 1992). This instability causes interference in the process of trade reform which is “expected to work by reducing the distortion in the structure of relative prices and by directing resources to sectors that can make the best use of them” (Rodrik, 1992, p89). Such a period of crisis may not be the most appropriate time for a country to undertake major trade reform, yet this is exactly what many developing countries have done by taking steps towards openness and freedom in their trade. Rodrik argues that these liberalisation policies have emerged during this difficult period for two reasons. Firstly, the difficulties themselves forced developing countries to accept a wide range of reforms. Secondly, the 1980s saw a greater leverage for institutions such as the World Bank and International Monetary Fund (IMF)

vis-à-vis debtor governments. This led cash-strapped governments to adopt IMF recommended policies with “little conviction of their ultimate benefits” (Rodrik, 1992, p89).

In a comparison of fair trade with free trade and protectionism, Maseland and De Vaal (2002) argue that, whilst it is unequivocally clear fair trade is superior in providing decent conditions to workers the situation is not as clear with regard to ‘fairness’. The fair trade model guarantees that producers benefit from decent conditions as this is a minimum requirement of the system. Although the same outcome may be achieved in a free trade or protectionist system, this would be purely by chance as the capitalist ethos would dictate that if there was a more profitable way to do it then that would be adopted (Maseland and De Vaal, 2002).

In an assessment of fairness, Maseland and De Vaal (2002) compare fair trade, free trade (Heckscher-Ohlin model) and protectionism (autarky) and find that fair trade is not always clearly the fairest option and that, in most cases, it is impossible to say *a priori* whether fair trade is an improvement. Moreover, the results are significantly dependent on the characteristics of the sector involved. For example, if transportation costs are low then free trade tends to fare better than fair trade but when transportation costs are substantial, fair trade is an improvement on free trade and a reasonable alternative to protectionism.

These results suggest that fair trade organisations need to take account of individual market structures, rather than assume superiority, and though not abandoning their minimum standards for decent conditions, need not pay ‘fair prices’ in every situation but revert to market price where the outcome is superior. However, it is noted that the studies

are short term whereas fair trade benefits are often deemed to be realised in the long-term. Moreover, the study uses two particular general equilibrium models of international trade as comparators which give little attention to the specific circumstances under which small marginalised producers operate. Thus it is a complex picture with 'fairness' being dependent on cost factors and a need to ensure decent conditions are maintained.

2.6 Review of Economic Literature on Fair Trade

In recent years, papers have been published which attempt to examine whether fair trade lends itself to an economic analysis, questioning the broad consensus that fair trade is not accessible to economic analysis. Mann (2008) argues that "fair trade involves economic transactions and that every economic transaction is accessible to some form of economic analysis" (Mann, 2008, p2034). Research by Hayes (2005, 2006, 2008) examines fair trade from an explicitly economic stance drawing on theories of general equilibrium to examine the efficiency of fair trade.

Mann (2008) examines the extent to which fair trade is reliant on market forces through an analysis of the microeconomics of fair trade, namely supply and demand and their separation from the conventional market. The fair price paid to producers is generally accepted as being higher than the prevailing world price. In this sense then, fair trade is responsible for creating a new producer price for the same quality product, in addition to the world price. This can be interpreted two ways in conventional microeconomic theory. Firstly, fair trade deviates from the world price and necessarily leads to excess supply. Secondly, the attributes of fair trade products differ from those in the conventional market, though these may not necessarily be physical, and hence both products have their own market equilibrium (Mann, 2008). In response to the first point, it is worth noting that FLO

restricts entry to the fair trade market through its registration procedure, which enables control over the volume of fair trade production. Notwithstanding, the second interpretation of the fair trade price is plausible when consideration is given to the quality and certification regulations enforced by fair trade. Indeed, fair trade cooperatives and those that employ hired labour such as plantations, must adhere to minimum standards in terms of decent working conditions, provision of health care and education, as well as satisfying environmental requirements. These attributes of the production process, which enable the product to be offered as fair trade, necessarily distinguish fair trade products from those produced in conventional markets, much like Kosher and organic foods, and hence have a distinct market equilibrium (Mann, 2008).

In examining the setting of fair trade prices it is important to establish what takes the place of demand and supply. Given that fair trade prices are typically above the market level, their determination is open to debate. In fair trade, prices are determined “in order to cover needs, not in order to address the degree of scarcity” (Mann, 2008, p2037). As outlined in section 2.2, prices are set based on what producers demand and/or based on production costs plus a surplus for future investment, usually estimated to be fifty percent above the world market price. Hence it is debatable whether prices should be higher for some commodities e.g. tea from Sri Lanka as compared to from India. Economic analysis implies that a higher price in Sri Lanka may come from either the fact that living standards may be higher in Sri Lanka than India or that the climatic conditions in Sri Lanka are less suited to tea production leading to lower yields and hence a requirement for higher margins from the producers. Both of these scenarios signal that India has a comparative advantage in tea compared with Sri Lanka. Given that most countries have an excess of fair trade suppliers, it would be possible for middlemen to switch entirely to Indian tea at a

lower average price. In the long-run this would increase efficiency as there would be a move towards the world market equilibrium and all producers would eventually produce for minimal marginal costs. This outcome leads to a conflict between the aims of fair trade and the demands of fair trade consumers. Notably, fair trade consumers are driven by equitable concerns for producers rather than efficiency, although it can be said that the current system of fair trade registration is already inequitable because of the quality and certification requirements creating a barrier to entry for the most marginalised (as discussed further in section 2.8.4). However, given the implied higher living standards of the Sri Lankan producers, the targeted policy of focusing on Indian producers would mean the system was indeed helping the poorest producers (Mann, 2008). Indeed, it is argued by Mann that by abandoning market prices as the criterion for buying decisions, there has been a loss of transparency, efficiency and equitability which can be restored by re-establishing the market price whilst maintaining the current set of social standards. This could potentially be supported by governments in the North producing a framework for favourable social conditions in the South. Mann concludes that “the price premium paid by consumers is probably paid not only for better social conditions, but also for lower production efficiency. By establishing a competitive environment for delivering social standards as well, Mann argues that more welfare for producers in the South could be delivered at a lower price” (Mann, 2008, p2041), and suggests a first step towards achieving this is for broad discussions to be held on the advantages and disadvantages of import restrictions on social grounds.

Further evidence that fair trade can indeed be analysed with an economic framework is clear from the work of Hayes (2005, 2006, 2008). In examining the relationship between a local fair trade organisation and the individual producer-household, orthodox economic

theory is used which gives primacy to market forces and assumes rational optimisation by competitive individuals. This stance is adopted in order to challenge opponents of fair trade (Lindsey, 2004; Sidwell, 2008) on their own terms, rather than as a true reflection of fair trade practices. Hayes (2006) argues that the fair trade price premium is not necessary or sufficient for fair trade and in a given situation of involuntary unemployment, does not lead to inefficient allocation, except in the case of full employment - where fair trade would be unnecessary. Moreover, fair trade should be encouraged as a complementary element of trade policies with a genuine concern for marginalised producers, as it improves welfare through strengthened competition for labour. This conclusion is drawn by Hayes (2006) following an analysis of the labour supply decision in a state of Keynesian involuntary unemployment with a choice between work and inferior production activities or petty self-employment. This is as opposed to a work/leisure choice with the theory of employer monopsony resulting in a focus on the local fair trade organisation. This local organisation may take the form of a charitable or community organisation, an enlightened employer, or a cooperative. The outcome is similar to that which occurs with a labour union or a minimum wage in eliminating monopsony rents and hence simultaneously increasing household income and promoting efficient allocation (Hayes, 2006). The paper concludes that the principal effect of large-scale fair trade is the “elimination of monopoly rents, in the local market for the labour services or products of self-employed households, and for their productive inputs” (Hayes, 2006, p466). Moreover, it is not necessary for fair trade to pay producers in excess of the marginal value of their product, as they will naturally increase production so that they benefit more from the increased price of labour. In general this is seen as having no direct relationship to the fair trade premium. Consequently, labour will move away from, and not towards, inferior productive activities and there will be a

move towards the Pareto optimum of full employment equilibrium under perfect competition.

LeClair (2002) argues that whilst fair trade benefits a significant minority of marginalised producers, it nevertheless “assists one set of producers, potentially at the expense of others, and it promotes continued reliance on products that are arguably poor prospects in the long run” (LeClair, 2002, p957). Examining the model LeClair uses, Hayes (2008) concludes that fair trade producers may indeed gain at the expense of non-fair trade producers but not in all circumstances, indeed only in the case of inelastic demand. Furthermore, the idea of fair trade as a second-best form of assistance at the potential expense of others is shown to be dependent on the particular definition of a subsidy and the assumption of full employment. Hayes (2008) argues that the differences in income LeClair shows in his analysis are identified incorrectly. The subsidy from ethical consumers, according to Hayes, should be reinterpreted as “the excess of the value paid by the ethical consumer over the normal market value of the goods received [*since*] it is only this excess that can be properly compared with a donation” (Hayes, 2008, p2955).

Indeed, when the subsidy is re-interpreted, it can be shown that fair trade is more effective than aid as it multiplies any charitable impulse from the consumer and results in an efficiency or welfare gain for the whole of the society represented by a producer’s income gains in excess of the consumer’s subsidy (Hayes, 2008). Also, the conclusion by LeClair (2002), that fair trade promotes reliance on products and deters diversification, is refuted by Hayes (2008) who argues that fair trade can promote diversification. This can arise at household level through investment in education, and by the cooperative through its access to credit, different markets and movement up the value chain. Hayes (2002) argues

that LeClair (2002) fails to address the importance of investment in children's health and education and "assumes that the assessment of long-term investment prospects depends only on current income [and] over-estimates the value of marginal factor resources in conditions of aggregate under-employment" (Hayes, 2008, p17).

It is clear that the benefits of fair trade can be analysed using economic theory though the outcomes differ depending on the assumptions applied within the models. However, there remains a limited body of literature within the field of economics. This may be associated with difficulties in applying models of efficiency and full employment to a regional or local context where under employment is prevalent and subsistence labour is preferred to unemployment.

2.7 Literature Review of the Impact of Fair Trade on GDP

The importance of agricultural exports to some of the poorest countries in the world has been referred to widely in the current literature. Coffee, as well as other raw materials currently licensed to be produced under fair trade conditions, are the main exports for a number of countries. Encouraged to specialise in products in which they have a comparative advantage and to embrace the liberal world of free trade by the World Bank and IMF, many governments invested heavily in coffee tree plantations. The investment in commodities susceptible to market forces has left many economies suffering, as the share of exports and value they capture has declined. A report by Oxfam states that "Ten years ago producer-country exports captured one-third of the value of the coffee market. Today they capture less than ten per cent" (Oxfam, 2001, p2) with the remaining 90% captured by the importers and supply chain.

The World Bank provides figures on coffee exports as a percentage of total exports in 2000 as follows: Burundi 79%, Ethiopia 54%, Uganda, 43%, Rwanda 31% and Honduras 24%. (Oxfam, 2002, p8). It is important to note the importance of these exports to the livelihoods of people in these countries. According to Oxfam, “In Uganda, the livelihoods of roughly one quarter of the population are in some way dependent on coffee sales....In Guatemala, more than seven per cent of the population is dependent on coffee for its livelihood in neighbouring Honduras, nearly 10 per cent. In Nicaragua.....coffee accounts for seven per cent of national income” (Oxfam, 2002, p8). There is a further impact from the declining value of exports since import prices do not fall so fast leading, to deterioration in poorer countries’ terms of trade.

With declining export value for coffee, governments have fewer funds for investment in health care and education, and from a microeconomic perspective, individual farmers are forced to make cut backs on food, medicines and educating their family – especially the girls (Oxfam, 2002, p2). It has been suggested economic growth alone is not sufficient to enable development to take place and it is the microeconomic policies and direct impact on farmers which is central to this. Indeed, it is argued that “the ways in which international, national and local markets are structured has critical implications for people’s livelihoods. This means that economic growth in itself is not necessarily sufficient for poverty reduction” (Mayoux, 2012, p5). However, as part of a development model, economic growth plays a crucial role and since the fair trade initiative works through international trade, it is important to assess the true impact of this for a country. It may be argued that fair trade can help promote economic growth as it increases output, most obviously through the incentive of minimum floor prices but also as productivity increases through the creation of job satisfaction and improved working conditions (Mayoux, 2012).

Smith (2010) reports that, in countries including Ghana, the Windward Islands, the Dominican Republic and Ecuador, the additional revenue from fair trade accounts for between 0.004% and 0.3% of GDP with Ecuador and Ghana experiencing impact at the lower levels due to the small proportion of bananas exported from these countries.

It is clear that fair trade has the capacity to affect a county's GDP through the generation of additional revenue hence expansion or contraction of the market can impact on overall living standards depending on the proportion of the market exports account for.

2.8 Review of Literature Critiquing Long Run Viability of Fair Trade

A number of studies (Murray and Raynolds, 2000; Vanderhoff, 2002; Renard, 2003; Lewis, 2005; Le Velly, 2007; Hayes, 2008; Dolan, 2009; Elliott, 2012) consider the long-run suitability of the fair trade model. For example, research has focused on areas such as the scope for diversification by farmers, adaptation of the current fair trade model, and some predictions as to the future impact of fair trade on global output and development. One of the key concerns of many economists is that the fair trade model encourages over-supply in specific markets by paying farmers a price above the market price (Ronchi, 2002). This is discussed below together with the potential consequences for farmers in the long run of diversification or adaption of the fair trade system.

The long run viability of fair trade is examined in the following sections within the context of the three dimensions of sustainable development: economic, social and ecological. In addition, a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis can be used to examine the viability of fair trade with respect to its capacity for enabling the growth of fair trade, self-financing and its 'ownership' by the beneficiaries (Paul, 2005).

2.8.1 Increasing Supply

In 2013 the world coffee market displayed record levels of production but there are concerns (Benzinga, 2014) that, although production is high, demand is likely to outstrip supply. Coffee production in the crop year 2012/13 reached 145.1 million bags. All coffee-growing regions reported steady production growth since 1963, with the exception of Africa (ICO, 2014). However, crop failure in Brazil, which supplies one third of the world's coffee supply, following a drought in January 2014 (Bloomberg, 2014) and the effects of damage to crops from 'coffee rust' fungus in Central America, which supplies 10% of the world's coffee supply (Benzinga, 2014), has led to concerns that demand will outstrip supply. Forecasts of price increases for Arabica beans to \$3/lb from \$2.06/lb (Bloomberg, 2014) appear to have been overestimates, as Brazil has reported sufficient excess production from the 2013 harvest to meet demand. However it is feared that the damage from the drought will continue to have an impact on supply until 2017 (Benzinga, 2014). The reduction in supply, following a number of years of over production in the coffee market, is contrasted with a 1% increase in demand in traditional markets such as the USA and a 5% increase in demand in non-traditional markets such as Asia (Volcafespeciality, 2013).

During the period that the coffee market was regulated (1965 - 1989), the global supply level "was equivalent to almost double that of world consumption" (ICO, 2014). This oversupply led to a build-up of stocks which kept coffee prices at a depressed level. Oversupply occurred as coffee production was encouraged by the World Bank, IMF and national governments to assist countries out of poverty. However this strategy has led to increased poverty, as farmers find they cannot always cover the costs of production. If, as some economists believe, fair trade encourages the production of selected products, then

the likely impact is for supply to continue to grow (subject to environmental shocks) thus suppressing world commodity prices in the long run. Nicholls (2005) claims that fair trade is too small to have any “price-setting” impact, but there will need to be changes to the system if the movement gains a more significant market share as significant distortions may then occur. Options for change are to abandon the price floor mechanism after reaching a certain market share, or to increase the sophistication of the mechanism by offering different price floors based on quality and origin (Nicholls, 2005). In addition, Nicholls (2005) states that any ‘deadweight loss’ from excess supply may be lower than anticipated if consumer demand adapts as a result of the provision of information on the negative implications of paying low prices. Such a scenario, will affect the elasticity of demand for low-priced goods making “the demand curve flatter and the deadweight loss created by a price floor much smaller” (Nicholls, 2005, p9)

Conversely, the European Fair Trade Association (EFTA) claims “In practice, evidence from nearly 40 years of fair trading suggests that very few producers have expanded production due to the higher price paid – given the tiny parcels of land they possess and the lack of working capital and resources, it is almost out of the question” (EFTA, 2001b, p29). On the other hand, Ronchi (2002) finds evidence in Costa Rica that cooperatives are purchasing more coffee lands to provide employment to the children of members and those with tiny holdings. Ronchi points out the importance of establishing whether these land purchases are “induced by higher liquidation prices and fair trade support for the cooperative and whether or not the scale of such expansion can undermine the *financial* fair trade gains for producers” (Ronchi, 2002, p23). Such expansion, if replicated globally and over a sustained period, could impact on market prices. Instead of encouraging farmers to increase supply, diversification of both product and labour is encouraged.

2.8.2 Diversification of Product and Labour

Diversification is examined from two perspectives in this section. The first is labour diversification, moving farmers off the land and into more productive activities. The second is product diversification where farmers move into higher yield crops.

Unfortunately, farmers face difficulties in switching away from single commodity dependence. Apart from the costs of switching, failures by international aid agencies to promote rural development and diversification and protectionist policies by the EU and US allegedly prevent farmers in developing countries from diversifying into other commodities (Oxfam, 2002, p31). Whilst it seems irrational for farmers to continue in loss-making production, when the viable alternatives are analysed, the decision is perfectly rational. Many farmers may not have the finance or skills to switch to alternative commodity production. Indeed, studies have shown producers lack the ambition to switch away from loss making activities such as coffee (Lewis, 2005; Nicholls, 2005). When interviewed, producers demonstrated an emotional attachment to coffee production and to tradition. Others cited a lack of alternatives while still others were hopeful of a return to higher prices enjoyed in the past (Lewis, 2005).

Fair trade acknowledges the importance of encouraging and supporting diversification, and actively promotes the movement of farmers into higher yield organic crops. Hayes (2008) sees diversification as being part of the long run achievements of fair trade allowing intergenerational changes to take place. Hayes (2008) believes the higher price received by fair trade farmers reduces the need for children to work on the farm, facilitates education opportunities and thus allows them to seek employment beyond the land. However, there is evidence to suggest that, contrary to the belief and marketing of fair trade advocates,

such as Hayes (2008), fair trade pricing may actually lead to an increase in migration. This issue is considered by Lewis (2005) in her study of coffee producers in Oaxaca, Mexico where it is observed that richer families see members migrate to the United States of America. Lewis (2005) examined the long-term viability of fair trade with increasing migration in a context where the fair trade coffee price had not changed from \$1.26/lb for the previous ten years whilst generally nominal wages had doubled in five years (Lewis 2005, p70). In order to ensure farmers do not abandon coffee, prices thus need to increase and remain high. However, migration can actually assist families left behind, in that remittances enable poor, rural household to access financial institutions, with a study showing that 42% of households with migrants in the US had bank accounts, compared to 5% for families with no US migration (Lewis, 2005).

Whilst these two stances are on the surface contradictory, this may not be the case in fact. The argument of Hayes (2008) that migration increases through diversification, and is a positive outcome of fair trade in the long-run, is based on the improved education of future generations which enables them to find employment in alternative sectors. This is in contrast to a situation where only individual family members migrate to seek income for the family left behind. Lewis (2005) attributes this to the wage differentials which exist between the fair trade floor price and nominal wages in other sectors. Thus, Lewis' argument is not contradictory. In her study, migration is a negative outcome and can be addressed by raising the fair trade minimum price. Hayes (2008) sees migration as a long term outcome of the improvements in information and education for future generations. It is therefore a positive impact which should be encouraged in the long run. Lewis (2005) does not directly criticise migration per se, but does so in the context of individuals having to leave the family home to seek for higher wages.

2.8.3 Mainstreaming of Fair Trade

Fair trade itself is changing. A fundamental principle of fair trade is to work with marginalised small producers. As economic and social variables make it extremely difficult for these producers to access and benefit from the market independently, fair trade offers a means of support to them. Fair trade differentiates itself from the conventional trading relationship between buyers and producers, by removing the dominance many buyers exert in markets for primary commodities. Working with democratic cooperatives and marginalised producers and preserving cultural traditions are two fundamental characteristics of the fair trade approach. Over the past decade, however, in terms of retailing, fair trade has moved away from small shops, which attract mainly ethically-concerned consumers, to a more diverse range of selling points, including mass sales through supermarkets. A survey by Mintel in 2005 estimated that “less than a fifth of fair trade products sold in 25 countries were in ‘world shops’, down from a third in 2000” (Dolan, 2009, p3). Mass market retailers have initiated training schemes for staff and undertaken advertising campaigns to enlarge their market. This varied approach to selling has enabled the fair trade message to reach a wider audience and help more producers in the South through increased demand.

This mainstreaming of fair trade creates a dilemma between remaining loyal to its roots as an alternative market model and the need to secure buyers for the marginalised producers who require a higher price for their crops in order to improve living standards. The fair trade system finds itself juggling the need to continue “to be pure (and marginal) or aligning with the large distribution (and losing their soul)” (Renard, 2003, p92). Concerns have been raised about firms straddling both the fair trade and conventional market by purchasing a small amount from fair trade and the majority from traditional sources (Dolan, 2009; Elliott,

2012). There is also some concern that, by becoming part of the mainstream market, fair trade will lose its identity as the traditional sellers (e.g. supermarkets) gain more control over the system. Indeed, the mainstreaming already observed has allowed dominant firms to gain some of this niche market and, it may be argued, to reduce the viability of the movement by their involvement. Moreover, firms such as Starbucks and Body Shop have launched their own certifications, the purpose of which may be to undermine the fair trade movement by confusing the consumer, and/or to gain some of the lucrative niche market. Reynolds (2000) argues that “to avoid being absorbed by corporations and their conventional trade practices....alternative trade movements must build new and tighter links between Southern producers and Northern consumers” (Reynolds, 2000, p299). Dolan (2009) argues that the mainstreaming of fair trade means that its success is more likely to be gauged on the volume of sales and social premium than on the realisation of its principal objectives. Low and Davenport (2005) state that “the process of mainstreaming has led, in many instances to the separation of the medium (fair trade products) from its message about transforming traditional exploitative and global production and trade relations” (Low and Davenport, 2005, p495).

There are in fact a number of issues arising from this new commercialised approach. Firstly, the choice of producer is focused somewhat on producer groups which produce a marketable product (EFTA, 1996). This approach by EFTA involves assessment questionnaires for potential producers in order to evaluate their democracy, marginality and community development projects. Also considered are the degree to which their products reach European technical standards and consumer tastes and, controversially, whether the producers have sufficient export and production capacities (Le Velly, 2007, p5). The contradictions with fair trade and mass marketing are clearly evident here in this

process of deciding which producers are selected. The emphasis on maintaining cultural traditions is downplayed in favour of meeting the tastes of Northern consumers. Moreover, the importance of having export and production capacities may undermine the fair trade principle of employing marginalised producers. Le Velly (2007) cites evidence where the producers selected are those with superior developmental projects and market capacities compared to more culturally authentic and marginalised producers (Le Velly, 2007, p. 6). Further evidence by Le Velly (2007) shows that, in order to meet FLO criteria, the producers cannot by definition be the most marginalised. Supermarkets and coffee shop chains demand high quality products and regular deliveries. Hence the suppliers who meet these criteria cannot be the poorest as they must have sufficient resources to meet these requirements. Raynolds (2000) argues that fair trade has in recent years expanded its eligibility “to include plantations with high labor standards.....fuelled by the recognition that often landless workers are in reality the most seriously disadvantaged and that some commodities are rarely produced by small-holders” (Raynolds, 2000, p303).

The implications of mainstreaming on the organisation and governance of fair trade is examined by Dolan (2009), in a case study of Kenyan tea farmers. She finds that while ATOs and FLO have shared agendas in terms of their commitment to equity, there is little difference between fair trade and conventional market systems. It is argued that, with the exception of the social premium, there is no difference because the conventional and fair trade systems exist within the same commodity chains. Furthermore, Kenyan fair trade tea is supplied via the same method as 85% of all Kenyan tea. This is the Mombasa Tea Auction, which is governed entirely by demand and supply (Dolan, 2009). The nature of the auction undermines the ethos of fair trade as the output of the certified cooperative is sold as conventional, processed black leaf tea. “The designation of Fairtrade occurs at the

marketing stage when retailers communicate to importers how much Fairtrade tea they wish to purchase” (Dolan, 2009, p5). This process, known as recertification, means that the cooperative officials have no idea how much tea is sold at auction. They simply find the money in their accounts with a date and there is no clear indication of how the sum is arrived at or what the volumes are (Dolan, 2009). In 2007, FLO implemented a minimum price for tea of USD \$ 1.4 and USD \$1.5 and this varies to accommodate varying regional production costs (Fairtrade, 2007). In line with other impact studies, (Ronchi, 2002; Utting-Chamorro, 2005; Lyon, 2002) Dolan (2009) reports that producers in Kenya had a lack of understanding of the fair trade system, no knowledge of where their product is sold nor that it should command a higher price. Dolan (2009) argues that the mainstreaming of fair trade has “engendered practices that depart from the movement’s seminal values and impoverished its capacity to deliver empowerment, autonomy and economic justice” (Dolan, 2009, p9).

Le Velly (2007) examines mainstreaming from two differing approaches. These are, firstly, an integrated approach, where the final seller and producer have a relationship based on knowledge of each other’s activities and the knowledge is shared with consumers, and secondly, a labelled approach in which the seller and consumer have little knowledge or experience of the product’s origins. The labelled approach is becoming increasingly common as supermarkets stock fair trade products, leading to greater awareness and also a dramatic increase in fair trade sales. Importantly, these labelling initiatives are not considered to be a violation of international free trade agreements by the WTO as they are strictly voluntary and do not discriminate by country of origin (Raynolds, 2000). Notwithstanding, Le Velly (2007) argues, as others do, that the growth in fair trade to meet

the mass market and satisfy demand in the North, may undermine the principles upon which fair trade was established.

Le Velly's (2007) analysis of large-scale fair trade emerged from a field study undertaken by the French promoters of fair trade, Artisans du Monde and Max Havaalar, and focuses on the changes in the trade relationship induced by rising fair trade sales. Le Velly (2007) examines the contradictions which may arise in the fair trade ethos, which was initially intended to address the perceived malfunctioning of "conventional trade". As fair trade sellers increasingly use "certain capitalist economic gears to increase their sales, the question of the fair trade graft's [*output/produce*] being accepted or rejected arises" (Le Velly, 2007, p2).

Traditional fair trade retail outlets typically operated a close relationship direct with suppliers, placing and receiving orders directly from producers who had been found through acquaintances. Thus long-term agreements were established. However, as the movement has grown, the industry has moved to a more centralised approach. While anecdotal evidence shows the advocates of the traditional decentralised approach are unhappy with the change, there are no plans to reverse it (Le Velly, 2007). The centralised approach to purchasing management "enables the network to rely on a large number of producers' groups, greatly facilitates stock and delivery management, and makes the creation of a wide, co-ordinated and frequently renewed product range possible" (Le Velly, 2007, p11). The use of supermarkets, although clearly enabling a much wider consumption of fair trade products, weakens the link between producers and consumers as information can only be conveyed via packaging. Furthermore, in labelled chains, commercial activities are no longer controlled and practices must simply conform to a number of pre-established

standards. In addition, FLO does not choose the organisations which will benefit most from fair trade but draws up a shortlist from a register of producers who meet their criteria. This is known as the coffee register. The importer is not restricted to dealing only with marginalised producers but may also consider well-structured producers of private plantations which may be able to deliver higher quality in larger quantities. In fact “forty percent of the organisations in the coffee register have never had a single order under fair trade” (Le Velly, 2007, pp14-15).

The conflict between utilising mainstream outlets and traditional points of sale is considered by Low and Davenport (2005). They argue that the typical consumer is predominantly concerned with price and quality when consuming a product, and less concerned with the ethical component which they often do not understand. As a consequence, “many elements within the movement have started to focus on selling the product, perhaps at the expense of the message” (Low and Davenport: 2005, p500). In further exploring these issues, Low and Davenport (2005) examine whether it matters what sort of business sells the good, provided that more volume is sold. Arguing that it is of significance, they use the term ‘clean-washing’ to describe what occurs “when a company derives positive benefits from its association with the fair trade movement, however minimal its efforts to “live the values” (Low and Davenport: 2005, p503), and cite examples of how companies such as Starbucks have ‘clean-washed’ their way into the market despite only stocking a small volume of fair trade product. This ‘clean washing’ or “image-laundering” (Renard, 2003, p93) can potentially cause confusion amongst consumers about what fair trade actually is, potentially undermining the growth of fair trade. However, this has to be balanced with the potential market access that mainstreaming enables.

Wilkinson (2007), like Le Velly (2007), examines the dilemmas faced by fair trade as it emerges as a global movement, and highlights three criticisms of fair trade. For some people the certification schemes undermine the “producer-consumer network since the interpersonal basis of trust is replaced by standardized auditing systems” (Wilkinson 2007, p223). The second argument concerns the use of big businesses in retailing fair trade, despite their unfair practices in the past being seen as one of the reasons for the establishment of fair trade. Finally, it is suggested that the certification scheme implemented by the FLO is the beginning of a downward spiral which will allow for the creation of softer fair trade criteria, “as in the Utz Kapeh scheme promoted by the Dutch retailer, Ahold, opening the way for private supermarket brands” (Wilkinson, 2007, p223).

Nevertheless, Wilkinson goes on to argue that mainstreaming “should not represent a moral threat to Fair Trade as a movement but should be understood as one of its strategic components” (Wilkinson, 2007, p237). This assertion is based on his assessment of the benefits experienced by the entire movement through greater awareness of its practices and principles. However, as already noted, the movement is often criticised for permitting practices which it was established to oppose (Renard, 2003; Raynolds, 2000; Murray and Raynolds, 2000). Transparency is seen only at the producer level and profits are concentrated down the supplier chain where there is less transparency and price control. Furthermore, the majority of “value-added” activities still remain largely in the North with Southern producers primarily involved in raw material production. Political campaigners, who are part of the movement, focus on this issue, as tariff barriers make it difficult for producers to move from raw material production to processing. On the other hand, it can be argued that the fair trade labelling scheme and mainstreaming of products adds greater

strength to political discussions through increased awareness of the issues (Wilkinson, 2007, p237).

The mainstreaming of fair trade is also supported by Hutchens (2007) who argues that in contrast to the early strategy of selling through small shops, “fair trade brands represent an arguably superior approach to fair trade mainstreaming congruent with the movement’s broader goals of market transformation” (Hutchens, 2007, p1). Hutchens discusses mainstreaming through the emergence of fair trade branded products such as Cafédirect, Agrofair and Divine Chocolate. These branded products have moved away from a non-profit environment associated with the traditional FTOs into a for-profit structure, and utilise marketing and branding to compete in the mainstream. This market strategy has apparently worked. For example in 2003, the Divine Chocolate Company became profitable, and has continued to be so year on year. In 2007 the company made its first dividend of £500/share following 18% sales growth in 2006 and the receipt of post-tax profits of £450,000 (Hutchens, 2007, p. 5). Whilst these forms of FTO are not the norm they are making headway as a new approach to the fair trade model.

Hutchens also discusses the mainstreaming of fair trade through the use of FLO certification. She acknowledges that, provided the producers have a trader to whom to sell, the fair trade revenue provides a source of financial security. However, as with Wilkinson (2007), there is recognition that producers are constrained to raw material production at the low-value end of the chain. Coffee branders and roasters receive nearly 2.5 times as much of the market value as fair trade producers, and the retailer margin is roughly 1.4 times the amount returned to the grower (Hutchens, 2007, p7). Hutchens (2007) argues that, although the certification scheme returns a higher rate to the producer than

conventional trade value chains, it compares relatively poorly with the brand-owners' share such as the Divine Chocolate Company, where the producer is also able to benefit from the true retail value of their product.

Hutchens, like Wilkinson (2007), is critical of the mainstreaming of fair trade through certification, as this means the movement is dependent on some of the largest players in the market, such as Starbucks, for funding. This funding comes from the purchase licences which are the main source of finance for the FLO. However, the fee structure for licences is based on the traders' market share, sales or volumes. Due to their size, traders such as Starbucks provide the largest revenue regardless of how little fair trade volume they stock or sell. This has led to claims that several fair trade requirements for producers have been omitted. For example Hutchens (2007) suggests there is a diminishing focus on market access for marginalised producers and a loss of the direct trader-producer relations. Hutchens (2007) goes on to argue that the FLO license definition, currently for those involved in production, packaging and labelling of products, "tends to exclude retailers who outsource these production activities. Absented from contractual commitments to fair trade practices, retailers are free to switch between Fairtrade producers at their discretion, abandon relationships with producer groups, buy the cheapest Fairtrade produce available and ultimately threaten the system's capacity to offer developmental benefits to producers" (Hutchens, 2007, p9). Furthermore, to accommodate the large retailers' preferences to continue their operations with current suppliers, the FLO has begun to inspect and certify large-scale commercial farms and plantations to a greater degree.

Hutchens provides an interesting comparison between the benefits of fair trade brands such as Divine, and the certification scheme. The growers for such a brand are also the key

shareholders and directors. Therefore they receive, not only the fair trade price and premium, but in addition a dividend payment from the ownership of brand equity. It is argued that these fair trade brands preserve the founding principles of the movement by retaining a focus on small producers and offering technical assistance to improve skills and knowledge, which enables producer empowerment.

Another difficulty which fair trade faces is the increasing likelihood that cooperatives will pursue direct relationships with supermarkets and transnationals. In Mexico, for instance, organisations have established direct links with Starbucks, Neumann and Carrefour (Murray *et al.* 2003, p23). It is felt that these direct agreements could undermine the viability of fair trade and cause confusion to both consumers and producers through differing standards, certification requirements and pricing agreements being applied.

It is evident that mainstreaming requires fair trade to reassess how it can align its fundamental principles to the demands of the mainstream market. Trade-offs exist between gaining mass market exposure leading to increased market share and sales of fair trade products, and the demands of the marginalised producers and ethical consumers. The pursuit of direct relationships between cooperatives and supermarkets may lead to greater benefits for producers by capturing more of the export value, or may undermine the fair trade system by confusing consumers or diluting the traditional founding principles of fair trade.

2.8.4 Satisfying Quality Standards

The adherence to a range of quality standards is becoming increasingly important for producers and buyers of fair trade. With the increased mainstreaming of fair trade through

the labelled approach, large-scale buyers have greater powers to enforce strict quality criteria on the producers. There are concerns that these standards may be too high for the marginalised producers to achieve, hence creating a barrier to entry for those producers for whom fair trade was initially established with the aim of improving market access. Thus it is possible that, in the long-run, the fair trade system may create its own set of barriers and restrictions on the most marginalised, as quality standards are increased to satisfy both the requirements for importation and, more importantly, the standards of the mass market retailers.

Quality standards and their consequences for fair trade are examined in Renard (2003, 2005). It is argued that “contrary to the neo-classical theory in which the price mechanism encapsulates all of the required information about a product, the theory of conventions perceives quality as the fundamental concept for the analysis of economic life, as well as being the key axis of current competitive strategies” (Renard, 2003, p87). Quality is seen to be constructed via two routes which often overlap, “the introduction of collective institutions that establish rules for quality and the means to uphold them or the acknowledgement of forms of local ties among actors that allow them to communicate and negotiate” (Renard, 2003, p88). According to Slyvander (1994, 1995 quoted in Renard, 2003) in agro-food there are four ways in which quality can be defined:

- “Industrial coordination, which rests on standards, norms, objectivised rules, and testing procedures
- Domestic coordination, based on face-to-face relations, on trust of people, places or brand names

- Civic coordination, which rests on the adherence of a group of actors to a set of collective principles it structures its economic relations: Fair trade is the prototype of this coordination
- Market coordination, or coordination by market laws, basically through the mechanism of prices” (Slyvander 1994, 1995, quoted in Renard, 2003, p88).

For civic coordination to be successful certification is required in order to confirm that the product does indeed adhere to the collective principles. This certification then allows for industrial coordination. It is this guarantee of quality, characterised by the label portraying social justice and fairness that allows for the higher ‘premium’ to be charged for fair trade products. Renard (2003) argues that “as the consumption of civic quality products increases, it may be necessary to reinforce weak civic coordination with market coordination” (Renard, 2003, p88). In other words, fair trade becomes subject to market forces to a greater degree. The difficulty of ensuring standards are adhered to, and not undermined by the growth of mainstream fair trade sales via the labelled approach, means that FLO has “sought its accreditation under international norms (ISO 65) as a recognised certifying organ” (Renard, 2003, p94). It is the civic coordination, and the consumer’s portrayal of this, which has contributed to the expansion of fair trade. Increasing these civic quality standards may, however, lead to difficulties for the producers, creating an unintended barrier to entry. In addition, consumers may become confused as dominant firms become more active in the market, launching their own alternative certifications. This may undermine the system to which the traditional fair trade model adheres to.

2.8.5 Supply Constraints

Long term success of the fair trade system depends on a sustainable supply of products but potential barriers to this have been identified (Murray *et al*, 2002; Murray and Reynolds, 2000). Legislative issues relating to quality and environmental standards as well as import regimes in the EU may result in supply difficulties. Further, problems in managing the perishable nature of some fair trade products and maintaining producer loyalty in light of limited understanding of fair trade could also affect supply.

In the context of the banana market, Murray and Reynolds (2000) identify a number of difficulties which fair trade may encounter in the long run. The first of these is in meeting demand. They quote a study carried out by the European Union which stated that 75% of European consumers would buy fair trade bananas if they were available. Furthermore, they find there is an annual market 25 times greater than the current volume (Banana Link, 1997, quoted in Murray and Reynolds, 2000). However, supplying this potential market is problematic, given changes to the EU banana import regime. This applies tariff quotas which favour banana shipments from former colonies of traditional importing countries. Furthermore, it has proven difficult for fair trade producers to acquire import licenses under the EU regime in place prior to the 2008 reforms. The challenge to fair trade is to ensure that the new EU banana regime, effective from 2008 promotes fair trade produce. In 2008, the African, Caribbean and Pacific (PAC) banana suppliers with Economic Partnership Agreement (EPA) were given duty and quota free access to the EU market. Additional reforms in 2009 agreed a cut in the import tariff applied to Latin American Most Favoured Nations (MFN) from €176/tonne to €114/tonne by 2019 at the latest (European Commission, 2014b).

Additional problems facing the long term growth of fair trade are to be found in the nature of the product itself. Whereas coffee is not quickly perishable, since beans can last up to 12 months, bananas are a perishable commodity and this has led to difficulties in shipping and distribution. The fair trade movement needs to ensure well coordinated logistic operations so that the products arrive in stores in retail condition.

An additional issue in the viability of the fair trade movement as a long term model is how, or whether, to expand fair trade membership. There is some criticism (see Murray *et al.* 2003), that the movement does not allow larger scale farmers to participate, despite the fact they may be following FLO criteria. Discussions on the expansion of fair trade also focus on the entrance of new producers into the movement. Whilst one of the threats to fair trade lies in the inability to increase market share, cooperatives are often wary of new entrants, seeing them as opportunistic competitors. Those outside of the movement see the difficulties in gaining entry as unfair. Gonzalez (2002) suggests a time constraint on membership to allow others to join. Others suggest that the high price is a barrier to increased market share and propose lowering the price to allow wider participation through increased demand. However, there is also opposition to lowering the price, in that it dilutes the benefits to participants and leaves the movement more vulnerable to conventional market price rises, as discussed below.

Given the cyclical nature of commodity prices, and the lack of understanding of fair trade in many cooperatives as discussed earlier, there may actually be a fall in the supply to fair trade markets if prices rise. Taking into account a potential lack of loyalty to fair trade due to a lack of understanding, producers may abandon the fair trade market when prices rise, resulting in a shortage of supply (Murray *et al.* 2002). Indeed, Elliott (2012) argues that in

2010 following the thirteen year high in coffee prices, there were numerous examples of producers reneging on their commitment to their cooperative to take advantage of spot market prices for coffee (Elliott, 2012). A further concern is the producers continuing to pay certification costs when market prices are above the fair trade price with producers preferring to sell to the conventional market thus avoiding certification costs. It is debatable whether the premium, paid regardless of market prices, would be sufficient incentive to farmers to continue to bear certification costs (Elliott, 2012). In order to avoid this issue occurring, fair trade needs to focus on communicating its message and role clearly to producers, moving away from the top-down information flow currently employed (VanderHoff, 2002). Understanding and loyalty to the movement within cooperatives is needed in order to encourage supply to fair trade buyers regardless of the movement of prices in conventional markets. Fair trade needs to stress the advantages that extend beyond simply the guaranteed minimum price. Given that the share of fair trade produce sold on conventional markets (due to insufficient demand from fair trade buyers) accounts for around 80% of all fair trade output (Elliott, 2012), there have evidently been other attractions than merely the price guarantee indicating that, perhaps, the system will not be impacted too severely by higher commodity prices.

2.8.6 Increasing Demand

Fair trade sales have increased dramatically in the past decade, mostly in response to the increased awareness of the products. The use of labelling has been critical in raising awareness of fair trade as it has “created viable and attractive offerings that European and North American chains could stock alongside other ethically branded products” (Low and Davenport, 2005, p498). In Europe, coffee reached an approximate 2% market share in 2004 in Austria, Belgium, Denmark, and Ireland, 6 percent in Switzerland, and 20% in the

UK. Fairtrade tea accounted for 5% of the market in Switzerland and 2% in Austria and Germany. Bananas capture almost half the market share in Switzerland, 2% in Austria and Norway and 4-5% in Belgium and Finland (Elliot, 2012). If Southern producers are to benefit then this market demand needs to be met and increased across all products. One approach that fair trade is using to promote this outcome involves educating consumers on the alleged injustices of the conventional trading models and offering consumers an informed choice “so that they exercise their purchasing power positively” (Raynolds, 2000, p306).

To understand how fair trade demand can be increased in the long-run, it is important to consider the reasons why fair trade sales have increased in the past. According to Nicholls and Opal (2006), the increase in the UK market for fair trade products can be attributed to several interdependent factors, which are political, academic, cultural and informational. In terms of political factors, it is argued that there has been a “growing international consensus for ‘trade not aid’ [as] as the best route to alleviate poverty” (Nicholls and Opal, 2006 p22). Academic researchers have, in parallel with consumer and political sectors, increased their interest in fair trade. Improvements in consumer information, most notably through the internet, have contributed to the growth in ethical consumerism which has taken place over recent years. Individuals now believe they can make a difference with their consumption decision. Finally, this shift in demand towards ethical products has resulted in a strategic response from businesses. Corporate social responsibility is now an accepted and inherent part of many decisions and within this, the proactive response of retailers has been to become engaged in fair trade (Nicholls and Opal, 2006).

Nicholls (2002) identifies that 50% of consumers say they would buy fair trade products but in reality the products generally account for only 1% of the product sector within UK

supermarkets (Nicholls 2002). If fair trade is to grow in the long-term it needs to address this discrepancy and bring more of the potential consumers into the market. Nicholls (2002) suggests a number of strategies such as an improvement in the communication of the producer input to the consumer, and promotion of consumer commitment to fair trade. It is also important to address the obstacles to getting more fair trade products into supermarket such as operational issues around marketing of products and product diversification.

The education of consumers to make different individual choices is an area to develop to increase long-run demand. In the UK, there are a wide range of institutions such as the Houses of Parliament, the UK Salvation Army, local councils, and various universities all of which only stock fair trade products. Low and Davenport (2005) argue that these interactions help to educate consumers about 'fair prices' and potentially encourage them to challenge conventional business and trading systems. Furthermore, they argue that "whether or not the individual chooses to buy fair trade products at other times, while they occupy the time and space boundaries of these institutions, a collective decision for positive social interaction overrides their individual preferences" (Low and Davenport, 2005, p506). However, this strategy must be balanced with the implied loss of consumer choice and sovereignty.

From a very different perspective, it is also the case that demand for fair trade is found in the South with South-South sales of fair trade growing dramatically. Future trends in this area may well be very important to the long-term fair trade initiative. Mexico followed by Brazil, South Africa and India, have created a national fair trade system – the first to be established in the South. This move to Southern fair trade systems has been complemented

by the consolidation of South-South networks and “an aspiration to substitute North-South by South-South Fair Trade” (Wilkinson, 2007, p234).

An alternative perspective on this issue is put forward by the cooperatives themselves who are concerned that ATO and FLO markets have not expanded as significantly as they had hoped (VanderHoff, 2002). The highest market share for coffee achieved so far is 20% in the UK but in most countries it has not reached 1%. Cooperatives, such as UCIRI in Oaxaca, Mexico have responded to this by seeking alternative buyers in the conventional market. UCIRI, for example, has formed an agreement with Carrefour with the same pricing agreement use by the FLO. This is an important issue for fair trade to address. The movement may be undermined if consumers become confused between the various ethical brands. Furthermore, these conventional alternatives may not enforce the same strict regulations on the cooperatives with respect to working and environmental standards. Fair trade needs to seek ways to grow their markets so that certified producers are confident of sufficient demand and do not abandon the system.

2.8.7 Fair Trade and Poverty Alleviation

The ability of fair trade to alleviate poverty, and the difficulties encountered, have been discussed by Reynolds (2002) and Lyon (2002). Factors such as producer characteristics and the effectiveness of producer groups in forming cooperatives and making links with external bodies are identified as critical to the success of fair trade in alleviating poverty. The domestic and global economic conditions in which fair trade operates are also important.

Background research undertaken by Reynolds (2002), as part of a Community and Resource Development funded program, finds that the ability of fair trade to assist in poverty alleviation is determined by three key factors. These are summarised as “(1) prevailing political and economic conditions at global, national and sub-national levels, (2) the internal organization of producer groups and their external links to state, corporate and NGO groups, and (3) the individual characteristics of producers such as ideological commitment, educational levels, market sophistication, capital and labour resources, and environmental assets” (Reynolds, 2002b , p3).

In examining each of these factors in turn, Reynolds asserts that the structure of modern day coffee markets can make it difficult for new producers to enter. Since the widespread adoption of so-called neo-liberal trade policies of developing nations, governments have been less able to provide subsidy support to coffee producers, focusing instead on export intensive industries. Furthermore, coffee prices were low due to excess supply and this impedes new entrants to the market. The low price of coffee is attributed to excess supply and, as FLO registered producers sell only approximately 20% of their product to fair trade buyers, the rest is excess capacity which keeps the world market price suppressed. Reynolds notes that the EFTA estimates “the United States, Canada and Japan offer additional opportunities for existing producers and new entrants, but we can expect market growth to slow once Fair Trade labelled coffee has captured 1-3 percent of these new markets as it has in Europe (EFTA, 2001a p15 quoted in Reynold, 2002b, p11). It is these political and economic conditions which are seen as crucial factors in the success of poverty alleviation through fair trade.

Secondly, producer organisations and their external links are examined. The strength and historical origins of these producer organisations are viewed as one of the crucial elements in the ability of fair trade to assist in alleviating poverty. Studies such as that undertaken by Lyon (2002) show that countries in which coffee producers have had earlier generations of coffee unions (i.e. producer groups) to build on, are more successful than those which do not have this experience. The historical background to these successful unions has, in some cases, allowed them to gain support from various useful sources including government, the Catholic Church and fair trade labelling organisations. This has enabled them to operate more effectively (Raynold, 2002, pp12-13).

Finally, Raynold highlights a range of individual producer characteristics which may help to determine whether producers participate in fair trade and whether they are successful. These include “socio-cultural factors (such as shared ideological commitment), socio-economic factors (such as educational levels, market sophistication, and capital labour resources), and ecological factors (such as soil fertility and elevation)” (Raynold, 2002 p14). These factors make fair trade producers more effective. They allow producers to work together more efficiently with shared goals, and also play a part in determining how successful producer groups are in garnering external support with government, church groups and fair trade exporters.

The three factors identified by Raynold (2002b) range from the microeconomic to the macroeconomic level. This indicates that there are a wide range of individual producer characteristics that must be taken into account when determining both the likelihood of producers choosing to participate in fair trade participation and their subsequent success. An understanding of these is important for cooperatives and the wider fair trade initiative

to identify and support those farmers who do not possess the criteria in order to increase participation as well as the success of their members.

2.8.8 Stakeholder Understanding of the Purpose and Role of Fair Trade

A long term difficulty with fair trade, which Lyon (2002) identifies, arises from a lack of clear understanding amongst producers of what fair trade actually is. Thus producers feel no particular association or commitment to the movement. Lyon states that this can lead to producers switching away from fair trade once conventional market prices increase and fair trade's benefits and incentives to participate are correspondingly reduced.

There are also problems with fair trade in terms of governance issues within the FLO system. A number of fair trade participants who entered into the market through Max Havelaar or Equal Exchange perceive the new labelled certification scheme, such as the FLO system, to be "depersonalized and institutionalized relationship[s] involving less frequent contact and at times insensitive and non-transparent communication" (Murray *et al*, 2003, p20). No contact with inspectors has been reported by cooperatives such as La Voz in Lyon's (2002) impact study. Problems have emerged from the insensitivity of inspectors and their lack of knowledge of producer techniques and specific features of an area. Some producers believe that the FLO and other labelling initiatives are moving fair trade away from its original objectives. Cooperatives are also reported as requesting a merging of certifications such as Bird Friendly, Fair Trade and Organic as they are often seeking several certifications at once which requires considerable time and expense. However, Murray *et al* (2003) claim that combining the fair trade certification with others would weaken the label as it has more rigorous social conditions than other labels. Any dilution of this could weaken the benefits of fair trade (Murray *et al*, 2003, p22).

2.9 Gender Issues

Finally, issues concerning gender need to be addressed particularly in order to clarify the role of fair trade in promoting the role of women (Murray *et al.* 2003). Fairtrade (2013) reports that in 2012, 23% of workers and farmers in certified producer organisations were women a fall of 2% from the 2011 reported figure. Case studies (e.g. Blowfield *et al.*, 2000) show that gender inequalities remain in many cooperatives, and that whilst women's role in production may increase, the payment generally goes to men especially where trade is based on small-holder production. Mayoux (2012) finds that women's workload often increases when they become active in fair trade, since they are not exempted from household work. Moreover, while the participation of women may be significant in coffee cultivation, evidence shows that their role in decision making remains minimal. Figures on the membership of women in cooperatives may be an unreliable measure of female participation, as often they are noted on records as part of a family unit in order to access greater credit from the cooperative or to increase voting rights (Ronchi, 2002). Indeed, in the Costa Rican cooperative studied by Ronchi (2002), women did not often exercise their right to vote. The reasons identified were cultural where a woman may be prohibited from voting by her husband, or familial, where a woman was unable to attend the General Assembly due to childcare responsibilities.

2.10 Previous Empirical Evidence on the Impact of Fair Trade

This section reviews the impact studies which have been undertaken to evaluate the effects of fair trade since its inception. Impact studies seek to establish the overall impact of fair trade and have been carried out by a number of organisations and academics to widen the understanding of the role that fair trade plays in improving the lives of its recipients beyond the broadly understood concept of the fair price, which is often the sole focus of media and

consumer attention (Dragusanu and Nunn, 2014; Ruben and Fort, 2012; Beuchelt and Zeller, 2011; Mendez *et al.* 2010; Smith, 2010; Fort and Ruben, 2009; Jaffee, 2009; Becchetti and Costantino, 2006; Schmelzer, 2006; Bacon, 2005; Utting-Chamorro, 2005; Fairtrade Foundation, 2004; Milford, 2004; Murray *et al.* 2003; Lyon, 2002; Ronchi, 2002; Taylor, 2002; Tallontire, 2000).

Despite the increasing number of impact assessments, and monitoring and evaluation studies which have been undertaken in recent years, it is difficult to provide a cohesive discussion of their overall findings as the methodological approaches and focuses of the studies vary significantly. Hence, it is not always possible to extend the findings from one study across the global fair trade movement as findings may only apply to the specific region within which the study took place. The variety of research includes the use of quantitative and qualitative information and, in limited cases, involves comparisons between those within, and external to, the fair trade movement. Paul (2005) argues that one of the key failings in current research is the lack of a uniform approach and the failure to tie the methodological approach into a more structured system which would allow for wider comparative studies with other development projects.

However, there are generalised common positive and negative impacts which emerge throughout the studies. The positive interventions of fair trade include higher incomes, enhanced well-being, social and political empowerment, and gains for the broader market environment such as spillover effects from the premium being spent on road improvements. For example, Becchetti and Constantino (2006) use simple econometric techniques to study the impact of fair trade on the welfare of a sample of Kenyan farmers. They find that fair trade is linked with higher economic and social wellbeing. Furthermore,

they show fair trade can lead to greater crop diversification, the creation of additional trade channels and higher prices for marginalised producers. In addition, fair trade is associated with relatively higher food consumption expenditure and improvements in diet, emanating from greater satisfaction with price and income enjoyed by fair trade producers than compared to the control group of farmers.

Despite these positive outcomes, there are continued pessimistic findings that emerge around gender, the environment, management structures, and problems of sustainability and continuing dependence (Mayoux, 2012, pp15-16).

The following sections consider each of these positive and negative outcomes from fair trade which are to be found in existing literature in order to demonstrate the common themes which emerge. Table 2.1, towards the end of this chapter, provides a summary of the impact studies, their different methodologies and their findings.

2.11 Positive Outcomes of Fair Trade

This section focuses on the positive outcomes of fair trade with specific emphasis on incomes, well-being and evidence of gains for the broader market environment.

2.11.1 Incomes

Most studies agree that the most obvious benefit of fair trade is the guaranteed minimum price and the social premium paid to producers (Ronchi, 2002; Reynolds, 2002b; Mayoux, 2012; Murray et al. 2003; Utting-Chamorro, 2005; Lyon, 2002). These increased financial rewards are the cornerstone of the fair trade model. However, case studies also exhibit large differentials in the income benefits, with some reporting of a doubling of income and

others claiming simply that producers are enabled to secure their employment. Schmelzer (2006) argues that it may be possible to attribute these differences to the organisational structure and financial profile of the cooperatives.

In particular the social premium is cited by researchers, such as Ronchi (2002), as being extremely beneficial as it not only raises incomes but also helps the wider community. In Costa Rica, for example, members of the Coocafé cooperative put the premium into a Social Capital Fund which has been used to invest in the use of low cost fertiliser. This in turn results in higher incomes for producers.

Mayoux (2012) summarises a number of studies and concludes that there has, in general, been a positive impact on the incomes of entrepreneurs, and on levels of employment and wages. She finds that fair trade employment may be the only source of income in areas of high unemployment, or for certain types of workers e.g. women. Furthermore, it is argued that fair trade employment provides off-season work in handicrafts and therefore complements agriculture. Additional studies (Arnould, Palstina and Ball, 2009; Fort and Ruben, 2009; Mendez *et al.*, 2010; Weber, 2011, Beuchelt and Zeller, 2011; and Dragusanu and Nunn, 2014) find evidence of fair trade producers receiving higher prices than conventional trade farmers. In their longitudinal study of 262 coffee mills in Costa Rica, Dragusanu and Nunn (2014) find that, between 1999 and 2010, fair trade mills achieve a selling price for coffee at 5 cents per/lb more than conventional trade mills with no difference in the quantity sold or exported. Mendez *et al.* (2010) found a statistically significant positive relationship between the average sale price and fair trade and organic certification across four countries (El Salvador, Mexico, Nicaragua and Guatemala) during the 2003/4 harvest. Similarly, Arnould, Plastina and Ball (2009) found higher prices, sales

and incomes for fair trade farmers in their study involving 1,269 coffee farmers in Nicaragua, Peru and Guatemala. Conversely, Fort and Ruben (2009) and Ruben and Fort (2012) found, in their study of 360 Peruvian coffee farmers, no statistically significant evidence that fair trade producers receive higher prices.

The opportunity to gain higher incomes is cited as one of the key reasons why many producers enter the fair trade market. This is especially evident in surveys of new entrants in the midst of the coffee crisis. In his study of Nicaragua, Utting-Chamorro (2005, p591) found that “incomes of most small coffee producers had doubled since their entry into the fair trade market” while fair trade coffee has been found to be twice the street price for conventional coffee, even after deductions for management and other costs (Murray *et al.* 2003). Similarly, Lyon (2002) cites price incentives as the primary reason for producers participating in fair trade. However, in her study of La Voz cooperative in Guatemala, Lyon reports that, initially, farmers were happy to receive stability, higher prices and increased recognition but have since become increasingly accustomed to these higher prices and subsequently demand further rises. This can be attributed to fair trade members remembering the high prices they received prior to the coffee crisis. Despite being paid \$16.77/qq⁶ in 2001-2002 for coffee in cherry, members “almost unanimously agree that approximately \$25.80/qq (in cherry) is the minimum price needed to cover production costs and provide for minimum profit gains” (Lyon, 2002, p5). Studies by Ronchi (2002b) of the Kuapa Kokoo cooperative in Ghana conclude that, although income benefits of fair trade may be small when commodity prices are high, they are significant when prices slump.

⁶ qq = quintal: 46kg. Traditionally this was 100lbs but is in fact 101.41lbs. (Ronchi, 2002, p14).

2.11.2 Well-Being

Frequently, impact assessments deem the non-monetary benefits of fair trade to be equally, if not more, important than financial gains. Improvements have been observed in self-esteem, spending on education and the preservation of indigenous cultures (Schmelzer, 2006). In Nicaragua, all producers contributing to the study talked of changes in their daily lives arising from greater economic stability and security. Such changes include better nutrition, the ability to pay for children's education and improved conditions and techniques on the farm (Utting-Chamorro, 2005).

In her study of Cost Rica, Ronchi found that "the role of price and support of producer organisations in Fair Trade is not misplaced.....Fair Trade can be said to have accomplished its goal of improving the returns to small producers and positively affecting their quality of life" (Ronchi, 2002, pp25-26). Ronchi reported that only 18% of those interviewed perceived no improvements in their standard of living as a result of participating in fair trade. Over half of the respondents did identify improvements, which took a variety of forms, including improvements to their home, repayment of long-standing debts or extension of children's educational experience (Ronchi, 2002, p11).

Similar studies (Utting-Chamorro, 2005; Bacon, 2005; Smith, 2010) have shown that participation in fair trade can help farmers to cope more effectively with disasters and shocks which affect their livelihoods. Several strategies are identified whereby farmers are able to survive and reduce the damages arising from natural and economic crises which are characteristic of the South, including hurricanes, earthquakes, recessions and declining terms of trade. The strategies used to cope with these difficulties include migration, increased borrowing, crop substitution and decreasing inputs (Bacon, 2005, p502). Bacon

argues that, through fair trade, farmers can respond with greater success to these natural disasters as the guaranteed prices lead to greater stability for the producers. Smith (2010) states that farmers, in a global study of the banana sector, report reduced vulnerability to poverty as a consequence of investment in off and on-farm income generating activities and an enhanced ability to save.

2.11.3 Gains for the Broader Market Environment

A number of impact studies (Ronchi, 2002; Murray et al. 2003; Lyon, 2002; Fairtrade, 2004; Smith, 2010) show that gains from fair trade are not experienced solely by producers but extend to the wider community and household family members. In particular, investment of the fair trade premium in social projects leads to gains for the whole community and hence reaches beyond those directly engaged in the fair trade initiative. In Costa Rica, Ronchi observed money from fair trade being put aside to be spent on infrastructure improvements, which benefit the whole community. Furthermore, members of the fair trade cooperative must pay hired field labour the legal minimum wage. This, when observed by other workers in the area, leads to labour unrest and ultimately forces non-cooperative members to pay their workers appropriately also. Finally, the cooperative has extended services to non-fair trade producers, for example through housing schemes and availability of short-term credit at the co-op stores (Ronchi, 2002, p21).

Aggregate values of the fair trade premium vary amongst producer groups. In the Windward Islands, where the banana trade accounts for up to 50% of the total export revenue of the Islands. Premiums generated \$1m for community and development groups between 1990 and 2004 (Fairtrade, 2004).

In La Voz, a Guatemalan cooperative, the benefits of fair trade in coffee to producers and their families are primarily realised through the higher price they receive. This has enabled them to purchase land from their struggling neighbours operating within conventional markets. The higher price also leads members of the cooperative to demand higher prices for their labour and coffee. This seems to imply that fair trade producers “demand increased power in the market” (Lyon, 2002, p27). In La Voz, there are requests from members for the cooperatives to go beyond coffee into products such as textiles which would allow women to become more active in the organisations. Lyon (2002) identifies the wider household benefits which come from fair trade, including the increased likelihood of children going to school as producers can pay for outside labour, releasing time for children to attend classes. This employment of labour has benefits for the community as a whole as it provides employment opportunities. Similar results are found in Smith (2010) in a study of the banana sector involving four countries. Smith finds that the fair trade plantations employ some of the poorest and most vulnerable groups such as disabled people, people with HIV/Aids, single mothers and landless workers. The formalisation of their employment with contracts and associated legal benefits does not necessarily lift the labourers out of poverty but has a positive impact on the marginalised group.

Positive effects from fair trade market participation are experienced by producers in La Voz through the long-term contracts they receive, which have also led to improvements in coffee quality. Conversely, Lyon (2002) suggests that such long-term contracts might create a sense of security amongst members, resulting in a decline in quality. However, fair trade has generated links between La Voz and exporters who have good knowledge of the final market and who can provide advice on quality.

Murray *et al.* (2003) found positive experiences from fair trade in the form of a training centre for women's literacy in Oaxaca, funded by the social premium. In Chiapas a community organic farming promoter was brought in to help farmers in the cooperative to diversify into organic farming, resulting in higher farm-gate prices. The studies undertaken by Murray *et al.* (2003), members of a Fair Trade Research Group at Colorado State University, show that the benefits of fair trade extend beyond the individual producer to the household. In one study, it was shown that participation in the fair trade movement had increased family income by 100-200% (Murray *et al.*, 2003, p9). Other benefits include access to a diverse range of projects via the cooperatives, such as credit availability to cover family emergencies and payments to help with medical expenses and ceremonies. In addition, training provided by the cooperative allows households greater opportunity to diversify their activities and hence their income stream. Improved access to education for children and enhanced family stability are also identified as being positive effects from fair trade.

Fair trade may also be responsible for a return to cultural traditions with producers in some studies speaking of a return to ancestral practices and a pride in being indigenous (Lyon, 2002; VanderHoff, 2002).

It is clear that gains from fair trade are not exclusive to fair trade participants and that spillover effects from social projects including infrastructure improvement benefit the wider community and are a common theme across each of the impact studies.

2.11.4 Gains for the organisational capacity of farmers

The guarantee of a fair price is recognised as being of fundamental importance to producers. However, the fair trade principle is complemented by the FLO's emphasis on the use of a democratic and cooperative approach to producer organisations. This is based on a recognised link between this system and achieving sustainable development. The International Cooperative Alliance, for example, has noted the importance of cooperatives in helping with developmental policies. "The relevance of cooperatives to Sustainable Development is apparent – and even more so when one considers the concept of Sustainable Human Development. As organisations of people, cooperatives are designed to help their members meet their economic and social needs and aspirations. As democratic and participatory organisations, they encourage equity and equality. As economic entities, they provide their members with commercial services. As locally rooted institutions, they reflect their communities' concern with social justice and the environment" (International Cooperative Alliance, 1995). Bacon (2005) notes the positive impact of cooperatives in that those small producers who are not part of a cooperative do not produce volumes to fill a container (275 sacks) and therefore have no access to certified markets (Bacon, 2005, pp504-505). In a follow up study, Bacon *et al.* (2008) find fair trade cooperative members unanimously felt the cooperative helped them to secure higher prices compared to 50% of farmers in conventional trade cooperatives. Moreover, cooperatives play an important role in providing a sense of group identity and raising self-esteem in areas which have undergone "rapid changes due to out migration, increased education, and the penetration of capitalist forms of economic relations" (Lyon, 2002, p27). Finally, Milford (2004) shows that cooperatives often fail if they are not involved in the fair trade market. Inside fair trade, they are able to compete better in conventional markets

and generate greater cooperative and organisational benefits compared to financial and development support from governments and NGOs.

A study by Utting-Chamorro (2005) shows that the success of cooperatives associated with the fair trade market is reflected in an increasing number of members. Although it is not feasible to attribute this entirely to fair trade, since cooperatives are associated with other alternative systems (e.g. bird-friendly, shade-grown and organic) the study in Nicaragua detects important cooperative activities. There are workshops for small producers to learn about fair trade and cultivation methods, and community development projects. Utting-Chamorro (2005) identifies positive impacts from fair trade in the increasing exports of high quality coffee to the fair trade market by the cooperatives in Nicaragua, and in the sound management of the social and capital fund. However, he does note that these impacts are limited due to high levels of debt within the cooperative, creating concern for its long-term financial sustainability.

Taylor (2002) reports that one of the most impressive findings of the several case studies he considers is the role that fair trade plays in encouraging contact and coordination between small farmer coffee organisations, with many cooperatives learning about fair trade from other organisations. Many first contracts were achieved through shared agreements between organisations, based on the idea that fair trade should be mutually supportive. Also, according to Taylor, buyers often request more coffee than a single cooperative can supply at any one time. Furthermore, cooperatives enable access to training and the ability to improve the quality of coffee. Murray *et al.* (2003) describe fair trade as an apprenticeship through which farmers learn about a variety of cultivation techniques such as organic. Moreover, according to Reynolds (2002b), the information and

improved transparency that membership of a cooperative brings is invaluable. Indeed, Reynolds argues that the asymmetric information advantage that buyers in conventional markets characteristically have over marginalised producers may be eroded as information is garnered from participation in alternative trade agreements.

Evidence from studies such as Lyon, 2002; VanderHoff, 2002; and Murray *et al.* 2003, has highlighted one of the key advantages of cooperatives to be the credit programs they offer since this leads to greater economic and social stability. For instance, the study in Oaxaca, Mexico (VanderHoff, 2002) has shown how the formation of a cooperative (UCIRI) and engagement in alternative markets has facilitated access to loans and credit. Certified in 1989, the cooperative first borrowed money from ECDS Oikcredit, an alternative bank. The ten year loan had an interest rate of 10%. Following the creation of Max Havelaar Holland, UCIRI had access to up-front payments of “70% of the value of the minimum Fair Trade price paid at the beginning of the harvest” (VanderHoff, 2002, p11). Credit has also been made available to the Mexican cooperative from the federal government and Banamex, a Mexican bank. In addition, UCIRI has its own funds and members are able to open savings accounts in an internal bank which the cooperative can access for added capital. In Guatemala, according to Lyon (2002), producers identified the loans from cooperatives as enabling them to make improvements to their coffee plots and to fund their children’s education. Often the cooperative was the only source of loans for producers who lacked an established credit history and who had little education on how to solicit banks for loans or on the nature of proper guarantees. However, the same study notes that cooperative loans also can lead to a deterioration of relations between cooperative members and management when debts cannot be repaid.

2.12 Challenges for Fair Trade

The following section examines the common themes that occur in impact studies which have the potential to undermine the success of the fair trade movement such as continued inequalities between fair and conventional trade farmers, the level of fair trade prices and the allocation of the social premium.

2.12.1 Continuing Inequalities

Despite improvements to the wider community through the social premium, as discussed above, one of the key negative elements of fair trade is the ongoing differential which exists between those involved in fair trade and those outside of the movement. In addition to this fair trade versus conventional trade divide, there are also divisions within the registered producer groups, with allegations of favouritism made by people who seldom receive fair trade contracts.

Regarding the differing experiences of those who sell to the fair trade market and those who access the conventional market only, Ronchi (2002) notes that, during peak periods for world coffee prices, fair trade premiums accounted for only 1% of producer incomes. However, in four harvests selected during the coffee crisis (1988 to 1992), prices paid by fair trade cooperatives were on average 3% higher than the national average, even excluding the fair trade premiums. If included, this would serve only to increase the differential between fair and non-fair trade producers (Ronchi, 2002). In addition to income differentials, Utting-Chamorro (2005) and Bacon (2005) find evidence that non-fair trade farmers suffer a broader range of difficulties and are four times more likely to report a risk of losing their farm land, have fewer children attending schools, undertake less investment on their farms and have lower levels of soil fertility. The conclusions drawn from this by

Bacon are that those who participate in alternative markets, such as fair trade, benefit from a reduced exposure, and hence reduced vulnerability, to low coffee prices. They receive higher prices than those paid in free trade markets making them more secure in their land tenure.

Lyon (2002) highlights the concerns of conventional trade producers, who for various reasons are not eligible to become FLO registered. This results in some tension between those benefitting from fair trade and the larger producers who are conventional trade. Lyon, quoting a newspaper article appearing in an English language paper in Guatemala writes, "international aid, Fair Trade prices, etc. should be for all affected growers in the coffee industry, not just the 'little people'" (Lyon, 2002, p1). Aware of these tensions, the need to enable all producers to benefit from fair trade, and in an effort to discourage current producers from becoming too reliant on them, Traidcraft have developed objectives which include an exit strategy which guides producers in approaches to leaving fair trade markets in the long run (Traidcraft, 2002).

In addition to the differing experiences of those inside and outside of fair trade, Taylor (2002) reports that further inequalities exist amongst registered FLO producers within the movement. One of the problems is an excess capacity potential in the supply of fair trade coffee. On the one hand, this implies that even if fair trade sales continue to expand, this demand can easily be met by currently registered producers. However, much excess capacity has come about as new producers join the movement following the coffee crisis. Buyers are able to exploit the situation and demand higher quality which many cooperatives are unable to produce. Several cooperatives claim that, in practice, the benefits of fair trade accrue to the strongest and most well-established organisations, and

thus new cooperatives find entry to the market difficult. A manager of one of the cooperatives in Taylor's study stated that "In its current form, Fair Trade is having its impact on an elite group of producers....This is not what the rules of Fair Trade are supposed to strive for" (Taylor, 2002, p25).

2.12.2 Limited Awareness of Fair Trade within Certified Producer Groups

A number of impact studies (Ronchi, 2002; Taylor, 2002; Lyon, 2002; Mayoux, 2012) report a lack of awareness and understanding amongst producers about fair trade, and how it is helping to raise their standards of living. In Costa Rica, Ronchi (2002) finds that producers do acknowledge an improvement in conditions over the last ten years but have little awareness of fair trade itself, thus signifying a need for improved communication.

In his overview of several case studies, Taylor notes that the links and experience which cooperatives have with the FLO and other international trading organisations can vary significantly. Some cooperatives receive annual visits and report good input from the FLO others record only one visit in ten years of certification (Taylor, 2002). In line with the findings in the Costa Rican study carried out by Ronchi, Taylor notes that members of the cooperative very often do not understand what fair trade is, because it is an abstract concept handled at the organisational level. Moreover, little emphasis is placed on educating producers about fair trade organisations (Taylor, 2002).

Lyon's (2002) case study of the La Voz cooperative in Guatemala analyses the important factors that have defined the cooperative's participation in fair trade networks, citing the most important agent as Elan Organic Coffees. Representatives of Elan make personal visits to the cooperative and fund training and conference attendance for the manager. Other

significant agencies are U.S.A.I.D (AID) and the Anacafe Small Coffee Farmer Improvement Program which paid for the previous manager to attend conferences in Boston and Houston and provided substantial financial support in the form of loans. “The first loan of \$16,130 was received in 1991....a second loan was received in 1993 (\$18,065).....a third loan of approximately \$51,615 was received in 1996” (Lyon, 2002, p7). The relationship between La Voz and AID/Anacafe Small Coffee Farmer Improvement Program has provided further direct assistance by classifying the cooperative as ‘second level’, allowing it to disperse funds among its members, and additionally to receive a 7 year loan of almost \$200,000 at 18% interest in 1998. More indirect impacts from this relationship are gained by the cooperative in the form of increased publicity and increased attractiveness to other lenders, making the acquirement of credit simpler.

This assistance granted by various organisations is important to note as the benefits observed in the region may be as much attributable to the financial and training support provided through these institutions as through the actual participation in the fair trade network. Paul (2005) and Mayoux (2012) note that it is difficult for impact studies to distinguish between the positive impact of fair trade and the effects of assistance from other bodies, as these often happen adjacently.

Lyon reports that many of those involved with the La Voz cooperative have limited understanding of the fair trade system. In one study “only three out of 53 surveyed members were familiar with the term fair trade” (Lyon, 2006, pp459-460) despite selling to fair trade markets for close to a decade. Lyon reports that La Voz has “had minimum contact with FLO international” (Lyon, 2002, p8) and awareness did improve following a visit from an FLO representative. Many farmers see fair trade as “a market niche, and not

a movement of small producers....many feel little sense of identity with the Fair Trade movement” (Lyon, 2002, p20). The lack of understanding of fair trade is apparent throughout the La Voz cooperative, from producers to the Directors. This can be partially attributed to the FLO and their lack of contact with the cooperative. Also, it may be that cooperative directors are more concerned with establishing loyalty to themselves rather than explaining the intricacies of the fair trade market to their producers. Finally, high operating costs of new cooperatives requires the returning of a much smaller percentage of the fair trade price to members. Hence they feel little benefit from participation in the fair trade movement (Lyon, 2002, pp24-25).

Thus, the relationship between fair trade cooperatives and FLO may be responsible, in part, for the limited awareness. VanderHoff (2002) describes the FLO system as a pyramid system where information is disseminated via a top-down approach, perhaps resulting in producers feeling they do not belong to fair trade but instead to the cooperative.

Murray *et al.* (2003) also identify low awareness of fair trade in their studies based in Latin America. They assert that this lack of knowledge and understanding of fair trade could be detrimental to the system’s long-term prospects. As commodity prices tend to be cyclical it is possible that, in the absence of loyalty, producers will not utilise fair trade during an upturn in prices. In contrast to this, VanderHoff (2002) reports a clear understanding and appreciation of fair trade at the producer level demonstrating the differing experience of cooperatives within the fair trade system.

2.12.3 Issues with Farm-Gate Prices, the Social Premium, and Financing

Despite a guaranteed minimum price for fair trade produce, studies have shown the true price received by farmers is sometimes lower than this (Bacon, 2005; Utting-Chamorro, 2005). The findings of different income impacts on producer groups are attributable to several factors but a recurring theme has been debt repayments. Often producers have borrowed money from the cooperative and repayments are withdrawn from their sales. Alternatively, the cooperative as a whole may have borrowed money and use part of the sales earnings to repay loans.

In a study of a cooperative in Nicaragua, for example, (Utting-Chamorro, 2005) the lower price that one group of farmers receive is the result of debts held by the cooperative and larger producer organisations, which were incurred when a former producer organisation was declared bankrupt in 1985. These farmers receive between \$0.40 and \$0.85/lb for coffee which is not equivalent to the minimum price. The cooperative hope to clear this debt within four years following which small producers will see more of a benefit from fair trade (Utting-Chamorro, 2005).

Studies which are predominantly positive about the fair trade system still refer to the issue of prevailing poverty (VanderHoff, 2002). In the case of UCIRI in Oaxaca, Mexico, premiums have been used to subsidise the coffee sold on traditional markets, as income received from coffee has fallen. Moreover, whilst incomes have increased through sales to the fair trade market, VanderHoff (2002) notes that this is not necessarily adequate to secure the survival of producers and their families. Smith (2010) reports that from 2006 onwards, fair trade sales within the banana market have become “income stabilising rather than income

boosting” (Smith, 2010, p11). This is due to the increase in prices of bananas on conventional markets and a stagnation of fair trade prices.

In his study in Northern Nicaragua, Bacon (2005) finds several of the cooperatives allocate a portion of the fair trade price to repay debts, as well as to invest in infrastructure and cover administrative costs. In two cases, he finds the money used to repay debts amounted to 50% of the fair trade premium. This clearly results in lower coffee prices paid to producers. Furthermore, because not all coffee beans are sold to the fair trade market, the average price received by the farmer “may be significantly less than prices paid in the different alternative markets” (Bacon, 2005, p505). In his study Bacon finds that, within 11 cooperatives, members received US\$1.09/lb for the portion of coffee sold directly to the roaster, but the average price paid to the farmers for all coffee was US\$0.58/lb. Within the fair trade cooperatives 13 members averaged US\$0.56/lb compared to US\$0.40/lb for those selling solely through conventional channels. Bacon states that many of the average farm gate prices are below the cost of production, which lies between US\$0.49 and 0.79/lb. This problem is further exacerbated by the stage payment scheme used by cooperatives. This involves initial credit payments for harvest, payment upon receipt of the beans at the processing facility, and a final payment once the product is exported and final prices have been calculated. Farmers wait an average of 73 days before receiving full payment for their organic coffee (Bacon, 2005).

Lyon (2002) also notes that a key difficulty with the fair trade initiative is that the sale of coffee takes a considerable amount of time and members often have to wait several months after the harvest for payment. This encourages producers to sell their product to buyers ‘on the street’ leading to difficulties in that the cooperative is left unable to fulfil

contracts, and the producers receive lower prices. Wealthy cooperatives are better able to deal with this, by paying farmers 'street prices' as they bring in their coffee harvest, followed by a bonus after the coffee is sold on. This can strengthen the producers understanding of fair trade as the higher price is received in a lump sum and is thus more visible to them.

Another important issue with the fair trade system concerns the allocation of the premium. Although this feature is generally cited as being one of the main benefits, studies in Nicaragua reveal that few of the producers "reported any improvements in their community, and those who could were unable to identify fair trade as the source" (Utting-Chamorro, 2005, p594). In other cases, the premium was found to be insignificant when it was divided amongst all producers. There are several ways to explain the lack of evidence of the premium contributing to community development. The first of these, as discussed in section 2.12.2, is that communication needs to be improved to make producers aware of how the premium has been spent. Secondly, some of the gains are not material, and are thus not easy to see. For example, reduced migration to the city and increased stability are two such outcomes. Finally, the infancy of the fair trade projects in some regions means that many producers are not aware that the premium should be spent on improvements in the community. Although this message is getting through to those who attend training courses, it is not spread to the wider community.

A further negative outcome noted by fair trade studies is that, being part of the FLO register and hence receiving certification, "does not automatically bring buyers or pre-financing" (Taylor, 2002, p3). In other words, a market for the product is not guaranteed. In a synthesis of several case studies forming part of a fair trade coffee research project, Taylor concludes

that cooperatives do not sell all of their products to fair trade buyers. Hence, fair trade sales are only a part of a wider strategy with suggestions that the future for small-scale producers lies in the development of organic farming as both fair trade and conventional channels discriminate in favour of organic produce.

In addition to a potential lack of fair trade sales for FLO registered producers, Taylor also reports that some cooperatives find fair trade financing to be slow to arrive. Fair trade buyers do not automatically provide advance financing, as producer organisations must satisfy creditworthiness requirements and coffee quality history before loans are granted (Taylor, 2002). However, there are also reports of positive experiences in accessing finance, with one cooperative in such a strong financial position it is able to lend money to its members for a wide variety of production-related needs.

2.13 Summary Table of Fair Trade Case Studies

Table 2.1 summarises the findings of impact studies discussed in this chapter. The studies are presented in chronological order starting with the most recent. The table includes details on both positive and negative findings as well as the methodology adopted in each study⁷.

Table 2.1 Summary of Fair Trade Case Studies

Case study	Positive findings	Negative findings
COSTA RICA Dragusanu and Nunn (2014)	<ul style="list-style-type: none"> Fair trade mills secured 5 cents more per/lb than conventional trade mills with no 	

⁷ Where information is available

<p>Product: Coffee</p> <p>Methodology:</p> <ul style="list-style-type: none"> • Longitudinal study between 1999 and 2010. • Annual panel. • Included 262 coffee mills. 	<p>difference in quantity sold or exported.</p>	
<p>PERU</p> <p>Ruben and Fort (2012) Fort and Ruben (2009)</p> <p>Product: Coffee</p> <p>Methodology:</p> <ul style="list-style-type: none"> • Used a matching approach to reduce bias in comparisons of fair and conventional trade farmers. • Surveyed 360 coffee farmers in total from 3 fair trade and 3 conventional trade cooperatives. 		<ul style="list-style-type: none"> • No statistical evidence that fair trade receive higher prices.
<p>NICARAGUA</p> <p>Beuchelt and Zeller (2011)</p> <p>Product: Coffee</p> <p>Methodology:</p> <ul style="list-style-type: none"> • Used a matching approach to reduce bias in comparisons of fair and conventional trade farmers. • Surveyed 327 members of coffee cooperatives. 	<ul style="list-style-type: none"> • Found fair trade farmers received a higher price for their coffee. 	
<p>SOUTHERN MEXICO</p>		

<p>Weber (2011)</p> <p>Product: Coffee</p> <p>Context:</p> <ul style="list-style-type: none"> • 845 coffee farmers. • 2004/5 harvest. 	<ul style="list-style-type: none"> • Fair trade/organic certified product achieved on average 12 cents more per/lb. 	
<p>EL SALVADOR, GUATEMALA MEXICO NICARAGUA</p> <p>Mendez <i>et al.</i> (2010).</p> <p>Product: Coffee</p> <p>Context:</p> <ul style="list-style-type: none"> • Included 469 households. • 18 cooperatives • 2003/4 harvest. 	<ul style="list-style-type: none"> • Significant positive relationship between average sale price and fair trade/organic certification. 	
<p>ECUADOR DOMINICAN REPUBLIC GHANA WINDWARD ISLANDS</p> <p>Smith, S. 2010.</p> <p>Product: Bananas</p> <p>Methodology:</p> <ul style="list-style-type: none"> • Qualitative study of the banana sector in the Windward Islands, Ecuador, Ghana and the Dominican Republic. • Six case studies carried out across the countries including three Small Producer 	<ul style="list-style-type: none"> • Seasonal migrant workers became full time farmers on their own land (Ecuador). • Created employment for some of the poorest most marginalised. • On average, farmers had received higher prices than they would have on conventional markets. • Producers reported improvements in living standards and/or reduction in poverty. • Contribution to social and community development through 	<ul style="list-style-type: none"> • Cooperative meetings not always representative of membership due to non-literate members tending to exclude themselves from elections. • Fair trade farmers are an ageing population. Aged, on average, over 50 years. • Farmers with low output do not report financial stability.

<p>Organisations (SPOs) and three plantations.</p> <ul style="list-style-type: none"> Teams in each country developed a research method around a common framework. 	<p>schools, clinics, water tanks and roads.</p>	
<p>OAXACA, MEXICO</p> <p>Jaffee (2009)</p> <p>Product: Coffee</p> <p>Methodology:</p> <ul style="list-style-type: none"> Qualitative study Surveyed 51 coffee producers including 26 fair trade and 25 conventional trade farmers between 2001 and 2005 	<ul style="list-style-type: none"> Fair trade producers were less likely to experience food shortage and had diets including more meat, milk and cheese. 	
<p>N. NICARAGUA</p> <p>Bacon <i>et al.</i> (2008)</p> <p>Product: Coffee</p> <p>Methodology:</p> <ul style="list-style-type: none"> Follow up on 2005 study outlined below. 	<ul style="list-style-type: none"> 100% of fair trade farmers felt their cooperative helped them to secure increased prices versus only 50% of conventional trade farmers. 	
<p>NICARAGUA</p> <p>Utting-Chamorro (2005)</p> <p>Product: Coffee</p> <p>Methodology:</p> <ul style="list-style-type: none"> Qualitative interviews with small producers, landless workers and key informants. Participatory research methods (Rapid and 	<ul style="list-style-type: none"> Fair trade provides a new source of income and employment. Members eager to learn new production methods to improve quality. Producers referred to greater economic stability and security. Producers identified material changes e.g. use of electric instead of fuel wood, better nutrition, ability to pay 	<ul style="list-style-type: none"> Debts held by cooperatives result in producers receiving lower farm-gate prices than may be expected. Lack of communication and debts and concerns over long-run sustainability. Few producers reported having witnessed any improvement in their community and those who did, did not

<p>Participatory Rural Appraisal) used.</p>	<p>for children's education, improve farm conditions and hire help.</p> <ul style="list-style-type: none"> • Growing number of members in cooperative. • Income of most members had doubled since entry into fair trade markets. • Workshops organised to learn about fair trade and new cultivation methods. • Producers adopting more environmentally friendly techniques. • Provision for women is changing e.g. building women's self-confidence and management capabilities. 	<p>identify fair trade as the source. This shows a problem of communication.</p>
<p>N. NICARAGUA</p> <p>Bacon (2005)</p> <p>Product: Coffee</p> <p>Methodology:</p> <ul style="list-style-type: none"> • Used livelihood approach to case study. • Surveyed 228 farmers. • 10 focus groups separated by gender. • Interviews with cooperative leaders. 	<ul style="list-style-type: none"> • Better access to credit. • Economies of scale. • Pooling of resources. • Conventional trade farmers four times more likely to perceive the risk of losing their land due to low prices. • Participation in alternative trade networks reduced exposure and vulnerability to low prices. 	<ul style="list-style-type: none"> • Lower prices received due to paying debts, provision of credit, administration and certification costs. • Two cooperatives used 50% of fair trade premium to pay debts. • Price received is lower than estimated monetary production costs. • 60% of coffee is sold through conventional markets. • Farmers generally sold to middle-men for lower prices while waiting for payment (average 73 days wait for payment). • 74% reported a fall in their standard of living. Increased

		income from fair trade is not enough to offset other conditions which have perceived decline on quality of life.
<p>DOMINICA, WINDWARD ISLANDS</p> <p>Fairtrade (2004)</p> <p>Product: Banana</p> <p>Methodology: Not explicitly identified.</p>	<ul style="list-style-type: none"> • Fair trade sales have generated premiums of \$500,000 for the Dominica fair trade group since 2000 which has been invested in schools, community and farmers projects. 	
<p>GUATEMALA</p> <p>Lyon (2002)</p> <p>Product: Coffee</p> <p>Methodology:</p> <ul style="list-style-type: none"> • Eight months with “La Voz que Clama en el Desierto P.L.” a small cooperative in San Juan La Laguna in Western Highlands, Guatemala. • Participant observation. • Interviews with members and associated organisations. 	<ul style="list-style-type: none"> • Participation in fair trade leads to secure incomes, fortifies rural economies across the country by providing jobs and through the multiplier effect of solvent farmers supporting local business. • Elan Organic coffees, a fair trade seller has provided good support to the cooperative. • Loans received from Anacafé Small Coffee Farmer Improvement Program: 199, 1993, 1996 and 1998. • Good relationship with Anacafé and USAID made the cooperative more attractive to other lenders. • Cooperative lend up to £1,300 for improvements on plots but also widely used for children’s education. • Higher prices enable children to be 	<ul style="list-style-type: none"> • Evidence of resentment from those “outside” the fair trade market. • Originally joined the cooperative due to price incentives and were happy with higher prices, stability and recognition but now they are used to the higher prices and want more. • Prices are less than the cost of production. • Cooperative has received little support from the FLO from 1989 to 2002. Recent signs of improvements. • High debts and interest rate act as a disincentive to workers to turn goods into the cooperative and may sell goods to middlemen for quick money. • Evidence of problems with members waiting

	<p>educated (children go to school and increase land holdings.</p> <ul style="list-style-type: none"> • Guaranteed price allows for long term planning. • Half of cooperative members employ one labourer nearly full-time and three quarters have one full-time labourer during harvest. • Improvements in coffee quality as long-term relationships with buyers' results in incentives to improve coffee. 	<p>for payment from the cooperative.</p> <ul style="list-style-type: none"> • Long term contracts can lead to sense of security and loss of quality maintenance. • Close relationship between cooperative members can make punishing poor quality difficult and it is often overlooked. • Members showed a lack of understanding of the fair trade market.
<p>COSTA RICA (Café Direct)</p> <p>Ronchi (2002)</p> <p>Product: Coffee</p> <p>Methodology:</p> <ul style="list-style-type: none"> • Combination of desk research and field interviews at each of the following three levels: the secondary level of Coocafé, the primary co-operatives, and with producers. • Involved 4 cooperatives. • Four visits to cooperatives between 1999 and 2001. • Guided interviews (28 in total) with producers and cooperative staff. 	<ul style="list-style-type: none"> • Members received a stable and often higher price. • Distributed US\$1,126,000 of revenue to 4,000 producers and families representing 70% of fair trade premium. • Social Capital Fund has funded 63% of US\$40,000 in facilities to produce organic fertiliser resulting in an implicit income bonus which can be directly traced to fair trade. • Two-thirds of producers reported financial improvement in the last ten years 50% identified home improvements, 1/3 repaid long standing debts, 1/3 prolonged their children's education and 1/3 now has access to a car. 	<ul style="list-style-type: none"> • Cooperative managers/members reported little contact with FLO. • Issue of supply inducement as each cooperative has a project of acquiring land as employment for member's children and those with tiny holdings.

	<ul style="list-style-type: none"> • Reduced migration. • Cooperative has launched Café Paz which is their first final product which makes a small profit in USA and Japan. • Increased understanding of markets through the production of Café Paz. • Lower interest rates have been extended to cooperative members. • Long-term credit to members and short-term credit to non-members for basic needs. 	
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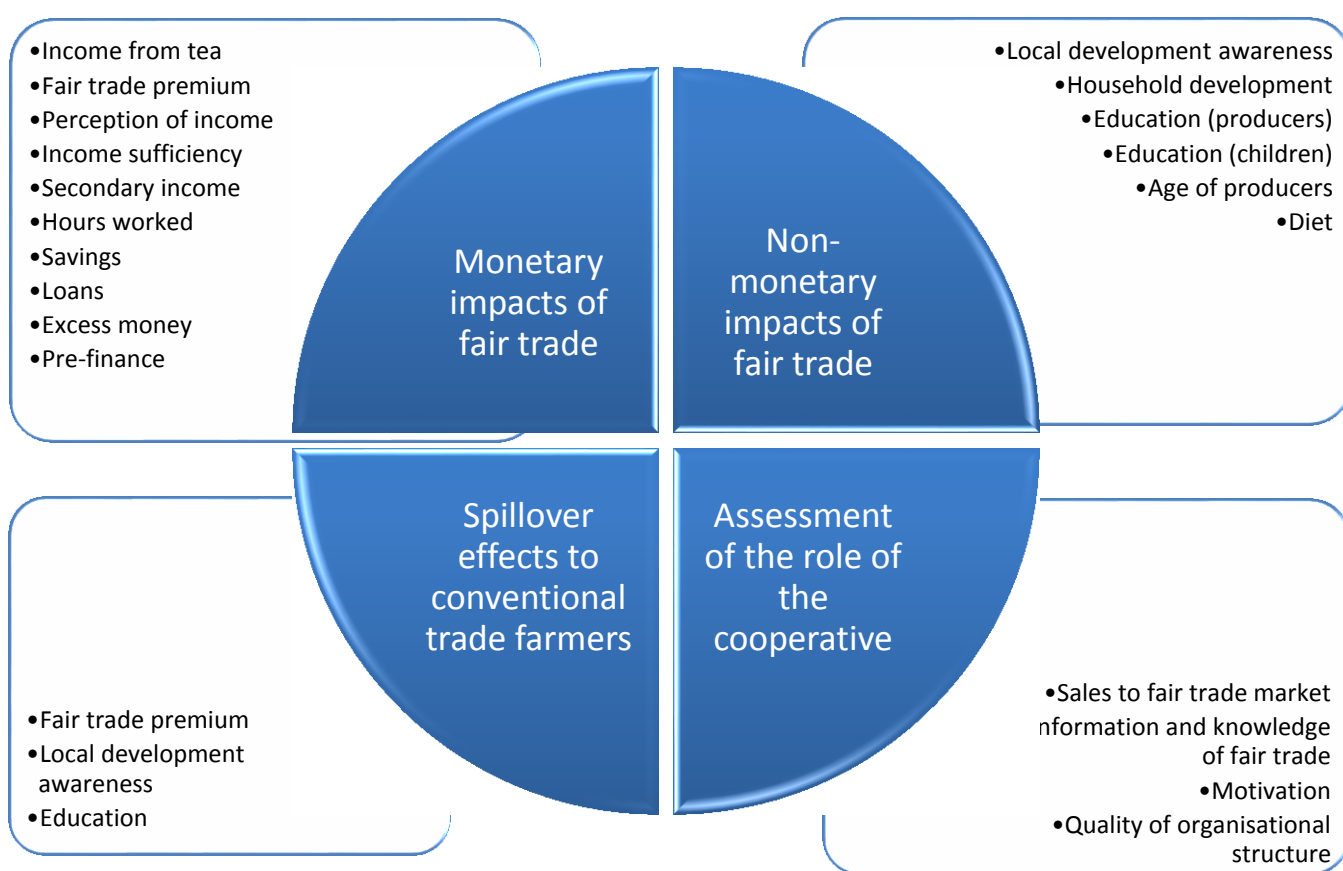
2.14 Theoretical Framework

Drawing on knowledge gained from the literature review presented in this chapter, and the findings reported in impact studies previously undertaken, the theoretical framework is presented in Figure 2.1 below.

The theoretical framework begins from considering whether ethically-driven purchases of fair trade products can result in measurable impacts for producers. Based on the findings of the previous impact studies outlined in sections 2.10, 2.11 and 2.12, four key concepts are identified within which impacts can be measured. These four concepts form the independent variables shown in Figure 2.1. The first two independent variables are whether fair trade results in any measurable monetary or non-monetary impacts for fair trade tea producers in the Central Province of Sri Lanka as compared with conventional trade producers in the same geographical region. The third concept considers whether the impacts of fair trade are extended to conventional trade producers of tea within the same geographical area. Finally, the fourth concept examines the extent that the Sri Lankan cooperative meets the criteria identified by Fairtrade (2013) and therefore contributes to rural development in the region.

The results of previous impact studies (Dragusanu and Nunn, 2014; Ruben and Fort, 2012; Beuchelt and Zeller, 2011; Mendez *et al.* 2010; Smith, 2010; Fort and Ruben, 2009; Jaffee, 2009; Becchetti and Costantino, 2006; Schmelzer, 2006; Bacon, 2005; Utting-Chamorro, 2005; Fairtrade Foundation, 2004; Milford, 2004; Murray *et al.* 2003; Lyon, 2002; Ronchi, 2002; Taylor, 2002; Tallontire, 2000) has led to the dependent variables being identified. As can be seen from Figure 2.1, the dependent variables include income from tea, fair trade premium, diversification of crops, awareness of fair trade, education of producers and children, and household development.

Figure 2.1 Theoretical Framework



The methodological framework used to explore the concepts and factors identified in Figure 2.1 is discussed in more detail in chapter 3. In brief, this involves a concurrent mixed methods approach combining both quantitative and qualitative data to investigate the four concepts identified above.

2.15 Summary

In summary, fair trade literature spans a variety of disciplines including sociology, geography, politics and economics. This chapter has attempted to synthesise the literature by focusing on thematic issues which arise such as pricing and the social premium, welfare models of fair trade and the long run viability of the model. Having reviewed the theory of free trade a demonstration of how welfare theory can be applied to fair trade showed that the outcome was dependent on the definitions used within the model. In the long-run, fair trade faces a number of challenges associated with mainstreaming, quality standards, and the sustainability of supply and demand.

Each impact study reviewed in this chapter has findings which are very specific to the individual context but there are common themes identified. The impact studies discussed so far inform the research design undertaken for this thesis, the primary purpose of which is to analyse the impact of fair trade on both fair trade producers and those who do not sell any of their produce to fair trade buyers, within the context of tea production in Sri Lanka and to draw comparisons with existing case studies. Appropriate methodological approaches are investigated in order to develop a suitable framework for the research and these are outlined in chapter three.

Chapter Three

Methodology

3.1 Introduction

The aims of this study, based in Sri Lanka, are to establish the nature and extent of any development impact on the individual producer or region, and to explore any income benefits arising from fair trade participation. Data for the analysis is generated by means of a case study enabling the fundamental goal of this thesis, that being, the ability to generalise the resulting data to the wider population. The generalisation process employed is statistical, utilising probability theory to judge the extent to which observed patterns within the sample are representative of the population. Statistical generalisation is an appropriate mode of generalisation for questionnaire research (De Vaus, 2002).

This chapter therefore examines the methodological approaches to the design of an impact study and reviews methodologies employed in previous studies. The methodology used in the present context is then outlined to show how previous research is integrated into the evaluation process, and into the design of questionnaires and interviews.

Thus, based on a sample of fair trade and conventional trade producers, the present study uses a multi-method approach. This multi-method approach comprises a statistical and qualitative analysis of data. The statistical analysis draws from responses to the questionnaires to measure the relationship between producers and fair trade participation. The development impact is explored using the qualitative responses to the questionnaire, interviews and observation in the Central Province region of Sri Lanka. This concurrent mixed methods approach of combining both quantitative and qualitative data can lead to a better understanding of the research issues.

3.2 Sample Selection

Within a quantitative design, determining the appropriate sample size is essential (Bartlett *et al*, 2001). The benefit of research in this manner is its ability to generalise about larger groups whose complete study is impossible or prohibitively expensive, from a more accessible smaller group (Holton and Burnett, 1997) and ultimately the question becomes the size of the smaller group.

An adequate sample size is necessary to ensure that a study has a good chance of detecting a statistically significant result and true effect. Furthermore, a study based on an inadequate sample size not only has a low probability of detecting a statistically significant result but also represents a waste of valuable resources (Whittle, 2012).

Singleton and Straits (2005) suggest that several interrelated factors have a bearing on appropriate sample size and composition:

- the heterogeneity of the population
- the desired precision of generalization
- the choice of sampling technique or method
- time/cost factors
- the planned stratification of the data

Firstly, regarding population heterogeneity, which concerns the value of dissimilarity within a population for a particular attribute or characteristic, Singleton and Straits (2005) (cited in Whittle, 2012) argue that, as a general rule, the greater the degree of heterogeneity the greater the sample size needed to generalize reliably from group to whole. Statistically population heterogeneity for a measurable variable is the standard deviation (σ). The

standard error of the mean is a further consideration. This is the standard deviation (σ) divided by the square root of the sample size (N) and it is clear that the standard error is directly related to the standard deviation and has an inverse relationship with sample size. This then provides Singleton and Strait's first principle of sample size, that is, the greater the degree of heterogeneity (σ) the larger the sample size (N) required to achieve reliable generalization.

Secondly, "the desired level of precision must be considered when deciding upon sample size" (Whittle, 2012, p3). The notion of precision in this context is best considered by relating it to the size of the confidence interval used to estimate a population value (Singleton and Straits, 2005). A confidence level or alpha value is chosen, so that if the sample mean has an alpha level of 0.05 we are 0.95 or 95% (1-alpha) confident that the observation has not simply occurred by chance. Alternatively, there is 95% confidence that the true population mean lies within the confidence interval. The size of the confidence interval is therefore related to the standard error⁸. The larger is the sample size, the smaller is the standard error and hence the sample mean is a better estimate of the true mean. This leads to Singleton and Strait's second principle, the greater the required precision, the greater must be the sample size.

⁸ Any single sample mean is one of many possible sample means that might have been found for different random samples. In theory, all of the possible sample means form a distribution called the sampling distribution of the mean which, regardless of the shape of the population distribution, is normal in shape. The standard deviation of the sampling distribution of the mean can be estimated by dividing the standard deviation of the sample by the square root of N, this is known as the Standard Error of the sample. Using z-scores allows measurement of distance between a single value (such as the sample mean) and the mean of a normal distribution. A z-score of 1 indicates that a value is one standard deviation from the mean. Z-scores can be converted into probabilities if they are from a normal distribution. 95% of the values in normally distributed data lie within 1.96 standard deviations of the mean. Therefore, if 95 out of 100 sample means are within 1.96 standard deviations from the mean, one can be 95% confident that any single sample mean is within that range.

Sampling design, available resources and the stratification of the data also have an effect on sample size determination. However, stratification can be subjective given the potential to identify many possible sub-populations according to researchers interests. Given this, the data needs to be incorporated with the sample size mathematically generated from the principles of population heterogeneity and desired precision (Singleton and Strait, 2005).

This question of sample size is one of the four features of research design highlighted by Peers (1996) that can determine reliability. Peers considers that survey design attempts to reduce the occurrence of alpha error, that is the observation of a trend or pattern in the sample that does not exist in the population and beta error, that is the failure of the sample to reveal such a trend or pattern that is present in the population (Whittle, 2012).

Cochran (1997) presents a formula for calculating sample size, which can take account of two data types, continuous and categorical. Where such a mixture of data is concerned, as in this thesis, Cochran (1997, p81) suggests that sample size should be determined by specifying the error margins which are appropriate for the variable type that is most important for the research. The chosen method for sample size requirement consists of two aspects firstly the level of risk the researcher is prepared to accept in the study, as represented by the standard error (Bartlett *et al*, 2001) and secondly the alpha level referred to previously. A commonly accepted margin of error in social research is an alpha value of 5% for categorical and 3% for continuous variables (Krejcie and Morgan, 1970). As mentioned previously, the last component of sample size calculation is the estimation of variance in the key variables of the study. Cochran (1997) (cited in Whittle 2012) considers there to be four methods for estimating the variance. Firstly, the sample can be divided into two stages and the results from the first are used to calculate an appropriate sample

size. Secondly, data from similar studies in the field may be used. Thirdly, pilot studies can be used to inform the calculation base and lastly estimates may be assisted by logical reasoning *i.e.* formal principles of correct reasoning or inference.

Such procedures all lead to a minimum sample size. Actual samples should also therefore reflect a suitable adjustment for non-respondents (Whittle, 2012). Salkind (1997) suggests oversampling by 40%-50% to address this issue.

Once the sample size has been determined, the type of sampling must be addressed. Sampling methods can be classed as either probability or non-probability based. The aim of this research is to generalise to the whole population from the selected sample and therefore probability sampling is selected. Non-probability sampling is generally used to discover the trends and patterns of a grouping within the selected population. This aids understanding of the particular group, and may aid understanding of the whole, but it is difficult to justify a generalisation from group to whole (Beyea and Nicoll, 1997). Methods of non-probability sampling include convenience sampling, judgement or purposeful sampling and theoretical sampling (Marshall, 1996). Convenience sampling is arguably the least rigorous of the approaches to sample selection. Whilst the result can be the least costly, measured by time and effort required, since the researcher selects participants who are most accessible, this can potentially result in poor data quality and a lack of intellectual credibility (Marshall, 1996).

Judgement or purposeful sampling involves the researcher “actively [*selecting*] the most productive sample to answer the research question” (Marshall, 1996, p523). Based on practical knowledge of the research area, available literature and evidence from the study

sample, a framework is developed such that particular characteristics are used to choose respondents. Compared to a simple demographic stratification, such as might be employed in epidemiological studies, this approach is more rational. The sample may be stratified by age, gender or social class, for example, or if participants are known to the researcher, on their attitude or beliefs. This approach can be advantageous if a broad range of variables is to be studied, including outliers and/or people with specific knowledge or expertise. Snowball sampling is an extension of this approach with those sampled recommending others (Marshall, 1996).

Theoretical sampling involves “building interpretative theories from the emerging data and selecting a new sample to examine and elaborate on this theory” (Marshall, 1996, p523). This approach is fundamental to the grounded theoretical approach⁹ but is often used, in some form, for qualitative investigations that necessitate interpretation.

According to Whittle (2012) probability sampling of the entire population allows for the calculation of sampling error and thus inference (within the stated error) from sample to the entire population. In non-probability sampling, the degree to which the sample differs from the population remains an unknown (Walonick, 1997). Methods of probability sampling include random sampling, stratified sampling and multi-stage cluster sampling. Random sampling ensures that each member of a particular population has an equal probability of being chosen. Stratified sampling is the independent random sampling of each mutually exclusive sub-group having first divided the population into homogenous

⁹ Grounded Theory can be defined as the discovery of theory from data systematically obtained from social research (Glaser and Strauss, 1967, p. 2)

sub-groups. Multi-stage cluster sampling involves two stages, cluster construction followed by a decision on what random elements to use from the cluster.

A final important element to consider when selecting a sample is the possibility of Neyman Bias also referred to as Prevalence Incidence Bias. According to Sackett (1979), this is a form of selection bias that can occur in any one of the seven stages of research which include: the literary review; the specification and selection of the study sample; the execution of experimental manoeuvre, the measurement of outcomes; the data analysis; the interpretation of the data analysis; and the publication of results. Whilst computerised data acquisition techniques have reduced the prevalence of this form of bias, poorly designed analysis techniques can introduce the bias into research.

3.3 Approaches to Questionnaire Design in Impact Studies

In the absence of published data, and in a small scale context, information must be collected by researchers. This can be done in the form of a survey administered either online, by telephone, by post or via interviews. In a survey context, important issues concern the nature of the information to be collected how questions are constructed and what characteristics are required of the questions and/or survey.

De Vaus (2002) considers that it is useful in the first instance to consider the type of information being sought in relation to behaviour, beliefs, knowledge, attitudes and attributes and that it is vital to determine whether these are involved in the survey as a whole or in particular questions.

Whittle (2012) states that further principles to consider in question design include reliability, validity, discrimination, response rate, absence of ambiguity and lastly relevance (De Vaus, 2002). Briefly, reliability exists if a question is answered in the same way at different times by the same respondent *ceteris paribus*. Validity requires that a question is actually well focused on the desired attribute. De Vaus, for instance, considers that the use of an IQ test to judge intelligence may in fact be judging class background. Discrimination refers to the degree of variability in permitted responses. For example, questions permitting only extremes could not, by definition produce variety within the answers. De Vaus (2005) considers the examples of income and gender. The gender question with two (m/f) alternatives will yield the correct variation. However an income question, if it were as extreme as “do you earn under or over £100,000” would (presumably) in a typical population provide little variance in response, with the majority of people choosing the ‘under’ option even though there are significant income differences between the ‘under £100,000’ respondents (Whittle, 2012). Discriminating via scales or bands tends to allow a greater variance in the sample on the key variables and provides more information for analysis (De Vaus, 2005; Oppenheim, 1992).

The response rate is also of crucial importance in questionnaire design since non-response can be highly problematic in analysis, given that the cause of non-response may not be known. This problem can be minimised through consideration of appropriate question content, construction and length, for example whether to use multiple choice, Likert Scales, or clearly phrased open response questions. The time required for completion is also important. (De Vaus, 2005).

For analysis, it must be assumed that all respondents have answered the same question, that is, a question cannot have one meaning to one respondent and another meaning to another. Two respondents for example may differ in their definition of the word “rich”. To one respondent it may mean having significant savings, to another it may mean having a high level of disposable income. A recognition of this problem in the question design process will minimise the risk of double meaning (Oppenheim, 2002). Finally, De Vaus (2002) simply states that his last principle of question design is relevance, that is, whether the question fulfils a particular function in the survey.

As mentioned previously, reliability and validity are two key factors in question design (Whittle, 2012; Pallant, 2007; De Vaus 2005; Singer *et al*, 2004). Firstly, the reliability of a measure provides an indication of how free the measure is from random error. There are two main methods for this judgment, which are the temporal stability of the measure and its internal consistency (Whittle, 2012; Pallant, 2007; De Vaus 2005; Singer *et al*, 2004). The temporal stability of the measure is assessed by administering it to the same individual at different times and calculating the correlation. High correlations indicate a greater degree of reliability.

However, the nature of the variable being measured must also be taken into account. For instance, current income security could feasibly change within a short period of time and a low correlation may not be an indicator of poor reliability in the context of highly volatile economic conditions. Measures of stable characteristics should, however, generate a high correlation (Pallant, 2007).

Validity in measurement simply refers to a survey question “actually measuring what we think it does” (De Vaus, 2005, p96). Whilst there is no cast iron rule for the assessment of validity, Pallant (2007) suggests collecting extra data on the measures to determine content validity, criterion validity and construct validity. Construct validity is the aspect of validity described earlier within De Vaus’ principles of question design. Content validity is the level to which the measure samples from the intended domain of content, in other words, the level to which the object is measured by a question. For instance, querying the level of satisfaction within a free trade cooperative and excluding the possibility of saying “no” does not provide the complete scope of the subject. Criterion validity judges the chosen or new measure against existing measures in the field. If there is a high correlation in the answers, the measure is judged as valid.

Messick (1975) argues that proving validity of a survey is futile given the difficulties in proving measures within a specific construct. Instead, it is proposed that validity is situation-specific requiring not the validity of the survey itself to be justified, but the validity of the survey in specific situations. A final alternative measure of validity is face validity. This is “the appropriateness, sensibility or the relevance of the test and its items as they appear to the person answering the test [*survey*]” (Holden, 2010, p637) and takes account of the opinions of those taking the survey and their interpretation of the questions. Fundamentally measures of validity have many drawbacks, not the least of which is that they are often compared to existing theories or methods, which may not in fact be appropriate in the specific context of a particular research project.

3.4 Approaches to Interview Design in Impact Studies

The interview remains the single most common qualitative research technique, with the end goal of seeing the research issues from the perspective of the interviewees (Cassell and Symon, 2006). Kvale (1983, p176) describes the purpose of the interview process as gathering descriptions of the life world of the interviewees through their interpretation of the meaning of the described phenomena.

When the data to be collected is quantitative, the interviewee may be considered simply as a component in the process, such as the participant completing a survey or taking part in an experiment. Here the quantitative researcher seeks factual observation without themselves affecting the interview process. Ultimately, however, even for this research design, the need to probe interviewees and for the interviewer to react and adapt within the interview is often seen as necessary in order to obtain the required information. For instance, the interviewer may be required to probe further into surface answers to discover any belief or systematic factors involved. For instance, questions which require respondents to assess themselves and recall examples of behaviour may require further probing for clarity or completeness *e.g.* asking respondents “why they like/dislike” something or “to tell a little more about” the issue provide a deeper response. Thus, it may not be possible to separate quantitative and qualitative issues in a simple or straightforward way.

Epistemology is the investigation into the grounds and nature of knowledge itself. The study of epistemology focuses on the means for acquiring knowledge and the differentiation between truth and falsehood. Epistemology generally involves a debate between rationalism and empiricism, or the question of whether knowledge can be

acquired *a priori* or *a posteriori*. Empiricism is knowledge obtained through experience whilst rationalism is knowledge acquired through the use of reason.

When designing research using interviews, it is appropriate to consider the intended use of any data deriving from the interview process, as this will have a direct bearing on the philosophy of the interview. Thus, Madill *et al* (2000) claim that qualitative techniques can be classified with regard to the desired nature of resulting knowledge. Broadly speaking, these vary between the two extremes of a realist approach and a radical constructionist approach. A realist approach assumes that interview data is a realistic estimation of the individual's reality outside the interview, whereas the radical constructionist approach views such data as relating to that interview only. Thus there is no claim that the data reveals the participant's personal experience (Madil *et al.* 2000). However, this is considered an oversimplification by Willig (2001) who argues that a decision must be taken as to what an interview transcript represents prior to analysis, for example, whether it is a factual account of events, the interviewee attempting to disclaim responsibility for something that has happened, an expression of the interviewee's unconscious desires, or an insight into their view of the world. Within this context, the view taken of what the transcript represents is determined by the theoretical framework of the research which is in turn informed by the epistemological stance. For example, Willig (2001) explains that if the epistemological approach is an empiricist one, "the text is seen as a straight-forward verbal expression of the interviewee's mental processes" (Willig, 2001, p10).

The epistemological assumptions of various interview types are considered by Hammersley, M. and Atkinson P (1995), Willig (2001), Vasilachis de Gialdino (2009) and Smith, C. and Elger, T (2012). They include positivist interviews, social constructionist

interviews and phenomenological interviews. The data gathered, from a positivist epistemological perspective, is intended to provide a direct insight into the interviewee's real world life outside the interview setting. This, of course, requires consideration of the accuracy of the data. Data gathered within this type of interview may be triangulated against other collected data and/or secondary data to ensure its accuracy (Cassell and Symon, 2006). Social constructionism is a broad movement encompassing several theoretical and methodological aspects (Burr, 1995) including an emphasis on the constructive nature of language. This is to say that language does not simply describe reality but helps to construct it. These interviews are usually very loosely structured and dominated by probing and adaptation on the part of the interviewer. Knowledge derived from these interviews is not considered to be reflective of the real life of the interviewee but to describe the interaction of the interviewee within the interview setting and with the interviewer.

In contrast, Smith, C and Elger T (2012) present the structure of positive interviews designed to produce unbiased, replicable responses as "tightly controlled, using a uniform structure [*with*] standardised questions posed by neutral interviewers" (Smith, C and Elger, T. 2012, p6). The authors argue that positivist researchers consider qualitative interviews, especially with case study research, to be inferior to structured surveys. This is due to the positivist researchers focus on aggregating responses to establish statistical distributions and hence produce generalisations about social phenomena.

Phenomenology is a philosophical tradition comprising a wealth of distinct and differing aspects (Moran, 2000), making a generalised discussion of phenomenological interviews problematic (Cassell and Symon, 2006). Relevant approaches for this study include the

hermeneutical-phenomenological approach as described by Giorgi (1985), the transcendental-phenomenological approach (Moustakas, 1994) and Interpretative Phenomenological Analysis (IPA) (Smith, 1996).

Transcendental-phenomenological approach was first conceptualised by Edmund Husserl in 'Logical Investigations' (cited in Kafle, 2011, p185). "The basic premise of this school of phenomenology is its adherence to the notion that experience is to be transcended to discover reality. Husserlian phenomenology is built up round the idea of reduction that refers to suspending the personal prejudices and attempting to reach to the core or essence through a state of pure consciousness. Therefore, transcendental phenomenology advocates for applying the phenomenological attitude over natural attitude. The basic interest of this school of phenomenology is to discover and describe the "lived world" (Kafle, 2011, p186).

Hermeneutical-phenomenological approach is a departure from Husserl's transcendental-phenomenological approach outline above since it rejects the idea of suspending personal opinions. "Hermeneutic phenomenology is focused on subjective experience of individuals and groups. It is an attempt to unveil the world as experienced by the subject through their life world stories" (Kafle, 2011, p186).

IPA'S underpinnings stem from the phenomenology which originated with Husserl and hence acknowledges that the researcher's engagement with the participant's text has an interpretative element. IPA assumes an epistemological stance whereby, through careful and explicit interpretative methodology, it becomes possible to access an individual's

cognitive inner world. It explores how people ascribe meaning to their experiences in their interactions with the environment (Biggerstaff and Thompson, 2008).

A central aspect of all phenomenological interviewing is the requirement for the interviewer to remove themselves from any bias concerning the interview topic up to the extreme of bracketing¹⁰ (Cassell and Symon, 2006). This requires the interviewer to perform a reflective process to ensure that any such bias does not impact on the interview process from a phenomenological perspective. Information derived from phenomenological interviews represent a middle ground in Madill *et al's* (2000) consideration of qualitative data, which is that data is shaped by the interview context, but this does not necessarily prohibit it from providing insight into the interviewee's real life experiences.

3.5 The Analysis Process and Validity Testing of Qualitative Interview Data

Seidel (1998) suggests that qualitative data analysis (QDA) can be broken down into three fundamental processes of noticing, collecting and thinking. The first of these, the noticing process, involves coding or classifying data into different fragments. Secondly, in the collecting aspect, Jorgensen (1989) considers that data must be broken apart into elements or units and reconstructed by the researcher into, "types, classes, sequences, processes, patterns or wholes" (Jorgensen, 1998, p107) in order to piece the data together to provide meaning or comprehension. For Seidel (1998) this is a further heuristic tool that prepares the data for the final analytical (thinking) process. According to Seidel (1998) the QDA thought process can be generalised as:

¹⁰ Bracketing is used in qualitative research to mitigate the potentially harmful effects of preconceptions that may taint the research process. It is the act of suspending judgement about the natural world to instead focus on analysis of mental experience.

- making sense of the data,
- looking for patterns and relationships, both within an interview and across the interviews, and
- identifying any general discoveries about the phenomena.

In terms of validating interview data, methodological triangulation is a possibility (Silverman, 2005). Here data is compared to findings generated by other methods, either primary or secondary. However, Mason (1996) cautions extreme care when using triangulation as a validation technique since the philosophical nature (for example interpretivism, positivism or post-positivism) of data can vary considerably, making data incompatible or inappropriate for comparison. Furthermore, Meeto and Temple (2003) argue that triangulation is open to manipulation as, for instance, only data that supports previous findings may be collected.

Mason (1996) suggests that validity in qualitative research should be assessed in terms of both methodology and analysis. The researcher needs to consider the appropriateness of the methodology both theoretically and practically. Fundamentally, the philosophy of the method should be valid in terms of both the desired outcome and the particular techniques employed (interview questions, sampling, *etc.*). For Mason (1996), validity of analysis derives from the methodological technique and stance, as well as from the interpretation of the researcher as to specific requirements of the research.

3.6 Methodological Approaches to Impact Study Design

Undertaking an impact study requires the researcher to consider the findings and approaches of previous studies in order to allow for comparison across studies and hence

the development of sound policy recommendations. There are broad issues that an impact study needs to encompass including attention to the role and interdependence of the purpose of the research, stakeholder contribution as well as ethical and cultural issues that may impact on the results.

There is a small body of literature on critiquing studies and their methodologies and these will be discussed in more detail later in the chapter. Paul (2005), Mayoux (2012) and Bacon (2005) critique the methods commonly used for evaluating fair trade and provide recommendations as to how impact studies of fair trade can be improved. Ronchi (2002) provides an overview of her methodological approaches to an impact study in Costa Rica.

Paul (2005) argues that previous studies have either been in-house or commissioned, highlighting a lack of independent research in the area and, in agreement with Mayoux (2012), states that previous studies have failed to follow a consistent approach. Both authors present a detailed methodology drawing on various evaluations undertaken across the South including, Costa Rica, Ghana, Nicaragua and Tanzania, India, and Bangladesh. There is also some discussion of the approach employed by DFID in developing an impact assessment of Kuapa Kokoo in Ghana.

In terms of evaluation criteria, Paul (2005) notes that, by extending the scope of fair trade evaluations to include areas such as efficiency and sustainability, comparisons can be made with other development projects, as well as introducing into the debate the five evaluation criteria used by the OECD Development Assistance Committee (DAC). These criteria are effectiveness, sustainability, relevance, efficiency, and impact. Mayoux (2012) discusses the challenges for future impact assessments, which include the selection of criteria

according to the intended beneficiaries of fair trade and the intended outcomes. For example, “are income increases more important than working conditions or social and political changes?” (Mayoux, 2012, p18).

In terms of outcomes, the indicators used to assess both economic and social impact are often inadequate due to problems in the measurement of impact and in the poor analysis of context. For example, an assessment of income impacts might involve the assessment of a ‘fair wage’. Not only is fairness a subjective concept, but wages and prices themselves are dependent upon contextual factors such as the market for goods and for labour, or different agents supply decision and marketing chains. As a result of these complications the definitions of fairness are often subjective and therefore highly contentious. Furthermore, Mayoux (2012) echoes Paul (2005) in citing issues related to the attribution of gains arising specifically from fair trade sales, as other provision provided by FTOs and NGOs, such as micro-finance, should not be ignored. Gains from fair trade measured against the intended beneficiaries need to be investigated to evaluate impact on parties. However, given the possibility of development support from other sources, the gains must not become confused. Support from NGOs for finance and local development can be viewed independently of gains from fair trade. However, confusion could arise since the existence of fair trade itself may attract NGOs to the area to build on existing support or because of increased awareness of opportunities by the fair trade cooperative members leading to projects being sought. Therefore, caution needs to be maintained when dismissing activities by NGOs without further investigation into role fair trade played in attracting or fostering this support and separation of the gains from the bodies needs to be clearly addressed.

Due to the varied nature and aims of fair trade, there can be difficulties in developing an appropriate study which takes account of all stakeholders. Yet these groups should be included throughout any study because they are subject to impacts from fair trade interventions. The range of stakeholders, their role in any analysis are identified by Mayoux (2012) and include, on a micro-level, producers and employees of fair trade suppliers as well as members of their households. On a meso-level, other producers and employees in the same national and international markets, and other members of the same community may also be identified as stakeholders. Finally, at the macro-level, it is the case that other producers and employees in the same markets, consumers and others are affected by regulation and policy change as a consequence of fair trade. Finally, Mayoux (2012) also identifies secondary stakeholders as being other 'grassroots' organisations and movements, entrepreneurs in the private sector, government administrators and donor agencies. It can be argued that studies of fair trade must therefore appreciate the diversity of stakeholders and their individual aims and perceptions of fair trade. Additionally, impact studies must be sufficiently broad in other ways to allow examination of the direct support for producers via a fair price, gender equality as well as local environmental support. Notwithstanding, they need to take account at the community and macro-level level, of awareness raising, health and education improvements and advocacy of human rights and gender equality.

It is also important that any study goes beyond an examination of impacts alone and extends to making policy recommendations. This can be problematic given the different levels of impact within any one project from community development via the social premium through to individual support for the producer. Furthermore, to avoid attaining an unintended policy outcome rather than informative and part of learning, policy

recommendations must take account of the sensitivity of funding requirements and the potential constraints that may exist on this (Mayoux, 2012). Given the variety of key stakeholders and commercial implications from competing fair trade organisations, the interpretation of findings must be “analysed in relation to contextual opportunities and constraints offered by the relevant markets, economic and social and political environments” (Mayoux, 2012, p5).

3.6.1 Using Methodological Approaches within Impact Studies

As discussed in the previous section, fair trade studies must be appropriately planned and should seek to address the following issues: the purpose of the assessment; the criteria and indicators to be used; stakeholder involvement in the impact assessment; the particular interventions to be assessed; the contextual factors to be included; and how the findings are to be fed into practice (Mayoux, 2012).

When analysing fair trade and developing a study to address these issues, certain tools are more appropriate than others. Paul (2005) discusses quantitative, qualitative and participatory methods in detail arguing that the use of quantitative methods cannot realistically be applied to an evaluation of fair trade. This is because, ideally, quantitative evaluations aim to incorporate what outcomes would be without intervention, enabling a “with-and-without” comparison between two sets or a “before-and-after” comparison where the test group and control group are the same. The problem with this approach is that “it is difficult to envisage a Fair Trade organisation being bent on evaluation to the point of conducting an experiment within a cooperative which entailed the random selection of beneficiaries” (Paul, 2005, p140). That is to say, difficulties emerge since randomisation requires the random division of eligible individuals into two groups: those

who receive the intervention and those who do not, creating practical and ethical problems.

Paul (2005) recommends the use of Rapid Appraisal Methods which have evolved over the last two decades. Rapid appraisal methods are quick, low-cost methods for gathering information, that lie somewhere along the continuum of data collection options ranging from informal short field visits & casual conversations to census, surveys, or experiments. Bergeron (1999) explains that Rapid Appraisal Methods offer “a useful set of research and appraisal tools to obtain quickly information from local populations about their conditions and their needs” (Bergeron, 1999, p3). Thus, this approach will enable local people to plan alongside outsiders leading to appropriate interventions as well as an evaluation of the impact of interventions have had after they have been carried out.

While limitations are evident with these Rapid Appraisal Methods, such as the lack of random sampling and influence of the researcher’s judgement, they provide fast access to relevant information, enable flexibility and require little investment and few resources. The most common techniques used are: key informant interviews; direct and structured observation; and informal surveys.

A participatory approach to analysing fair trade is recommended in Paul (2005) and Mayoux’s (2001) papers. Paul recommends this should be carried out using Rapid Rural Appraisal (RRA). The RRA, a type of Rapid Appraisal Method, “uses a non-standard set of methods for collecting and analysing information, ranging from semi-structured interviews to analytical games. On this basis, miscellaneous methods of participative enquiry have been designed with a view to bridging the social and cognitive gap between a project’s

beneficiaries and its evaluators” (Paul, 2005, p141). Paul’s experience of implementing this technique involves the use of non-standard methods such as visual techniques including charts, illustrating the history of the community and highlighting changes that have occurred, in order to show advances in living conditions. The variety of techniques used in this method have allowed researchers to gain a better understanding of producers, to tackle power and gender issues and to see who benefits the most from fair trade, employees or smallholders.

Also applying RRA, Bacon (2005) undertook an impact study in Nicaragua using a survey containing structured closed ended interview questions. In addition, working with gender specialists he conducted ten focus groups separated by sex, using participants from the same list of farmers who participated in the survey to triangulate their answers. Interviews were also carried out with leaders of the cooperatives and professional staff.

Mayoux (2001) states it is important for fair trade impact assessments to include a range of political, economic, social and environmental criteria and to involve different stakeholders who may all have differing interests in the interventions and outcomes. It is argued, given the commitment of fair trade to help the most disadvantaged, their views and interests “must be given at least equal weight in terms of selection criteria for assessment representation in the impact assessment process and analysis of the types of impact and the practical implications” (Mayoux, 2001, p13). Moreover, in order to allow for credible recommendations to be drawn, there must be a careful analysis of the particular type of intervention according to its aims, structure and the nature of the activities involved. The analysis of economic and socio-economic factors must be placed in a context that includes international, national and local markets for products, input and

labour, and incorporates the opportunities and constraints facing other private sector enterprises. Further, Mayoux states that, given the aims of fair trade, assessment should contribute to the building up of a sustainable and participatory monitoring evaluation system, including capacity building for producers themselves and, where possible, communities, to monitor and evaluate. There should also be a contribution to networking, learning and accountability between organisations, (Mayoux, 2012). Recommendations derived from discussions between various fair trade stakeholders can highlight areas of focus for future impact studies on fair trade. Such recommendations include how the benefits of fair trade can be increased, how fair trade markets can be expanded, and how the impact of fair trade on macro-level policy and the mainstream market *i.e.* conventional trade, might be increased (Mayoux, 2012).

Other tools which may be useful in an impact study are Social Impact Assessments (SIA). These make use of several methods for collecting qualitative data, such as key informant interviews and targeted surveys, in order to examine how a given reform distributes the costs and benefits amongst stakeholders, (Paul, 2005). This approach makes use of several methods for collecting qualitative data such as key informant interviews and targeted surveys. Previous studies in Ghana (Jones and Bayley, 2000; NRET 2000) have used this method to show that the impact of fair trade was limited due to the combination of a weak cooperative labour force and an absence of related development projects (Paul, 2005). Hence, it is argued, this method is useful in evaluating the context and assets required to reap the potential benefits from fair trade.

SIA studies of Coocafé in Costa Rica (Ronchi, 2002) involved field interviews on three levels: the secondary level of Coocafé; the cooperative; and individual producers. Selection of

cooperatives was not random but aimed to build a representative sample in terms of geography, size and experience of the fair trade market.

Table 3.1 below summarises some of the methods used in previous impact studies. As is evident from the preceding discussion, there are a range of approaches to the evaluation of fair trade. It is clear that the process of research design need to be sensitive of context and stakeholder interests. Accordingly, evidence and the recommendations from the literature are used to inform the methodology employed in this study.

Table 3.1 Methods employed in previous impact studies

Study	Cooperative and location	Methodological approach
Jones and Bayley (2000). OPM.	Kuapa Kokoo, (Ghana)	<ul style="list-style-type: none"> - focus on quantitative indicators of increased incomes and profits - based on organisation records and selected interviews with entrepreneurs and producers. - some discussion of the impact on markets but no comparison between fair trade producers and others.
Traidcraft (2000)	AMKA (Tanzania) and Just X (South Africa)	<ul style="list-style-type: none"> - focus on quantitative indicators of increased incomes and profits based on organisation records and selected interviews with entrepreneurs and producers.
Murray and Tiffen (2000) Hopkins (2000)	Twin/Kuapa Kokoo and Oxfam	<ul style="list-style-type: none"> - combine participatory and, qualitative and quantitative methods and analysis. - cover social, organizational, environmental and economic impacts.

<p>NRET studies: Malins and Nelson (2000), Malins and Blowfield (2000).</p> <p>Blowfield and Gallett (2000)</p> <p>Maynard and Robinson (2000).</p> <p>Nelson and Galvez (2000a) and Collinson and Leon (2000)</p> <p>Nelson and Galvez (200b) and Collinson and Burnett <i>et al.</i> (2000)</p>	<p>Uganda</p> <p>Ghana</p> <p>Mexico</p> <p>Ecuador</p> <p>Peru</p>	<ul style="list-style-type: none"> - Use the Sustainable Livelihoods framework for natural, social, financial, human and physical capital - make extensive use of qualitative and economic analysis of both private sector markets, contexts and institutions as well as impacts. - do not give a detailed account of the methodologies used.
<p>Ronchi (2002)</p>	<p>Costa Rica</p>	<ul style="list-style-type: none"> - involves field interviews on three levels: the secondary level of Coocafé, the cooperative and producers. - selection of cooperatives was not random but aimed at building a representative sample in terms of geography, size and experience of the fair trade market. - use guided interviews with producers. - sample size (28).
<p>Bacon (2005)</p>	<p>Nicaragua</p>	<ul style="list-style-type: none"> - RRA approach to survey - Closed ended questions - Ten focus groups by sex and triangulation of answers - Interviews with leaders of the cooperative and professional staff
<p>Becchetti and Constantino (2006)</p>	<p>Kenya</p>	<ul style="list-style-type: none"> - Survey comprised of 100 questions - 120 sampled in total.

		- Group 1 is organic farmers, group 2 farmers under conversion, group 3 is fruit farmers and group 4 have no affiliation to the fair trade cooperative (30 per group)
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3.7 Methodological Approach for the Sri Lankan Impact Study

The aim of this study is to evaluate the impact of fair trade on those inside and outside the movement to establish evidence of income and well-being differences between the two samples. Informed by the methods used in previous studies, the approach to designing the research study in Sri Lanka, completed over 14 days in July 2009, is discussed below but in brief, uses a multi-method approach comprising interviews and a survey of tea producers in the Gampola region of Sri Lanka to generate both quantitative and qualitative data. In line with other impact studies, interviews and questionnaires are the preferred approach (Ronchi, 2002; Bacon, 2005; Becchetti and Constantino, 2006) due to the lack of published data, the small-scale activity being researched, the need to be sensitive to context and the fact that there are many criteria for assessment.

3.7.1 Sample Size Selection

A stratified sample employing researcher judgement of the purpose of the research is used for this study. As outlined in section 3.2 a basic requirement for the sample is the presence of sufficient data to carry out statistical analysis. Bearing in mind that the number of cases selected is also dependent on the availability of producers and the costs involved in data collection (Van De Ven, 2007). Sample sizes from previous studies (Ronchi, 2002; Becchetti and Constantino 2006) provide an indicator of appropriate sample size and as such, a sample of 40 farmers from each category (fair trade and conventional trade) is deemed an

appropriate sample. For the purposes of this thesis the need to over-sample (Salkind, 1997) to allow for non-response is not relevant, as the questionnaires were completed during face to face meetings with the producers.

Previous studies are characterised by a lack of quantitative data which limits observed outcomes, and hence a greater reliance on qualitative data. This Sri Lankan study gathers both quantitative and qualitative data. By developing a rigorous and comprehensive methodological approach, this impact study can be compared with other development studies.

The sample selected draws on guidance from Paul (2005) for a “quasi-experimental design”, using non-random methods to compare the study group with an equivalent group that does not benefit from the intervention. Hence, the case study examines the impact of fair trade on those involved in the movement, as compared with those who are outside of it.

The study incorporates 40 fair trade and 40 conventional trade farmers in the Gampola area, the only region in Sri Lanka known to have fair trade operating at the time, and includes the following 7 villages: Samarakoohena; Deenside; Nawa Gurukelle; Gurukele Village; Oruwel; Nillambe and Dewita. Each of the farmers had 1 acre of land primarily used to grow tea with some farmers diversifying into the production of spices such as pepper, cloves and lemongrass. All of the 40 fair trade farmers are members of the SOFA cooperative. The areas selected for visits each day were randomly chosen from a selection of small villages which SOFA operates in. Within these villages, farmers were selected using a judgement framework based on whether they were fair trade or conventional farmers, operated with or independently of SOFA and were tea producers. The fair trade farms were

easily identified by the lot number indicated on the edge of each of their farms, which enabled a distinction to be made between fair trade and conventional trade farms in the area. In each village, an equal number of farmers from each category i.e. fair trade and conventional trade was randomly selected. For the fair trade farmers, SOFA provided a list¹¹ of all villages and members in Gampola with SOFA membership. The list included 21 villages and a total of 1082 farmers. From this, 7 villages were randomly selected and then the farmers were randomly chosen from within each village. For conventional trade farmers, no list was available and therefore the same villages were selected and participants were randomly chosen and asked to participate whilst administering the surveys in each village. None of the farmers declined the invitation to complete the survey so the sample is not biased in this way.

3.7.2 Questionnaire Design

As recommended in the literature (De Vaus, 2002, 2005) the questionnaire used in this study (See appendix 1 and 2 for questionnaires) is designed to determine behaviour, beliefs, knowledge, attitudes and attributes. This is because, fundamentally, this thesis is aimed at a consideration of producer attitudes towards fair trade and local and personal development, beliefs with regard to causation of any gains or losses and whether these differ between cooperative members and non-members.

For belief questions, the research is concerned with what the participants believe to be true regarding the effectiveness of fair trade. For instance, regardless of whether it can conclusively be shown that fair trade is solely responsible for the development or income

¹¹ The list of villages and SOFA members within each village was retained by the cooperative for privacy reasons.

differential between members and non-members, further expansion and increased membership of the cooperative will be markedly difficult if there is no belief that the cooperative is the cause. With regard to attitude questions the research is concerned with what producers believe is appropriate given their experiences, for instance whether they would choose to become part of the cooperative if they are not already. Thirdly, the study considers of the attitudes of different belief and knowledge, exploring relationships between such beliefs and levels of income and education or years of experience in producing for fair trade.

In order to allow greater variance in the sample, bands and scales are used in the questionnaire design (De Vaus, 2005; Oppenheim, 1992). Non-response has been minimised through the construction of questions with appropriate content and length (De Vaus, 2005). The validity and reliability of the questionnaire requires the questions to be clear and unambiguous, as well as an assurance that every question is relevant to the research topic. To ensure the suitability of the questionnaire, the content was assessed against the wording checklist of De Vaus (2002) (see appendix 3). Finally, a single interpreter fluent in English, Tamil and Sinhalese ensures consistency in the administration of the survey.

3.7.3 Questionnaire Structure

The questionnaire is designed to explore socio-economic indicators of the impact of fair trade on the lives of fair trade and conventional trade tea producers, and as such, is divided into six sections.

The first section collects personal details such as name, age, gender, cooperative affiliation and type of tea production, whether organic or conventional. Sections two and three gather data on socio-economic indicators including personal and local development. The questions are structured to allow for detailed investigation into a producer's home life and work commitments. Information is gathered on number of dependants, family educational achievements, access to water, electricity and medical care. The main crops farmers cultivate, the principal food items they consume, as well as their perception of local development indicators are investigated in section two.

Economic indicators are examined in the next section, with questions designed to record producer's income from tea, and perceptions of income and price changes related to tea. Further information on a producer's ability to save and invest in personal development as well as spending patterns on food, housing and clothing is also gathered in this section of the questionnaire. Labour-leisure decisions are investigated through questions on the number of hours spent working on farms, sources of second income and the ways in which producers' spend their time when not working on their farms.

In section five, both fair trade and conventional trade producers answer questions on their knowledge of, and association with, the cooperative. With fair trade producers, the purpose of these questions is to understand any advantages and disadvantages arising from cooperative membership. Answers also offer insights into the cooperative's operational strategy and how producers are supported. Conventional trade producers are asked about their knowledge of the cooperative and whether they feel there are advantages to joining, in order to, explore the reasons they may or may not be planning to join.

The final section is for completion by females only and examines the time spent working on the farm, and their association with the cooperative, with a view to discovering their roles within the cooperative or family environment.

3.7.4 Interview Design

A combination of techniques informed by the discussion in section 3.4 are used in the field study of this paper. Thus, in addition to the questionnaire administered to producers, the study also includes interviews with heads of organisations, producers and with key informants involved in research centres and cooperatives. Each of these methods has been recommended by Paul (2005) to provide a structured and clear approach to gathering information and has proved effective in studies carried out in Tanzania (Traidcraft, 2000). Direct observation and information gathering also form part of the case study, to facilitate a deeper understanding of the issues and allow a thorough analysis of the impact of fair trade on conventional trade producers.

During the interview process the interviewer may need to react and adapt within the interview in order to probe issues further and obtain the required information. For instance, the interviewer may be required to investigate surface answers about development responsibility to discover any beliefs or systematic factors influencing the response, for example, undisclosed association with the government or SOFA resulting in biased responses. The interview is seen as a vital aspect in this type of study (Cassell and Symon, 2006) and the interviewee is seen as a full participant rather than a passive provider of answers to set questions. With this in mind interviews consist of one-to-one sessions, set within the perspective of realist interviews. The interviews are clearly structured to

allow for direct comparison and for triangulation against other collected data (e.g. observation and secondary data) to ensure its accuracy (Cassell and Symon, 2006) (see appendix 4 for interview questions)

The interview design process can be broken down into four stages (Cassell and Symon, 2006):

- Defining the research question (s)
- Creating the interview questions
- Recruiting the participants
- Carrying out the interviews.

In terms of the present study, the research question is clearly defined in the introductory chapter. The specific role of the interviews is to establish causality of development in regions, that is to say, which organisations are responsible for reported development. Unlike the broad social constructionist and phenomenological approaches to interviews where an interview guide is recommended (Cassell and Symon, 2006) the realist approach, adopted in this study, requires a formal list of directed questions. Producer participants are selected based on their decision to participate or remain outside the cooperative with heads of organisations also selected for inclusion. A sub-group of the producers, used as part of the questionnaire process, are selected to allow triangulation of answers and explore responses to surveys in greater detail. The selection of producer participants is representative of the original sample taking into account the age, gender and educational information provided in the original questionnaires.

As is the case for the questionnaire, the presence of an interpreter fluent in English, Tamil and Sinhalese ensures consistency in how questions are asked to participants in each interview.

3.8 Data Analysis

Bacon (2005) is one of a small number of previous impact studies that tests statistical significance of fair trade. Using a two way Anova approach, the finding is that certified markets have a statistically significant positive effect on the sale price. Pariente (2000) observes that the minimum price increases producer's security. Becchetti and Constantino (2006) evaluate econometrically the impact of fair trade on various indicators of well-being such as crop variety, average market price for each product sold, sale conditions and subjective price satisfaction. Other impacts studies undertaken, although often qualitatively rich, tend to be non-systematic focusing more on the qualitative discussion (Nelson and Galves 2000a; Hopkins 2000; DFID 2000; Castro 2001 and Ronchi, 2002).

The analysis in this thesis adds to both the quantitative and qualitative data currently available through analysis of Sri Lanka, not previously the subject of an impact study assessing statistical significance. Furthermore, it attempts to address recommendations from DFID (2000) on the importance of comparisons between the quality of living standards (both levels and changes) for fair trade producers against a randomly selected control sample.

Having collected data from two groups of farmers, the objectives are to compare the groups across a range of characteristics and variables such as age, income from tea, educational achievement, working hours and household development for example,

investment in home improvements and ability to save. The analysis will investigate links between variables including income and education, hours worked and household development. Grouping the analysis by monetary and non-monetary variables enables a detailed overview of impact factors to be explored using both quantitative and qualitative results. The overall aim is to examine the nature of any benefits from fair trade membership such as higher incomes, improved education of children and/or producers, reduced working hours and household development. Importantly, analysis of the data will be undertaken with an awareness of the potential for Neyman Bias to influence both the analysis and interpretation. Therefore, this will be mitigated against throughout the analysis and discussion of results.

To complete the data analysis, a number of statistical tools are used within SPSS. An independent-samples t-test is used to compare whether the two groups have different mean values and is employed to examine differences between incomes, age and hours worked for fair and conventional trade farmers, years worked in fair trade and perception of income improvement, hours worked by producers, and the existence of a secondary income. Mean age of farmers and mean income level in respect to their children's educational achievement are also examined using this test. Where data are not normally distributed, non-parametric equivalents such as the Mann-Whitney U-test are used. For example, when testing mean differences in the number of hours worked for fair and conventional trade farmers.

Chi-square test for independence is used to determine whether there exists a significant association between two variables. This is employed to test the relationship between the perception of income improvement, income sufficiency, second income requirements, reported excess money, local development awareness, household development,

secondary level education and educational achievement of producer's children for fair and conventional trade producers.

Pearson correlation coefficient measures the strength of a linear relationship between two variables, denoted by r . The test is used to explore the relationship between hours worked and income to assess whether a positive correlation exists.

Multivariate analysis of variance is used to examine education differences from age and income factors by comparing the groups to determine whether the mean differences between the groups are likely to have occurred by chance.

Standard multiple regression is used to evaluate the relationships between a set of independent variables and dependent variables. The test is used to identify how much of the variance in producer's income is explained by age, fair trade participation, Educational achievement, or number of children. Further uses of this test are on how given variables such as those previously mentioned affect producer's reporting subjective factors such as an improved income and household development.

Qualitative data gathered from interviews, surveys and observation are used to support and expand the discussion of the results from the above tests in chapter five. These qualitative results add context and depth to the statistical results enabling policy recommendations to be made.

3.9 Ethical Considerations of Research Design

Great care should be given to ethical considerations, as noted by Denzin and Lincoln (1994, 2000) and Butler (2000). Ethical considerations primarily revolve around three factors: informed consent, the right to privacy and the protection from harm (Denzin and Lincoln, 1994). In this research, participant involvement relies upon assurances of anonymity where possible and complete confidentiality. 'Doing no harm' in the present context has two aspects: harm to the external self, such as harm to a person's future or existing participation in the community or cooperative if confidentiality were to be breached, and harm to the internal self, particularly relevant when interviewing an emotionally charged subject (King, 2006). The principle of 'doing no harm' is built into the research design through the assurance of anonymity and confidentiality. Lastly, with regard to informed consent, (discounting the debate as to whether a participant can ever be fully informed) participants were informed carefully and truthfully (King, 2006) of the nature of the research and any recording of interviews was overt.

3.10 Summary

This chapter reviewed different methodologies for measuring the socio-economic impact of fair trade on producers operating in conventional trade and fair trade markets. Discussion of the appropriate approach to sampling and selection is followed by consideration of questionnaire and interview design with these instruments identified as the most common method for measuring the impact of fair trade on producers.

In chapter four the data gathered from the methodology outlined in this chapter will be used to measure the impact of fair trade on two producer groups.

Chapter Four

Data Results for Gampola District Analysis

4.1 Introduction

This chapter presents analysis of the data gathered within the Gampola District of Sri Lanka to determine the impact of fair trade on both fair and conventional trade producers of tea. In July 2009, a field study was carried out over 14 days to examine the impact of fair trade on several village communities in Gampola, an area in the Central Province of Sri Lanka. All fair trade producers in this region are members of the Small Organic Farmers Association (SOFA) which has been in operation for 11 years. As of July 2009, SOFA had 1802 organic tea and spice producer members spread across 21 villages. This comprises 1314 men and 488 women with responsibility for a total of 2669 acres.

The field study incorporated 40 SOFA members, and therefore fair trade producers, and 40 producers working outside of fair trade and selling their produce through the local buyer and thus under free market rules.

A detailed quantitative and qualitative analysis is undertaken to establish the monetary and non-monetary benefits that contribute to producers' lives. The analysis is divided into broad interdependent groups around the following themes: income; local development and social premium; access to pre-finance; well-being; education; children; organisational capacity; and awareness of fair trade.

This chapter initially shows descriptive statistics to provide an overview of the sample. This is followed firstly by data manipulation to test for normality and secondly by the results of statistical tests performed in SPSS. Such tests include: independent-samples t-test; Chi-

square test for independence; and correlation. Finally, multiple regressions are presented to inform analysis and discussion in chapter five.

4.2 Descriptive Statistics

This section outlines the data gathered from the 80 surveys carried out on fair trade and conventional trade farmers for the Gampola region. The results from the 40 fair trade sample are summarised first, followed by the 40 conventional trade farmers. Finally, Table 4.1 summarises this data and includes the results for the sample as a whole.

4.2.1 Fair Trade Producers

Fair trade producers in the sample grow organically produced tea along with spices such as cinnamon, lemongrass, pepper and cloves. The age range of all those surveyed lies between 33 and 88 years with a mean of 55.90 and standard deviation of 13.40. Of those sampled, 11 were female (27.5%) and except for one person, all of those surveyed (98.8%) were married. The hours per day that farmers worked on their land ranged from 0¹² to 9 with a mean of 5.3 and standard deviation of 1.92. Almost a third of farmers (32.5%) spent 5 hours per day on their farm cultivating their tea crop.

Of those who worked within the fair trade system, 28.7% had done so for 11 years with the shortest being 3 years (1.3%), with a mean of 8.85. Incomes generated from the production of tea ranged from 12,000 rupees to 100,000 rupees per year. The mean income was 38,350 rupees with a standard deviation of 23,193. Of the sample, 97.5% said that they had seen

¹² This was a single farmer who was 74 years old. His son-in-law and labourers worked on the farm in his place.

an improvement in their income in the past 5 years¹³ with 100% stating that the price of tea had grown somewhere between 0 and 5% over this period. However, 92.5% of the fair trade sample felt that their income was still insufficient and only 37.5% had extra money available to spend on personal development such as home improvements. However, when this response was crosschecked with another question on how improved income had affected them, 61.5% indicated that they had been able to invest in their household development. Answers included improving or building their home, providing for their children's education, purchasing furniture and saving.

All but two of the fair trade producers had children. The mean number was 2.98 with standard deviation of 1.83. The maximum number of children any participant had was 8. An examination of the educational achievement of producers and their children shows that the majority of producers had children with secondary level education. Fifteen households (39.47%) reported primary level education for their children, and 22 (57.89%) reported secondary level education. Only one farmer (2.63%) reported their child as achieving University level education. In total, 6 (15.79%) farmers had children who had not yet finished education, as they were too young and still progressing through the education system¹⁴. Educational improvement is thus seen across the generations as only 2 producers (5%) had themselves attained secondary level education and the overwhelming majority of 38 (95%) had left school with only primary level education.

Fair trade producers were asked whether they were aware of improvements in their village in the past 5 years and 100% confirmed such improvements including more development,

¹³ The single 'no' answer came from a farmer who had fallen sick and therefore had to recruit hired labourers to do the work for him.

¹⁴ This data is the percentage based on the sample of those who have children in education i.e. sample size is 38

road building and more houses. When respondents were asked who was responsible for the improvements observed in the town, 90% attributed the development to the SOFA cooperative with the remaining 10% citing both SOFA and the government as being responsible.

4.2.2 Conventional Trade Producers

As in the sample of fair trade producers, all of the conventional trade producers grow tea although in contrast to the 100% organic production of fair trade, none of their output is organic. Eight of the producers (20%) also grew spices such as clove, turmeric and pepper. The age range of the conventional trade farmers surveyed is between 29 and 79 years with a mean of 49.43 and standard deviation of 14.37. All of those sampled were married and 7 were female (17.5%). The hours per day that farmers spent cultivating tea crops on their land ranged from 4 to 10 hours with a mean of 7 and a standard deviation of 1.54. Almost a half (47.5%) worked for 8 hours per day on their farm producing tea. These simple statistics suggest that the conventional trade farmers are working harder cultivating tea than those involved in fair trade with an average of 3 hours extra labour per day.

The farmers have worked in the production of tea for between 2 and 62 years with a mean of 25 and a standard deviation of 15.22. Incomes generated from the production of tea ranged from 12,000 rupees to 76,000 rupees. The mean income was less than for the fair trade farmers at 33,000 rupees with a standard deviation of 15,290. Of the sample, 72.5% said that they had not seen an improvement in their income in the past 5 years. Sixteen farmers (40%) stated that the price of tea had declined in the past 5 years compared to 60% who have seen an increase of between 0 and 5% over the same period. All of the sample felt that their income was insufficient and only 17.5% had extra money available to

spend on household development such as home improvements. However, similar to fair trade producers, when responses were crosschecked with a question on the how the improved income had affected them, 57.5% nevertheless indicated that they had been able to invest in their household development.

The majority of participants (92.5%) had children with only 3 (7.5%) reporting no children. The mean number was 2.38 with standard deviation 1.58. The maximum number of children any participant had was 7.

Seventeen producers' children had primary level education (45.5%) with the remainder reporting secondary level (54.5%). In total, 12 (30%) farmers had children still within education¹⁵. Some inter-generational improvement is seen here, as in the fair trade sample, with a lower proportion of farmers (37.5%) having secondary level education compared to their children. However, improvement is not as marked given that only 5% of fair trade producers had experienced secondary education.

Some three quarters of conventional trade farmers confirmed that they had seen improvements in their village including more development, road building and educational improvements. When respondents were asked who was responsible for the improvements, none of the farmers attributed the improvement to fair trade or SOFA. Indeed, 70% of conventional trade farmers had not heard of the fair trade movement. Twenty-four (60%) attributed the improvements to the government and a further 6 farmers reported either

¹⁵ This data is the percentage based on the sample from those who have children in education i.e. sample size is 37

that they do not know who is responsible or that they personally are (7.5% for each response).

4.3 Water and Electricity

Indicators of well-being such as access to pipe-borne water and electricity were included in the questionnaire to provide an insight into living standards. Of those surveyed 75% had access to pipe-borne water and 90% had electricity in their home. All the respondents had access to a doctor at a distance ranging from 2.5 to 8 kilometres. The mean distance farmers travelled to their nearest doctor was 4.96 kilometres with a standard deviation of 1.77.

Investigations into the provision of water and electricity (Development of Sri Lanka, 2013a and 2013b) indicate that these services are part of government responsibilities. Hence, it can be argued that there is little scope or incentive for any cooperative to support improved provision, resulting in little difference between the two groups of farmers. Any small differentials that do exist are determined by the village of residence and whether government projects have yet been implemented. The Sri Lankan government has pledged to achieve 100% electrification by mid-2014 (Development of Sri Lanka, 2013a) and is progressing towards achieving its millennium goals on sanitation which includes universal access to water and good sanitation by 2020 (Development of Sri Lanka, 2013b).

Table 4.1 Summary of Sample Data

Descriptor	Fair Trade	Conventional Trade	Total Sample
Organically grown tea (%)	100.00	0.00	50.00
Females (%)	27.50	17.50	22.50
Males (%)	72.50	82.50	77.50
Average age (years)	55.90	49.40	52.70
Cooperative affiliation (% yes)	100.00	0.00	50.00
Married (yes)	97.50	100.00	98.8%
Mean number of children	2.98	2.38	2.68
Producer's education			
Primary (%)	95.0	62.50	78.80
Secondary (%)	5.00	37.50	21.30
Child Education			
Primary (%)	39.50	45.50	42.50
Secondary (%)	57.90	54.50	56.20
University (%)	2.63	0.00	1.30
Mean income from tea (rupees)	38,350	33,000	35,675
Improved income (yes)	97.50	27.50	62.50
Change in price of tea			
Decrease	0.00	40.00	20.00
Increase 0 – 5%	100.00	60.00	80.00
Income sufficient (% yes)	7.50	0.00	3.75
Excess money (% yes)	50.00	17.50	33.80
Household development (% yes)	61.50	57.50	59.50
Mean hours worked per day on tea production	5.30	7.00	6.20
Aware of development (% yes)	100.00	75.00	87.50
Responsibility for development			
SOFA	90.00	0.00	45.00
SOFA/Govt.	10.00	0.00	5.00
Govt.	0.00	60.00	30.00
Other¹⁶	0.00	40.00	20.00
Access to pre-finance (% yes)	100	0.00	50.00
Fair trade aware (% yes)	100	30.00	65.00

¹⁶ 'Other' includes: "no response" due to feeling there has been no development, "personally responsible" or "don't know".

4.4 Assessment of Normality

An assessment of the normality of numerical data is provided in this section of the chapter. This is a prerequisite for many statistical tests because normal data is an underlying assumption in parametric testing. As such, the numerical data is tested for normality and transformed where appropriate. A summary of the findings is presented, followed by a review of associated histograms.

Four variables are tested for normality: farmer's age (*age*); income from tea (*TealIncome*); the number of children (*Child*); and number of hours per day spent producing tea on the farm (*Hoursworked*). Table 4.4 summarises the findings for each variable.

Tests for normality are carried out using the Kolmogorov-Smirnov¹⁷ and Shapiro-Wilk¹⁸ statistics and as can be seen from Table 4.2, only age is found to be normally distributed. In the case of the other three variables, Table 4.4 presents the characteristics of their distributions in terms of skew and kurtosis. Thus income and number of children are seen to be positively skewed, with hours worked exhibiting negative skew.

Since 3 variables are not normal, transformations of the data are carried out to construct normal variables. The results of this are also shown in Table 4.4.

¹⁷ Normality is accepted when the Kolmogorov-Smirnov statistic is greater than 0.05 and not significant (Pallant, 2010, p63)

¹⁸ Normality is accepted when the Shapiro-Wilk statistic is greater than 0.5 and not significant (Laerd, 2014)

Table 4.2 Tests of Normality of Original Data

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
<i>Age</i>	.059	80	.200*	.971	80	.066
<i>Teaincome</i>	.159	78	.000	.894	78	.000
<i>Child</i>	.190	80	.000	.909	80	.000
<i>Hoursworked</i>	.206	80	.000	.921	80	.000

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Table 4.3 Tests for Normality on Transformed Data

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
LogTealIncome	.125	36	.167	.960	36	.223
LogChild	.171	36	.009	.925	36	.018
RSQRTHoursworked	.221	36	.000	.937	36	.040

a. Lilliefors Significance Correction

Table 4.4 Assessment of Normality

Variable Description	Variable name	Skew and Kurtosis	Normal	Normal Name
Farmer's age	<i>Age</i>	None	Yes	n/a
Income from tea	<i>TealIncome</i>	Positive skew 1.19 (scores clustered to the left) Positive kurtosis 1.65 (Data is peaked)	No Log Transformation	<i>LogTealIncome</i>
Number of children	<i>Child</i>	Positive skewness 0.09 (Scores clustered to the left) Positive kurtosis 1.65 (Data is peaked)	No Log Transformation Originally data preferred	n/a
Hours worked per day	<i>Hoursworked</i>	Negative skewness -0.38 (Scores clustered at the high end) Positive kurtosis 0.21 (Data is peaked)	No Reflect and square root Transformation Originally data preferred	n/a

Figures 4.1 to 4.4 illustrate the spread of the data before and after the transformations whilst Table 4.3 shows the statistical significance of the transformed data.

In the case of age, data are normally spread and therefore, no transformation is undertaken. In the case of both income and number of children, the data are clustered to the left and peaked. For tea income, the Kolmogorov-Smirnov significance value of 0.167 shown in Table 4.3 indicates that the data is normally distributed following the transformation.

The transformation of number of children results in a worse distribution in terms of normality, as seen in Figure 4.3, and only a small change in the significance value reported in Table 5.3 to 0.009, therefore the original data will be used in the statistical tests.

Hoursworked, the measure of how many hours farmers worked on their respective farms, is not normally distributed. Given the results from the tests for Normality and the corresponding histogram, the variable is transformed using the reflect and square root approach and renamed *RSQRTHoursworked*. This, rather than log transformation, is applied to the *Hoursworked* variable as the scores shown in Table 4.4 indicate values clustered at the high-end. Therefore, in contrast to *TealIncome* and *Child* where both have scores clustered to the left and therefore require log transformation, reflect and square root is applied (Pallant, 2010, pp 93-94). It is noted from Figure 4.4 and Table 4.3 that there is only a marginal improvement towards normality and consequently, the original data are used in the analysis. The observed transformations are a consequence of the relatively small sample size that is less likely to produce normal distributions.

The subsequent analysis takes account of this discussion and uses parametric tests for those variables that have met, or are close to, normal *i.e.* *Age*, and *LogTealIncome*. In the case of *Child* and *Hoursworked*, the data violate the assumption of normality, hence non-parametric tests, such as the Mann-Whitney U test, are used for these variables.

Figure 4.1 Age of Farmers

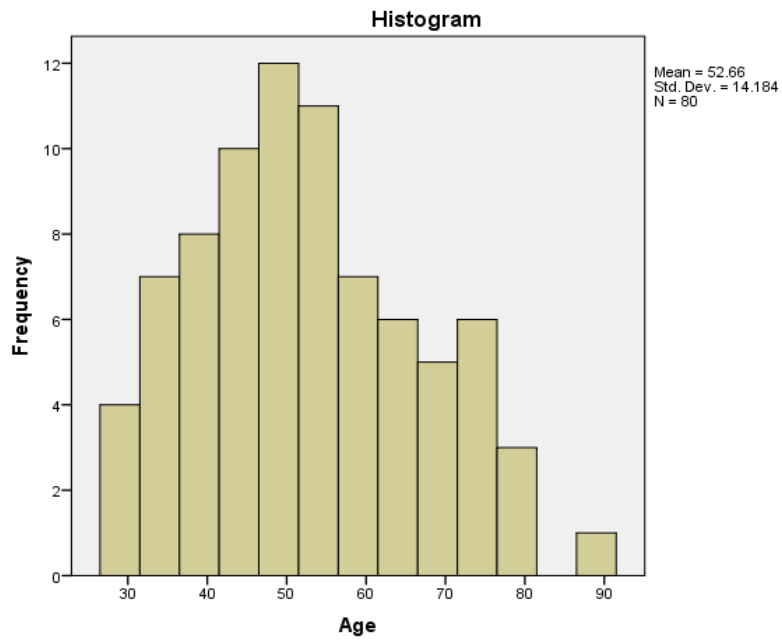


Figure 4.2 Income from Tea Production

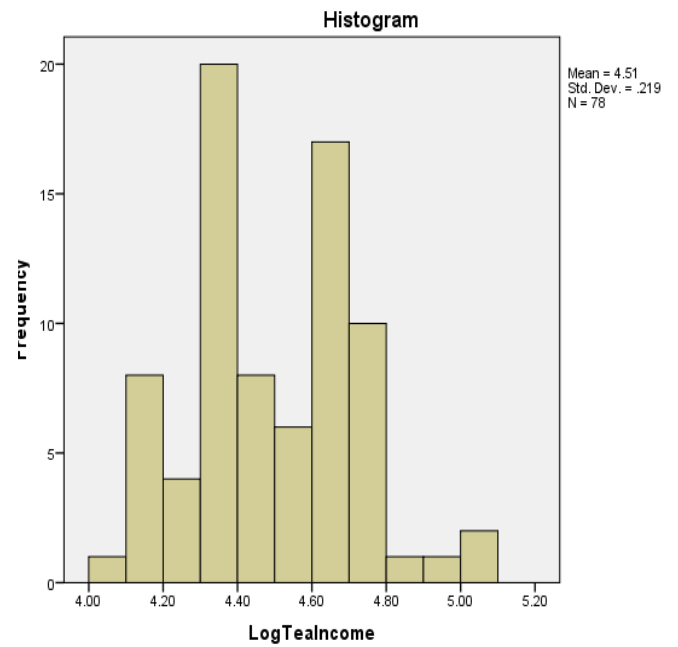
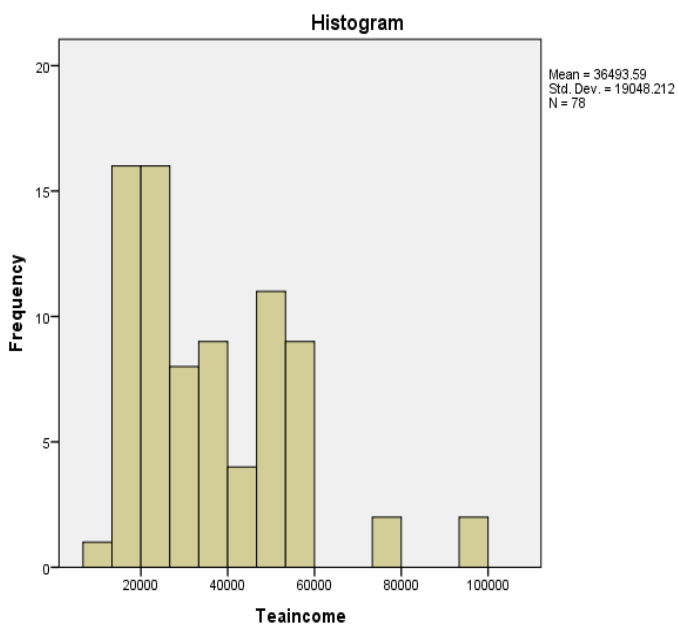


Figure 4.3 Number of Children

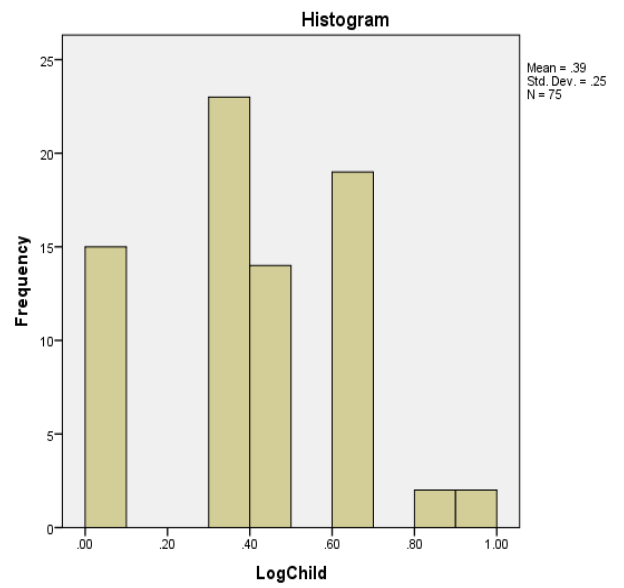
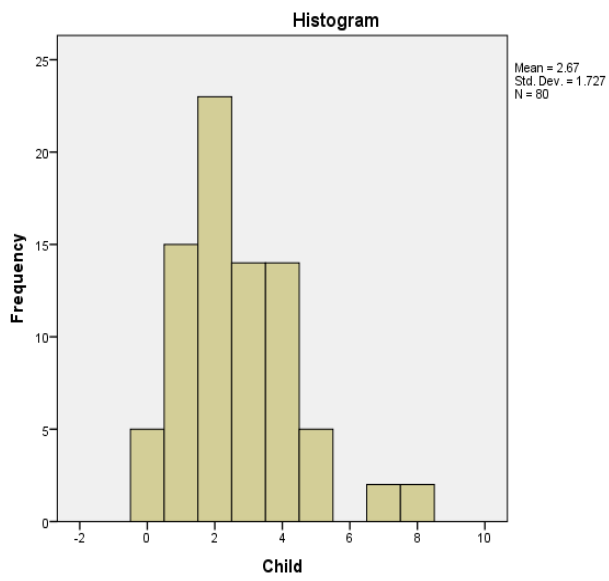
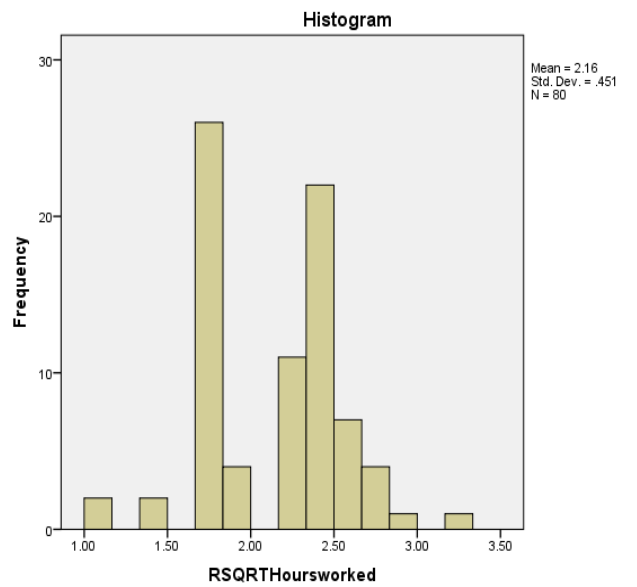
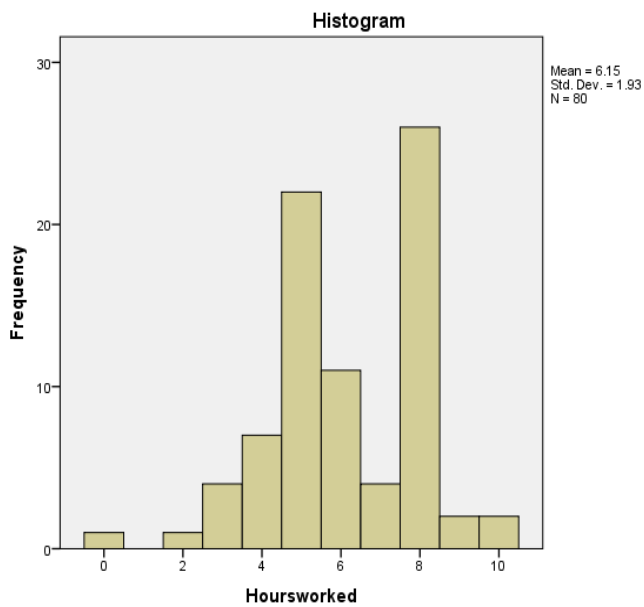


Figure 4.4 Hours Worked Per Day on Tea Production



4.5 Data Results

The following sections present the results of statistical analysis and includes: the independent-samples t-test; Chi-square test for independence; correlation; multiple regression; and logistic regression.

There are several interdependent themes around which the data are analysed. The first includes income indicators, and in this context, the analysis explores the relationship between income and fair trade involvement, perceptions of income improvement and sufficiency, years worked in fair trade, hours spent working on tea production per day, secondary income, excess money and pre-finance availability. The second theme examines non-monetary impacts from fair trade involvement including the existence and awareness of local development and social premium impacts and household development. Thirdly, the analysis considers the influence on educational standards of factors such as fair trade involvement, age and income in a household. Finally, a logistic regression is presented to examine the relationship between a range of variables and the likelihood of respondents reporting their income to have improved or that they are able to undertake household development.

4.6 Income Indicators

A large majority of previous impact studies find that the most notable benefit derived from fair trade is a guaranteed income, based on the minimum price, and its associated risk reduction. The relationship between income and fair trade in the Gampola region is therefore explored in this first section with consideration also given to the respondents' perception of income, whether they consider the income they receive to be sufficient and whether they have access to pre-finance.

The mean per capita income (from tea) within the sample is Rs 38,350 for fair trade producers and slightly lower at Rs 33,000 for conventional trade farmers (excluding any second income). These figures lie either side of the mean per capita income for Sri Lanka as a whole in 2009/10, at Rs 36,451. When examining the results for sectors the urban mean is Rs 47,783, the rural mean is Rs 35,228 and the Estate mean is Rs 24,162 per capita. The Central Province in which Gampola is located has mean per capita income of Rs 31,895. (Census and Statistics, 2011a, p7).

The districts closest to the sample survey areas, and for which data is gathered within the Household Income and Expenditure Survey, are Kandy, Matale and Nuwara Eliya which have mean incomes of Rs 33,063, Rs 30,013 and Rs 31,029 respectively (Census and Statistics, 2011a, p7). Therefore the incomes reported by the farmers in the survey are relatively good when compared to similar districts and the Rural sector of Sri Lanka as a whole.

Dividing the population into income quintiles to analyse inequality shows that the richest 20% received nearly 54% of total household income whilst the poorest 20% received 4.5% in 2009/10 (Census and Statistics, 2011a, p7). The Gini coefficient for mean household income in Sri Lanka is 0.49. “The relevant figures....for urban, rural and estate sectors are 0.48, 0.49 and 0.43 respectively. This means income disparity between households in [the] estate sector is relatively lower than in [the] other two sectors”, (Census and Statistics, 2011a, p10). Gini coefficients for mean household income, per capita income and recipient’s income by sector and by province revealed no significant differences between sectors *i.e.* urban, rural and estates. However, the highest Gini coefficient of 0.51 was

reported for the Central Province in which Gampola is located, (Census and Statistics, 2011a, p10).

4.6.1 Fair Trade Involvement and Income Impact

In the first instance, the relationship between fair trade involvement and income is explored and compared to the findings of other impact studies. Whilst previous studies agree that the most obvious benefit of fair trade is the guaranteed minimum price and the social premium paid to producers, (Ronchi, 2002; Raynolds, 2002b; Mayoux, 2012; Murray *et al.* 2003; Utting-Chamorro, 2005; Lyon, 2002) there is however a large difference in the reported income benefits ranging from a doubling of income through to income stabilisation.

In the sample survey, the income range extends from 12,000 to 100,000 rupees, with mean income from tea production higher for fair trade producers compared to conventional producers, although each farmer has a one acre plot. It must also be recognised that commodity prices are higher than the minimum guaranteed fair trade price at the point of data gathering. Hence, both conventional and fair trade farmers are receiving the same crop price. The question is whether the income difference observed in the sample is statistically significant, and the hypothesis to be tested is therefore as follows:

H₀: Fair Trade *LogTealIncome* is equal to Conventional Trade *LogTealIncome*

H_A: Fair Trade *LogTealIncome* is not equal to Conventional Trade *LogTealIncome*

An independent-samples t-test is used to determine whether there is a statistically significant difference in the mean levels of tea income of the two groups. This type of test

requires one categorical independent variable with only two groups *i.e.* fair trade: yes/no and one continuous dependent variable *i.e.* *LogTealIncome*.

Table 4.5 Group Statistics of Independent Samples Test on *Fairtrade* and *LogTealIncome*

	Fairtrade	N	Mean	Std. Deviation	Std. Error Mean
LogTealIncome	Yes	38	4.55	0.23	0.037
	No	40	4.47	0.21	0.03

Table 4.6 Results of Independent Samples Test on *Fairtrade* and *LogTealIncome*

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
LogTealIncome	0.67	0.42	1.48	76	.143	0.07	0.05	-0.03	0.17
Equal variances assumed			1.47	74.19	.14	0.07	0.05	-0.03	0.17
Equal variances not assumed									

Throughout the analysis, the following criteria are used:

- 1) a significance level or test size, $\alpha = 0.05$
- 2) the strength of the different effect size statistics¹⁹ is determined using Table 4.7

below as suggested by Cohen (1998, p22). For independent samples t-test the ETA

¹⁹ Effect size or 'strength of association' is a set of statistics that indicate the relative magnitude of the differences between means, or the amount of the total variance in the dependent variable that is predictable from knowledge of the levels of the independent variable (Tabachnick & Fidell, 2007, p54)

Squared values will be used whilst for chi-square tests for independence Cohen's d will be used to report the effect size.

Table 4.7 Strength of Effect Size Statistics

Size	Eta Squared (% of variance explained)	Cohen's d (standard deviation units)
Small	0.01 or 1%	0.2
Medium	0.06 or 6%	0.5
Large	0.138 or 13.8%	0.8

As shown by the results in Table 4.6, an independent-samples two-tailed t-test is conducted to compare the means of *LogTealIncome* of fair trade and conventional trade farmers. There is no significant difference in scores for fair trade (Mean (M) = 4.55, standard deviation (SD) = 0.23) and conventional trade (M= 4.47, SD = 0.21; t (76) = 1.48, p = 0.14 two-tailed). In terms of effect size, as described in Table 4.7, the magnitude of the difference in the means (mean difference =0.07, 95% CI: -0.03 to 0.17) is deemed to be small, since the value of eta squared = 0.03. It is noted from Table 4.6 that the results show very little difference regardless of equal variances being assumed or not.

There is statistically significant evidence not to reject the null hypothesis that fair trade income equals conventional trade income. This result, the outcome not to reject H_0 , is discussed within chapter five, section 5.3 in the context of empirical analyses from previous impact studies.

4.6.2 Producers' Perceptions of Income Improvement

As part of the investigation into the non-monetary benefits of fair trade, this study considers improvements in producers income's, as perceived by individuals themselves. Given that the existence of fair trade reduces risk, it can be argued that participants may perceive themselves to be better off. Indeed, standard microeconomic theory on expected utility argues that, for a risk averse person, a certain income of a fixed amount will give higher utility than expected income of that same amount²⁰. In addition, guaranteed income²¹, without fluctuation may, over a period, lead the individual to feel their overall income has improved, even though this may not, in fact, be the case.

Previous impact studies have highlighted such risk reduction benefits from fair trade. Examples include the case of Northern Nicaragua, (Bacon, 2004) where farmers selling through the conventional market were four times more likely to perceive the risk of losing their land due to low prices. Utting-Chamorro (2005) also found that small producers emphasised greater economic stability as contributing to their well-being.

Further impact studies, beyond those focusing on fair trade, also suggest that there may be psychological benefits even without measurable real benefits. In a study of piped water adoption in urban Morocco, Devoto, *et. al.* (2011) showed that significant private returns could be gained without associated income gains. In particular, this was evident through reported happiness and greater social integration. The results therefore suggest, "that facilitating access to credit for households to finance lump sum quality-of-life investments

²⁰ This is to say that certain receipt of £100 will give higher utility than an expected income of £100

²¹ Assuming stable output and a guaranteed price

can significantly increase welfare, even if those investments do not result in income or health gains” (Devoto *et al.* 2011, p1).

In light of the above discussion, the hypothesis to be tested here is that there is a positive relationship between fair trade and the perception of whether income from tea production has increased as a result. The underlying rationale is the psychological influence of participating in fair trade on farmers and the fact that they have taken part in order to realise some gains including a (perceived) higher income. This could be explained in two ways, firstly that farmers believe that the system pays above market prices. Hence they suffer from a form of money illusion and behave as if they have higher incomes, spending and saving more than their conventional trade equivalents. This psychological belief is supported by Lyon (2002) and Utting-Chamorro (2005) who state that price incentives are the principal reason for producers participating in fair trade. Secondly, it can be argued that the minimum guaranteed price by reducing risk acts as a form of insurance so that fair trade farmers feel more confident to spend their income since fear of future income decreases is diminished.

The crosstabulation in Table 4.8 shows that 27.5% of conventional trade farmers in the survey felt their income had improved compared to 97.5% of fair trade producers. Within the sample as a whole, 62.5% of all respondents felt their income had improved in the past five years.

Table 4.8 Crosstabulation of *ImprovedIncome* and *Fairtrade*

		ImprovedIncome		Total
		Yes	No	
Fairtrade 0	Count	11	29	40
	% within Fairtrade	27.5%	72.5%	100.0%
	% within ImprovedIncome	22.0%	96.7%	50.0%
	% of Total	13.8%	36.3%	50.0%
Yes	Count	39	1	40
	% within Fairtrade	97.5%	2.5%	100.0%
	% within ImprovedIncome	78.0%	3.3%	50.0%
	% of Total	48.8%	1.3%	50.0%
Total	Count	50	30	80
	% within Fairtrade	62.5%	37.5%	100.0%
	% within ImprovedIncome	100.0%	100.0%	100.0%
	% of Total	62.5%	37.5%	100.0%

The null hypothesis to be tested is therefore expressed as:

H_0 : The variable *Improvedincome* is independent of the variable *fairtrade*

H_A : The variable *Improvedincome* is not independent of the variable *fairtrade*

A Chi-square test for independence is conducted to explore the relationship between two categorical variables, participation in fair trade and reported income improvement. The observed frequencies of cases that occur in each of the categories (as shown in Table 4.8) are compared with the values that would be expected if there was no association between the two variables.

The results of this chi-square test for independence are shown in Table 4.9.

Table 4.9 Results of Chi-square Test for Independence on *ImprovedIncome* and *Fairtrade*

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	41.813 ^a	1	.000	.000	.000
Continuity Correction ^b	38.880	1	.000		
Likelihood Ratio	49.444	1	.000		
Fisher's Exact Test					
Linear-by-Linear Association	41.291	1	.000		
N of Valid Cases	80				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.00.

b. Computed only for a 2x2 table

Table 4.10 Effect Size Statistics of Chi-square Test for Independence on *ImprovedIncome* and *Fairtrade*

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.723	.000
	Cramer's V	.723	.000
N of Valid Cases		80	

There is a significant difference in scores for fair trade with Yates' Correction for Continuity²² being 38.88, which is significant at the 5% level. This means that the proportion of fair trade producers reporting that their income from tea had increased is significantly different from the proportion of conventional farmers, $\chi^2(1, n = 80) = 38.88, p < 0.05, \phi(\phi) = -0.723$. The phi coefficient (ϕ) reported in Table 4.10 is the most commonly used effect size statistic used in the Crosstabs procedure. The phi coefficient is a correlation coefficient ranging from 0 to 1, with higher values indicating a stronger association between the two variables. In this test, the $\phi = 0.723$ result indicates a large effect size using Cohen's (1988) criteria (stated in Table 4.7) of effect size of 0.50 for a large effect.

²² This is used to prevent overestimation of the chi-square value and hence statistical significance when used within a 2 by 2 table (Pallant, 2010, p217).

There is therefore statistically significant evidence to reject the null hypothesis and accept the alternative that improved income is not independent of the *fairtrade* variable.

The result echoes those of other impact studies (Lyon 2002, Ronchi 2002, Utting-Chamorro, 2005) and is also supported by qualitative data for the Gampola region, which is discussed in more detail in section 5.3. In brief, this suggests that fair trade farmers are more likely to respond positively to questions on whether they save, make physical improvements to their home and/or invest in their children's education.

4.6.3 Income Sufficiency Perceptions

Satisfaction with income is an indicator of well-being in that it illustrates how comfortable people feel about satisfying their desired living standard. An impact study at the La Voz Cooperative in Guatemala (Lyon, 2002) reports that, initially, farmers were happy to receive stability, higher prices and increased recognition of their industry but having become increasingly accustomed to these higher prices subsequently demand further rises. Bearing this in mind, tests are carried out to see whether this result is replicated in Sri Lanka. Satisfaction with income from tea is compared between the fair trade and conventional trade groups, and the satisfaction of fair trade producers is also examined in relation to the length of time they have been part of the Cooperative.

Previous impact studies have not tested whether participants consider their income to be sufficient. However, studies outside the fair trade context have tested the relationship between subjective well-being and income, finding that money has very little impact on happiness (Campbell, Converse and Rodgers; 1976, Diener *et al.*, 1999; Headey and Wearing, 1992; King and Napa, 1998; and Ng, 1997). Research on perception of income

satisfaction and satisfaction with the quality of living undertaken in Slovenia (Stanovnik and Verbič, 2003) established that “the probability of a family to be satisfied with its income, *ceteris paribus*, increases with rising disposable income and the probability of a family to be satisfied with its income, *ceteris paribus*, decreases with the family size. Older households, i.e. households where members are older than 60 years, are, *ceteris paribus*, more likely to be satisfied with their income than younger households are. Similar statements can be applied for pensioner households” (Stanovnik and Verbič, 2003, p8).

The survey asked farmers about the sufficiency of their income from tea, ignoring any income from second sources. Informed by the findings of the literature on subjective well-being and the knowledge from section 4.15 that there is no statistical difference between the age of fair and conventional trade farmers, the null hypothesis to be tested here is that there is no difference between the conventional and fair trade satisfaction with income from tea.

Table 4.11 Crosstabulation of *Fairtrade* and *Incomesufficient*

		Incomesufficient		Total
		Yes	No	
Fairtrade 0	Count	0	40	40
	% within Fairtrade	.0%	100.0%	100.0%
	% within Incomesufficient	.0%	51.9%	50.0%
	% of Total	.0%	50.0%	50.0%
Yes	Count	3	37	40
	% within Fairtrade	7.5%	92.5%	100.0%
	% within Incomesufficient	100.0%	48.1%	50.0%
	% of Total	3.8%	46.3%	50.0%
Total	Count	3	77	80
	% within Fairtrade	3.8%	96.3%	100.0%
	% within Incomesufficient	100.0%	100.0%	100.0%
	% of Total	3.8%	96.3%	100.0%

The crosstabulation is shown in Table 4.11. The result shows that only 3 farmers stated that their income was sufficient therefore it is clear that there is not really sufficient variability in the data. The proportion of fair trade producers satisfied with their income cannot be said to be different from the proportion of conventional trade farmers reporting the same.

4.6.4 Relationship Between Hours Worked and Income

To further enhance our understanding of the determinants of income, it is important to examine the relationship between fair trade, hours worked on tea farming and income from tea production. If farmers are able to work for fewer hours as fair trade members but achieve an income not significantly different from their conventional counterparts (see section 4.6.1) then this is further evidence of non-monetary gains or monetary gains if time saved on tea production can be used to gain income from other sources. As with a number of other aspects of this study, there is no other study within fair trade for comparison. Notwithstanding, studies of wage inequality in America (e.g. Lerman and Yitzhaki, 1985) have found a positive relationship between total wages and hours finding that 10% of observed inequality could be accounted for by the interaction of hours and wage variability. The hypotheses tested are as follows:

H_0 : *Hoursworked* and *LogTealIncome* are not correlated (correlation coefficient = 0)

H_A : *Hoursworked* and *LogTealIncome* are correlated (correlation coefficient $\neq 0$)

The relationship between the variables *LogTealIncome* and *Hoursworked* is investigated using Pearson product-moment correlation coefficient.

Preliminary analyses are performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. The results of the initial scatter plot are shown in Figure 4.5 and Tables 4.12 and 4.13 provide the correlation coefficient and associated descriptive statistics

Figure 4.5 Scatterplot of *Hoursworked* and *LogTealIncome*

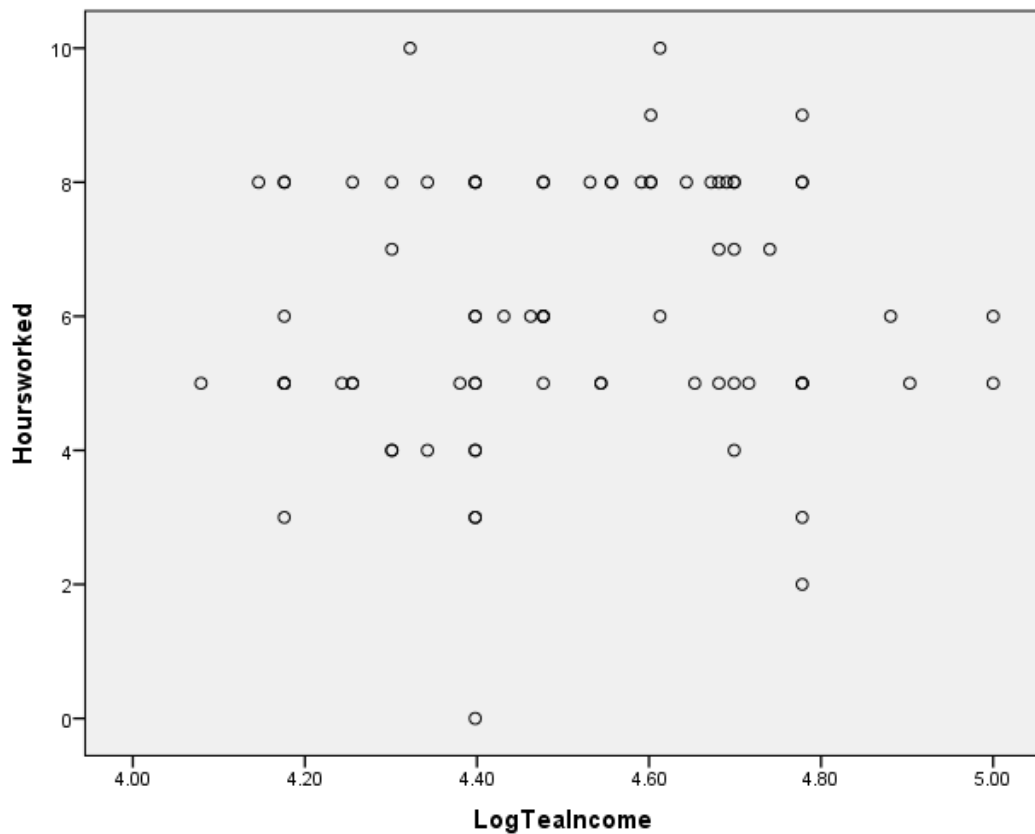


Table 4.12 Descriptive Statistics for *HoursWorked* and *LogTealIncome*

	Mean	Std. Deviation	N
Hoursworked	6.15	1.930	80
LogTealIncome	4.5078	.21859	78

Table 4.13 Correlation Coefficient for *HoursWorked* and *LogTealIncome*

		Hoursworked	LogTealIncome
Hoursworked	Pearson	1	.084
	Correlation		
	Sig. (2-tailed)		.462
	N	80	78
LogTealIncome	Pearson	.084	1
	Correlation		
	Sig. (2-tailed)	.462	
	N	78	78

There is a small positive correlation between the two variables of 0.84 indicating that to a minor extent, the more hours people work, the greater the income they report. Using Cohen (1988 pp.79 – 81) guidelines, this shows a small strength correlation. The percentage of variance of eta squared is 0.7% meaning that there is not a lot of overlap between the two variables. The p value of 0.462, compared to a significance level of 0.05, indicates no statistically significant relationship.

Thus far, the observed positive relationship between hours worked and income is small and not statistically significant. Further analysis is therefore undertaken in section 4.7 that follows to establish whether there are any additional explanations of the findings.

It is considered feasible that fair trade membership may result in farmers working fewer hours on tea production, given the guaranteed income which facilitates better planning and cash flow management. Thus, although their income is not statistically different from the conventional farmers, their labour-leisure choice may be. Indeed, if it is found that fair trade farmers work fewer hours then it could be argued that they have attained an acceptable income from tea and therefore choose to engage in other activities, income or non-income generating, such as spending time with their family or cultivating crops other

than tea to increase overall income. Furthermore, working fewer hours on their tea farms would enable fair trade to meet its objective of assisting farmers to diversify and thereby attain sustainable production *e.g.* by facilitating the introduction of choice to spend time gaining other skills or developing other crops. Diversification in this way is an important development tool and also contributes to the risk reduction gains associated with the minimum guaranteed income, as previously discussed in section 4.6.2.

4.7 Relationship Between Fair Trade and Hours Worked

To investigate the viability of potential diversification, analysis is undertaken to investigate whether fair trade members, on average, work fewer hours on tea. Sample data shows that the average hours that fair trade and conventional trade farmers work per day are 5.3 and 7 hours respectively. This difference is tested to check for significance.

H_0 : There is no difference between *Hoursworked* for fair trade and conventional trade farmers.

H_A : There is a difference between *Hoursworked* for fair trade and conventional trade farmers.

Table 4.14 Median results for Mann-Whitney U Test on *Hoursworked* and *Fairtrade*

Report	
Median	
Fairtrade	Hoursworked
0	8.00
Yes	5.00
Total	6.00

Table 4.15 Results from Mann-Whitney U Test on *Hoursworked* and *Fairtrade*

Test Statistics ^a	
	Hoursworked
Mann-Whitney U	403.500
Wilcoxon W	1223.500
Z	-3.932
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Fairtrade

The result for a Mann-Whitney U Test (two-tailed) is shown above and reveals a statistically significant difference in the *Hoursworked* by fair trade producers (Md = 8, n = 40) and conventional trade producers (Md = 5, n = 40), $U = 403$, $z = -3.93$, $p = 0.00$, [<0.025] two-tailed). The effect size is 0.4 indicating a medium effect size using Cohen (1988) criteria of 0.1 as a small effect, 0.3 as a medium effect and 0.5 as a large effect.

Thus there is statistical evidence to reject the null hypothesis and accept the alternative that there is a statistically significant difference between the hours that fair trade and conventional trade farmers work.

The fact that conventional trade farmers work more hours on average in tea production than fair trade farmers is important given that their average income is lower in the sample, although not significantly so. It could therefore be argued that the fair trade farmers enjoy a higher standard of living since their working hours in tea production are lower to achieve a comparable income.

Additionally, fair trade farmers are able to dedicate fewer hours to their tea crop due to factors such as increased skills and enhanced support from the cooperative. This support to develop understanding of production techniques, in particular the use of dolomite, may

well increase the productivity of fair trade farmers. This, in turn, releases time for fair trade producers to work on additional projects thus increasing their income. This possibility for second income generating work off the farm is considered below in section 4.8.

It is worth noting here, however, that discussions with farmers about the cultivation of additional crops on their one acre plot, and hence diversification, revealed that only 8 conventional farmers (20%) produced any crops other than tea. This is in contrast to the 40 fair trade farmers (100%) who cultivated additional crops, including cloves, cocoa, pepper, cinnamon, lemongrass, coffee, ginger, turmeric, vanilla and vegetables. In addition, a small number of fair trade farmers have also benefited from goats, given to them by the SOFA cooperative, and which are a source of fertiliser and milk, leading to further diversification.

The fact that fair trade farmers work fewer hours on tea production enabling diversification into other crops is evidence of a risk reduction impact and enhanced well-being arising from more choices over the allocation of time. Development is dependent on alternatives economic choices and fair trade creates alternatives for farmers.

4.8 Fair Trade and Second Income

To attempt to gain further insights into how fair trade farmers use their time beyond tea production, investigations are undertaken to establish whether there is a statistically significant relationship between participation in fair trade (*fairtrade*) and the presence of a second income (*secincome*). Second Income is defined in this study as income from any source other than tea production and data is generated from responses to the question “what other types of activity do you do to improve [*your*] income?” Secondary income may

include income from other crops or livestock as well as off-farm activities such as working as a labourer, driver *etc.*

Table 4.16 Crosstabulation of *Fairtrade* and *SecIncome*

		SecIncome		Total		
		Additional Income	No additional income			
Fairtrade	0	Count	33	7	40	
		% within Fairtrade	82.5%	17.5%	100.0%	
		% within SecIncome	50.0%	50.0%	50.0%	
		% of Total	41.3%	8.8%	50.0%	
	Yes		Count	33	7	40
			% within Fairtrade	82.5%	17.5%	100.0%
		% within SecIncome	50.0%	50.0%	50.0%	
		% of Total	41.3%	8.8%	50.0%	
Total		Count	66	14	80	
		% within Fairtrade	82.5%	17.5%	100.0%	
		% within SecIncome	100.0%	100.0%	100.0%	
		% of Total	82.5%	17.5%	100.0%	

The results in Table 4.16 show that there is no difference in the number of respondents reporting second income across the two groups. Consequently, a Chi-square test for independence was not carried out as it is clear that there is no significant difference in scores and we therefore do not reject the null hypothesis.

Given that fair trade farmers are no more likely to have a second income than conventional farmers, it can be deduced that they are utilising the free hours beyond those spent in tea production (relative to conventional farmers) on other activities. Qualitative data from

interviews would indicate (as outlined in section 5.2) that this time is spent on tending to subsistence crops. Nor can it be ruled out that the farmers use this free time for leisure activities, arguably enhancing their well-being.

4.8.1 Hours Worked and Second Income

A final test to examine the use of free time looks at the relationship between *Hoursworked* and *SecIncome* for all farmers. Farmers are separated into two groups, in terms of whether or not, second income is reported. The difference in hours worked is then examined.

H_0 = the median number of hours producers work per day on tea is the same for the two groups

H_A = the median number of hours producers work per day on tea is not the same for the two groups

Table 4.17 Median results from Mann-Whitney U Test on *Hoursworked* and *SecIncome*

Report	
Median	
SecIncome	Hoursworked
Additional Income	6.00
No additional income	8.00
Total	6.00

Table 4.18 Results from Mann-Whitney U Test on *Hoursworked* and *SecIncome*

Test Statistics ^a	
	Hoursworked
Mann-Whitney U	386.500
Wilcoxon W	2597.500
Z	-.985
Asymp. Sig. (2-tailed)	.324

a. Grouping Variable: SecIncome

Tables 4.17 and 4.18 show the outcome of the Mann-Whitney U Test (two-tailed). As can be seen, there is no statistically significant difference in the scores for the number of hours worked by those with an additional income (Md = 6, n = 40) compared to those without an additional income (Md = 8, n = 40), $U = 386$, $z = -0.985$, $p = 3.24$, [>0.025] two-tailed). The effect size is 0.1 indicating a small effect size using Cohen (1988) criteria of 0.1 as a small effect, 0.3 as a medium effect and 0.5 as a large effect.

There is thus no statistically significant evidence to reject the null hypothesis that the number of hours producers work per day on tea is the same regardless of whether there is a second income.

This test explores whether median hours worked on tea affects the existence of a second income. Since the null is not rejected, it can be inferred that fair trade farmers, shown in section 4.7 to work relatively fewer hours on tea production, are no more likely than those working more hours (conventional trade farmers) to generate secondary income.

The fewer hours worked by fair trade producers on tea income is an important result, discussed further in chapter five. The result is effectively equivalent to an increase in income except that the farmers are typically using the extra time to do other things, which are implicitly income-generating rather than explicitly e.g. subsistence crops. Arguably, the farmers could be taking more leisure too although this seems unlikely given the level of incomes in the survey. Whilst the results on hours are reasonably clear, it is more difficult, given the data, to establish what alternate activities and incomes occur on the farm.

4.9 Excess Money

The existence of excess money, which could be used for household development, education or saving, is investigated within the study. Using responses to the question “what do you do with money not spent on housing, food or clothes” it is considered that they have excess money above and beyond that required to meet their basic needs if a positive response is given.

The SOFA Cooperative in Sri Lanka encourages all members to save a proportion of their tea income and has set up, within government banks, accounts for members where savings are deposited. Therefore, it could be argued that SOFA members are more likely to have excess money relative to conventional trade producers. The surveys and interviews with cooperative members reveal that 17 members (37.5%) have excess money but it is not clear how and where these farmers are able to access banks. According to Bernard Ranaweera, President of SOFA, the AGM received a request from members that SOFA retain income from fair trade sales in a bank account that can be accessed on request. In response to this request, a special bank account has been set up in a government bank and all members can choose to save 10 rupees per kilo of tea sold. In addition to the seventeen members who explicitly state that they are building savings, seven members use excess money for other household development such as building or improving their home.

Further analysis of the income and spending behaviour of those within the sample looks at the relationship between participation in fair trade and the proportion of respondents with excess funds. The data for the latter variable is gathered from the question “what do you do with excess money” where respondents state either they have no excess money or indicate what they are able to consume with the excess funds.

The crosstabulation (see Table 4.19) shows that 33.8% of the overall sample report excess money. Within fair trade, 50% of respondents answer positively compared to 17.5% of conventional trade producers.

Table 4.19 Crosstabulation of *Fairtrade* and *ExcessMoney* variables

		ExcessMoney		Total
		Yes	No	
Fairtrade 0	Count	7	33	40
	% within Fairtrade	17.5%	82.5%	100.0%
	% within ExcessMoney	25.9%	62.3%	50.0%
	% of Total	8.8%	41.3%	50.0%
Yes	Count	20	20	40
	% within Fairtrade	50.0%	50.0%	100.0%
	% within ExcessMoney	74.1%	37.7%	50.0%
	% of Total	25.0%	25.0%	50.0%
Total	Count	27	53	80
	% within Fairtrade	33.8%	66.3%	100.0%
	% within ExcessMoney	100.0%	100.0%	100.0%
	% of Total	33.8%	66.3%	100.0%

The hypotheses to be tested are stated as follows:

H₀: The variable *ExcessMoney* is independent of the variable *fairtrade*

H_A: The variable *ExcessMoney* is not independent of the variable *fairtrade*

As shown in Table 4.20, a chi-square test for independence (with Yates Continuity Correction) indicates rejection of the null hypothesis in favour of the alternative that the two variables are not independent of each other. $\chi^2 (1, n = 80) = 8.050, p = < 0.05, \phi = -$

0.344. The effect size ϕ value (-0.344) shows a medium effect using Cohen's (1988) criteria of 0.3.

Table 4.20 Chi-square Test Results

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	9.448 ^a	1	.002		
Continuity Correction ^b	8.050	1	.005		
Likelihood Ratio	9.748	1	.002		
Fisher's Exact Test				.004	.002
Linear-by-Linear Association	9.330	1	.002		
N of Valid Cases	80				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.50.

b. Computed only for a 2x2 table

This result shows that the SOFA objective of providing a means of saving is effective and has a positive impact on the well-being of members. In line with other positive development indicators that increase resilience, such as the guaranteed minimum price and diversification, fair trade membership is also increasing resilience to shocks and enhancing the ability to invest through its support for savings.

The increased tendency to save, observed within the fair trade group, is a point of interest given the link typically assumed between savings and income – higher incomes make savings possible. SOFA's support for the act of saving may have a positive impact, but also, fair trade producers may be generating more income overall, or reducing expenditure on subsistence, by being able to divert more of their time to other farming activities.

4.10 Standard Multiple Regression of *LogTealIncome*

The preceding analysis has compared the two groups of farmers to establish whether there are any significant differences between them, focusing on income from tea and other

variables associated with income. The final step in the analysis is a multiple regression, to identify how much of the variance in *LogTealIncome* is explained by age, fair trade participation, hours worked on tea production, education levels and family size in terms of the number of children (i.e. *age*, *fairtrade*, *Hoursworked*, *Educ*, and *Child*). These variables are chosen because of their likely impact on income. Age, education and fair trade participation may provide the producer with experience and knowledge to enhance their productivity thus increasing their income. A greater number of children may reduce the producer's ability to spend time on the farm and hence reduce income from tea. Hours worked on tea production may impact on *LogTealIncome* as fewer hours on the farm could reduce reported income. The variable years worked in fair trade is considered for inclusion but initial tests indicated that the perfect collinearity between this and the *fairtrade* variable resulted in SPSS excluding *fairtrade* from the regression which is deemed more important for consideration than *FTYears*. This test also gives an indication of the relative contribution of each independent variable as well as the statistical significance of the results for both the model and the individual independent variables.

The data was checked to that ensure the assumptions of the model are met. Firstly, Table 4.21 indicates that there is some relationship between the independent variables and *LogTealIncome*. All of the variables have correlations with *LogTealIncome* below the preferred threshold level of 0.3 (Pallant, 2010, p158) which is likely due to the small sample size and the fact that the data is cross-sectional. The correlation between each of the independent variables falls below the recommended bivariate correlation of 0.7 (Pallant, 2010, p158) which, if violated, would indicate variables should not be included together. Based on the initial checking, all variables are retained.

Table 4.21 Correlation Coefficients

		LogTealIncome	Age	Fairtrade	Educ	Child	Hoursworked
Pearson Correlation	LogTealIncome	1.000	.189	.167	-.109	.082	.084
	Age	.189	1.000	.230	-.406	.733	-.164
	Fairtrade	.167	.230	1.000	-.397	.175	-.443
	Educ	-.109	-.406	-.397	1.000	-.400	.230
	Child	.082	.733	.175	-.400	1.000	-.031
	Hoursworked	.084	-.164	-.443	.230	-.031	1.000
Sig. (1-tailed)	LogTealIncome	.	.048	.072	.170	.236	.231
	Age	.048	.	.020	.000	.000	.073
	Fairtrade	.072	.020	.	.000	.060	.000
	Educ	.170	.000	.000	.	.000	.020
	Child	.236	.000	.060	.000	.	.393
	Hoursworked	.231	.073	.000	.020	.393	.
N	LogTealIncome	78	78	78	78	78	78
	Age	78	80	80	80	80	80
	Fairtrade	78	80	80	80	80	80
	Educ	78	80	80	80	80	80
	Child	78	80	80	80	80	80
	Hoursworked	78	80	80	80	80	80

Tolerance is an indicator of “how much of the variability of the specified independent is not explained by the other independent variables in the model and is calculated using the formula $1-R^2$ for each variable” (Pallant, 2012, p158). A value greater than 0.1 indicates that the multiple correlation with other variables is low (*ibid*). In Table 4.22, it is shown that all of the Tolerance values are above 0.1 and so the assumption of multicollinearity is not violated. This is further evidenced by the Variance Inflation Factor (VIF), which is the inverse of the Tolerance value. As such, results need to be below 10, as is the case in this model.

Table 4.22 Table of Coefficients to Determine the Existence of Multicollinearity

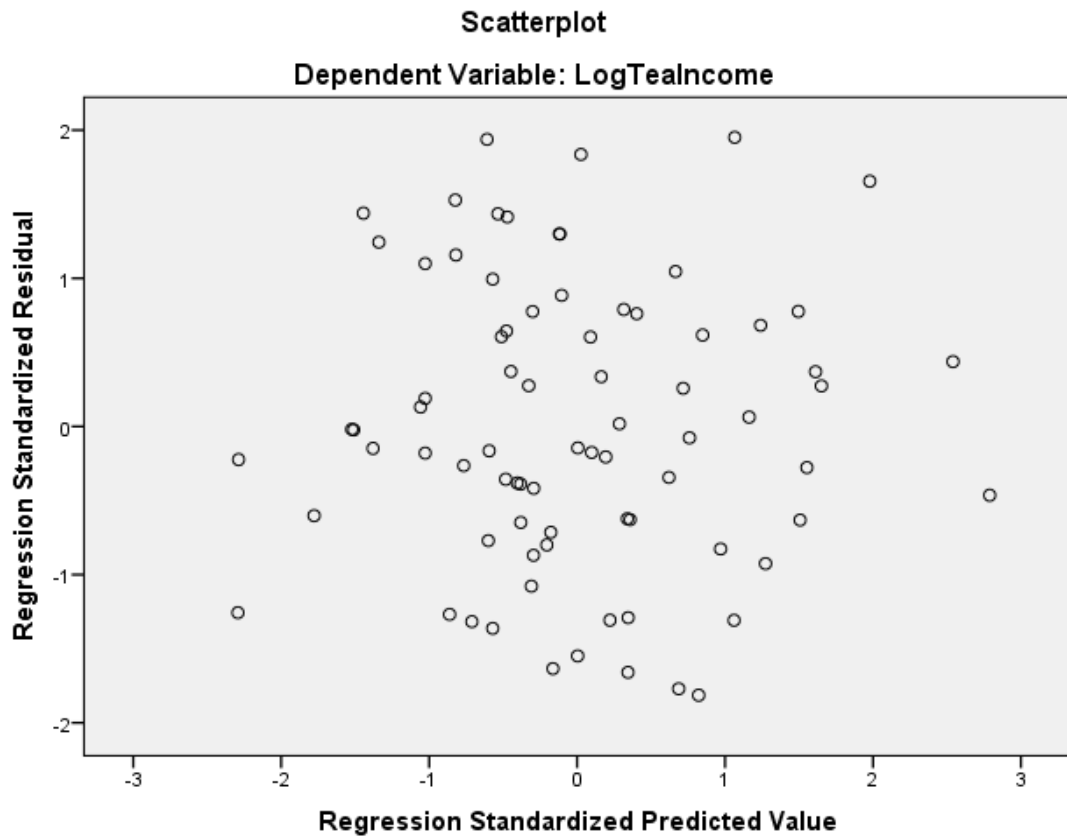
Coefficients^a

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
1 Age	.434	2.305
Fairtrade	.709	1.410
Educ	.712	1.404
Child	.437	2.287
Hoursworked	.777	1.287

a. Dependent Variable: LogTealIncome

The scatterplot of the standardised residuals in Figure 4.6 shows the residuals in a roughly rectangular distribution with no clear or systematic outliers. This scatterplot is used to check that the assumptions of normality, linearity, homoscedasticity and independence of residuals are not violated. Also, there are no outliers using Tabachnick and Fidell's (2007) definition of outliers as cases that have a standardised residual of more than 3.3 or less than -3.3.

Figure 4.6 Scatterplot of the Standardised Residuals



The model summary in Tables 4.23 and 4.24 show how much of the variance in the dependent variable, *LogTealIncome*, is explained by the model. The R^2 value is 10.1% with an associated adjusted R^2 value of 3.9%. The Adjusted R^2 statistic corrects for the optimistic over estimation of the true value of the population that tends to occur in small samples. The result is shown not to be statistically significant ($P = 0.16$ [>0.005])

Table 4.23 Standard Multiple Regression

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.372	5	.074	1.618	.166 ^b
	Residual	3.308	72	.046		
	Total	3.679	77			

a. Dependent Variable: LogTealIncome

b. Predictors: (Constant), Hoursworked, Child, Educ, Fairtrade, Age

Table 4.24 Standard Multiple Regression Model Summary

Model Summary^b

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.318 ^a	.101	.039	.21434

a. Predictors: (Constant), Hoursworked, Child, Educ, Fairtrade, Age

b. Dependent Variable: LogTealIncome

The Normal Probability Plot, Figure 4.7, shows points in a reasonably straight line from bottom left to top right. This suggests that there are no major deviations from normality in the model and that the regression is acceptable.

Figure 4.7 Normal Probability Plot

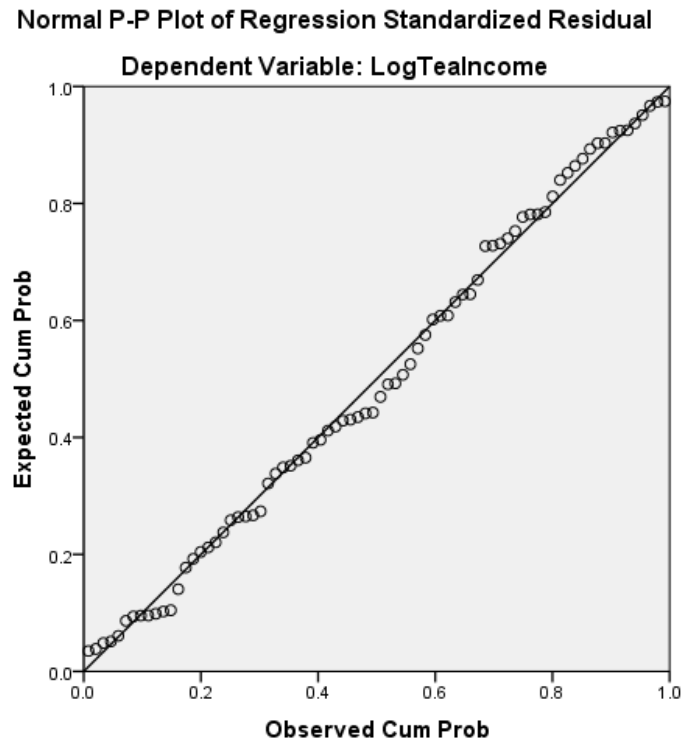


Table 4.25 shows which of the variables included in the model contribute to the prediction of *LogTealIncome*. A comparison of Beta values for standardised coefficients²³ allows for comparison of each variable with respect to their contribution. Checking for statistical significance tells us that none of the variables makes a significant unique contribution to the prediction of *LogTealIncome*. However, the variable *age* showed the largest Beta coefficient, $\beta = 0.29$ indicating that the variable *age* makes the strongest unique contribution, *cet par*.

The signs of the coefficients in Table 4.25 are worthy of discussion even though the overall results are not significant. *Age*, *Fairtrade* and *Hoursworked* show a positive relationship

²³ 'Standardised' means that the value for each of the different variables have been converted to the same scale to allow for comparison.

with *LogTealIncome*. The relationship between producer age and income from tea may be anticipated since age, arguably, brings greater experience. However, in farming, productivity could potentially fall with age and therefore an inverse relationship could potentially emerge. Fairtrade producers have been shown to have, whilst not significant, higher tea incomes than conventional trade farmers. Hence the observed relationship between fair trade participation and tea income is to be expected. The positive relationship between hours worked and income is expected as working more hours will, arguably, result in higher output and therefore higher income from tea.

Negative coefficients are observed for number of children and education. It is unclear why education would have a negative effect on *LogTealIncome* aside from the possibility of more educated farmers having access to alternative work off the farm, given their higher education level. This may result in their income from tea production falling whilst overall income (not reported in this study) increases. Finally, the negative coefficient on the number of children may be expected if it is argued that more children place more demand on the producer's time thus reducing their ability to work on the farm thereby reducing their reported income from tea.

However, such comments are only tentative given that the individual variables do not exhibit a statistically significant contribution.

Table 4.25 Table Evaluating each of the Independent Variables

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations		
	B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part
(Constant)	4.147	.240		17.276	.000	3.668	4.625			
Age	.005	.003	.29	1.736	.087	-.001	.010	.189	.20	.19
Fairtrade	.097	.058	.22	1.684	.096	-.018	.212	.167	.19	.19
1 Educ	-.013	.070	-.03	-.185	.853	-.153	.127	-.109	-.02	-.02
Child	-.022	.021	-.18	-1.036	.304	-.065	.020	.082	-.12	-.12
Hoursworked	.026	.014	.23	1.831	.071	-.002	.055	.084	.21	.21

a. Dependent Variable: LogTealIncome

4.11 Analysis of Findings: Local Development and Social Premium Indicators

Impact studies (Ronchi, 2002; Murray *et al.* 2003; Lyon, 2002 Fairtrade, 2004) show that the gains from fair trade are not experienced solely by the producers but are also reported by household family members and the wider community. In particular, investment of the fair trade premium in social projects leads to gains for the whole community and reaches beyond those directly engaged in the fair trade initiative. Positive impacts to the wider community have been reported in Costa Rica, the Windward Islands, Guatemala and Oaxaca and include hiring additional labour, extension of schemes (housing and credit) to individuals outside the cooperative, infrastructure improvement, and the provision of education and advice centres.

Similar localised improvements are observed in the Gampola region where the development fund has been used by SOFA for a range of initiatives such as the purchase of cows and goats for some members. Milk generates additional income and the dung is used in organic compost. Secondly, new tea plants have been purchased to expand the

productive capacity of farmers and to replace old tea plants that have become unproductive. Non-repayable payments are made to members to help with medical costs or funeral arrangements. Leaf collection centres have been built in villages as a central point for producers to leave their tea and/or spices for collection by the cooperative. These leaf collection centres also provide a space for quality to be checked and monitored prior to collection. Roads have been improved around the local village to enable easier transportation of the product whilst other projects have sought to improve crop quality through education and training of members, and the provision of dolomite to members to improve the pH level of soil. Finally, the cooperative has funded schemes targeted at women who make reed baskets, often used as packaging for the final exported product.

A number of the initiatives outlined directly improve tea productivity and hence allow the members to devote less time to tea. It is clear that, for fair trade members, there is a lot being offered in addition to the support for the price of the commodity. The support for productivity improvements are important in themselves for efficiency but also when considered in conjunction with the results of section 4.7. Arguably, this improved efficiency, obtained through SOFA support, and helps to explain the significant difference in working hours observed between the two groups.

It is clear from the study that whilst the majority of SOFA initiatives positively impact only their members, there have been gains for the wider market environment from fair trade operating in the area. Non-members have gained from improved roads, water projects, and an assembly hall that is used for local events. Many non-members cited examples of improvements in the past five years such as improved education levels, more development, better roads, improved housing, more farmers focusing on tea production and water

projects. However, when asked who was responsible for these improvements, none of the farmers outside the cooperative cited SOFA as being responsible. Many identified the government or answered that they did not know.

4.11.1 Local Development Awareness

Although both groups of farmers show evidence of some awareness of local development, it is useful to establish whether, statistically, the two groups are the same or whether the prevalence of awareness is different, irrespective of who is responsible for the development. Therefore a Chi-square test of independence is carried out on the two variables reflecting fair trade participation and awareness of local development.

H_0 : Awareness of local development is independent of the variable *fairtrade*

H_A : Awareness of local development is not independent of the variable *fairtrade*

The crosstabulation (see Table 4.26) shows high levels of awareness in that 100% of producers involved in fair trade were aware of local development having taken place compared to 75% of conventional producers.

Table 4.26 Crosstabulation of *fairtrade* and *DevelopAware* Variables

		DevelopAware		Total
		Yes	No	
Fairtrade 0	Count	30	10	40
	% within Fairtrade	75.0%	25.0%	100.0%
	% within DevelopAware	42.9%	100.0%	50.0%
	% of Total	37.5%	12.5%	50.0%
Yes	Count	40	0	40
	% within Fairtrade	100.0%	.0%	100.0%
	% within DevelopAware	57.1%	.0%	50.0%
	% of Total	50.0%	.0%	50.0%
Total	Count	70	10	80
	% within Fairtrade	87.5%	12.5%	100.0%
	% within DevelopAware	100.0%	100.0%	100.0%
	% of Total	87.5%	12.5%	100.0%

The results of a Chi-square test for independence (with Yates Continuity Correction) are shown in Table 4.27 and point to the rejection of the null hypothesis, $\chi^2 (1, n = 80) = 9.257$, $p = 0.002 (<0.05)$, $\phi = -0.378$. The ϕ value, -0.378 , represents a medium effect using Cohen's (1988) since the value 0.3 lies between 0.2 and 0.5. Thus, there is statistically significant evidence to accept the alternative hypothesis and conclude that there is a significant difference between fair trade and conventional trade producers' awareness of local development.

Table 4.27 Chi-square Test Results

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	11.429 ^a	1	.001		
Continuity Correction ^b	9.257	1	.002		
Likelihood Ratio	15.296	1	.000		
Fisher's Exact Test				.001	.001
Linear-by-Linear Association	11.286	1	.001		
N of Valid Cases	80				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.00.

b. Computed only for a 2x2 table

The implications of this result are discussed in detail within section 5.3.1 along with the qualitative responses gathered from producers. This qualitative data also examines the awareness that producers have of fair trade itself as opposed to SOFA. This anomaly was noted as producers always referred to SOFA but never fair trade. A direct question on whether they had heard of fair trade demonstrated very limited awareness reported. It is noted that the results are analogous to those from other studies (Ronchi, 2002; Taylor, 2002; Lyon, 2002; Mayoux, 2012) where fair trade awareness levels were also low.

4.12 Analysis of Non-Monetary Gains from Fair Trade

As previously discussed, impact studies consistently identify the non-monetary benefits of fair trade that accrue to producers. Bacon (2005) finds fair trade involvement has the potential to help when dealing with shocks or disasters, whilst Schmelzer, (2006) finds improvements in self-esteem and education spending. Ronchi (2002) reports greater repayment of debts and extension of children's educational engagement, and Utting-Chamorro (2005) finds better nutrition and improved economic and financial stability.

The following section therefore focuses on whether there are such gains from fair trade participation in Gampola. The analysis so far has suggested that there are psychological gains from fair trade membership, with producers feeling better off. The following analysis will attempt to establish whether this psychological impact results in observed differentials in producer behaviour. This could manifest itself through the educational attainment of children, investment in improvements to the family home or accumulation of savings.

4.12.1 Household Development

Household development is examined using data from the question on how any improvement in income over the past five years has affected farmers. All farmers, fair and conventional trade, were asked this question regardless of whether they had reported any improved income. This was to establish whether there was any difference in their spending even in the absence of reported income improvement i.e. a psychological impact of being part of the fair trade system. If they said that they had not made any investment in areas such as improving their home, saving or investing in their children then they were categorised as not being able to develop their standard of living. If they stated that they had made gains in these areas, they were deemed to be developing their living standards and thus achieving household development.

H₀: Household development and fair/conventional trade are independent

H_A: Household development and fair/conventional trade are not independent

Table 4.28 shows that 59.5% of the sample, irrespective of any reported income gain over the past five years, have experienced household development. Within fair trade, 61.5% of respondents answer positively compared to 57.5% of conventional trade producers.

Table 4.28 Crosstabulation of *fairtrade* and *HouseholdDev* Variables

		HouseholdDev		Total
		Yes	No	
Fairtrade 0	Count	23	17	40
	% within Fairtrade	57.5%	42.5%	100.0%
	% within HouseholdDev	48.9%	53.1%	50.6%
	% of Total	29.1%	21.5%	50.6%
Yes	Count	24	15	39
	% within Fairtrade	61.5%	38.5%	100.0%
	% within HouseholdDev	51.1%	46.9%	49.4%
	% of Total	30.4%	19.0%	49.4%
Total	Count	47	32	79
	% within Fairtrade	59.5%	40.5%	100.0%
	% within HouseholdDev	100.0%	100.0%	100.0%
	% of Total	59.5%	40.5%	100.0%

The results from a Chi-square test for independence (with Yates Continuity Correction) are shown in Table 4.29.

Table 4.29 Chi-square Test Results

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.134 ^a	1	.715		
Continuity Correction ^b	.019	1	.892		
Likelihood Ratio	.134	1	.715		
Fisher's Exact Test				.820	.446
Linear-by-Linear Association	.132	1	.716		
N of Valid Cases	79				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.80.

b. Computed only for a 2x2 table

The result indicates no significant association between fair trade and household development, $\chi^2 (1, n = 79) = 0.019, p = 0.892, \phi = -0.41$. The effect size ϕ value (-0.41) shows a medium effect using Cohen's (1988) criteria of 0.3. Therefore, there is statistically significant evidence not to reject the null that *HouseholdDev* is independent of fair and conventional trade producers.

This result is discussed further in section 5.4. Arguably, the excess money reported by fair trade producers in section 4.9 is not resulting in greater spending on household development. The excess money is therefore being saved through the incentives SOFA have put into place (reported in section 4.9) or spent on items other than household development. This could include funding an improved diet e.g. greater consumption of meat, as indicated by the quantitative results in section 5.2.

4.13 Education Indicators

The following section explores educational attainment and factors affecting education to establish whether there is a link between fair trade participation and educational standards for both producers and their children. For children, the reported education achievement is

for the child with the highest attainment. Therefore, if a farmer has 3 children one of whom has reached University, this is the reported result for *ChildEduc*.

According to a study on access, attendance and achievement of rural schools in Sri Lanka by the Consortium for Research on Education Access, Transitions and Equity (CREATE), public expenditure on education averages to less than 2% of GDP²⁴ (Little, Indika and Rolleston, 2011). In spite of this low investment, there has been sustained, almost full, enrolment in education for up to nine years (*ibid.*). Differences in achievement persist, especially in rural areas, where concerns around physical access to education have been replaced with issues of equity of access to similar learning opportunities. Such differences are associated with parental levels of education, location, health, and access to private tuition (*ibid.*). According to the World Bank (2011), education in Sri Lanka includes:

- Free tuition in all government primary and secondary schools
- Free material for a school uniform for each child each year
- A set of textbooks for each child for each subject
- Subsidised travel on buses and trains
- Free school meals for primary age children in poor areas
- Compulsory education legislation for all children aged 6 – 14 years to complete nine years of education.

According to Create (2011), 92% of children attend government schools with the remainder attending private or international schools. The adult literacy rate in 2008 was 93% and the declining birth rate resulted in a decline in the number of students in government schools

²⁴ Between 2001 and 2010 government education expenditure as a proportion of GDP ranged from a high of 2.67% in 2006 to a low of 1.86% in 2010. (Little, Indika and Rolleston, 2011, p 4)

from 4.26 million in 1991 to 3.93 million in 2008. In 2008, it was estimated that 99% of boys and girls were enrolled for primary education (Grades 1 – 5) (*ibid.*). “The basic education cycle in Sri Lanka extends to Grade 9 and all children are expected by law to enter Grade 1 at 5+ and to complete nine years of education by the age of 14. The survival rate to the end of Grade 9 is 93% for girls and 89% for boys. The senior secondary stage of education spans Grades 10 – 13, with high stakes national examinations at Grade 11 (GCE O Level) and Grade 13 (GCE A Level). In 2006/7 the NER [*net enrolment ratio*] in senior secondary education was 69% for girls and 65% for boys” (Little, Indika and Rolleston, 2011, p4).

The data on educational enrolment shows a divergence between the richest and poorest income groups at both junior and senior stages of education. According to World Bank (2011), the NER at junior secondary ranges from 89% to 97% for the poorest and wealthiest quintile respectively. At senior secondary, the NER ranges from 52% to 77% for the poorest and wealthiest quintiles respectively. In addition, performance of students varies between developed urban zones where children’s performance in tests is better than their peers in rural and estate schools (*ibid.*).

4.14 Producer Educational Standards

The SOFA cooperative has been in operation since 1998 thus, at the time of the survey, the longest period of membership is 11 years. Hence the educational standards of the current producers have not been influenced by fair trade participation. However, it is possible that the members’ educational attainment influences their decision or willingness to join the cooperative rather than remain independent. Hence, tests are conducted on the data to examine the relationship between producer education and fair trade participation. It

should be noted that all producers surveyed had attained primary level education and therefore it is secondary level education that is being tested.

Crosstabulation (see Table 4.30) illustrates that 62.5% of conventional producers have only primary level education compared with 95% of those involved in fair trade. The remaining 37.5% of conventional producers have secondary level education compared with only 5% of fair trade producers. In the sample, therefore, education levels are higher for conventional trade farmers relative to fair trade producers.

Table 4.30 Crosstabulation of *fairtrade* and *Educ* Variables

		Educ		Total
		Primary	Secondary	
Fairtrade 0	Count	25	15	40
	% within Fairtrade	62.5%	37.5%	100.0%
	% within Educ	39.7%	88.2%	50.0%
	% of Total	31.3%	18.8%	50.0%
Yes	Count	38	2	40
	% within Fairtrade	95.0%	5.0%	100.0%
	% within Educ	60.3%	11.8%	50.0%
	% of Total	47.5%	2.5%	50.0%
Total	Count	63	17	80
	% within Fairtrade	78.8%	21.3%	100.0%
	% within Educ	100.0%	100.0%	100.0%
	% of Total	78.8%	21.3%	100.0%

The hypotheses to be tested are as follows:

H₀: Attainment of secondary level education is independent of fair and conventional trade participation

H_A: Attainment of secondary level education is not independent of fair and conventional trade participation

Table 4.31 Chi-square Test Results

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	12.624 ^a	1	.000		
Continuity Correction ^b	10.756	1	.001		
Likelihood Ratio	13.954	1	.000		
Fisher's Exact Test				.001	.000
Linear-by-Linear Association	12.466	1	.000		
N of Valid Cases	80				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.50.

b. Computed only for a 2x2 table

As shown in Table 4.31, the results of a chi-square test for independence (with Yates Continuity Correction) indicate a significant association between conventional trade and education, $\chi^2 (1, n = 80) = 10.756, p = < 0.05, \phi = -0.397$. The ϕ coefficient -0.397 is considered a medium effect using Cohen's (1988) criteria. There is statistically significant evidence to reject the null and accept the alternative hypothesis that education is not independent of fair trade participation.

One possible explanation for this result is that producers with lower educational levels recognise they need the support of the cooperative, perhaps due to a lack of self-

confidence. However, for a deeper understanding of the result, it is useful to take a broader perspective and consider the age profile of fair trade producers and whether this is associated with educational attainment.

4.15 Relationship Between Fair Trade and Age

As outlined above, to better understand the relationship between fair trade and educational levels of producers observed in the sample, it is important to explore other factors which might be influencing the outcome. It is possible that the educational level of producers is linked to age in that the older producer may be less likely to have a higher education level. If the likelihood of being involved in fair trade is linked to age then there will be some in-built bias on the reported education levels of the two groups. The first stage therefore is to test whether there is a significant difference in the age of the two groups.

The hypotheses are stated below:

H_0 : Mean age of fair and conventional trade producers is the same

H_A : Mean age of fair and conventional trade producers is not the same

Table 4.32 Group Statistics for Age and Fairtrade Participation

	Fairtrade	N	Mean	Std. Deviation	Std. Error Mean
Age	Yes	40	55.90	13.401	2.119
	0	40	49.43	14.369	2.272

Table 4.33 Independent Sample T-test Results

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Age Equal variances assumed	.228	.634	2.084	78	.040	6.475	3.107	.290	12.660
Age Equal variances not assumed			2.084	77.624	.040	6.475	3.107	.290	12.660

The results of an independent samples t-test are shown in Tables 4.32 and 4.33. There is a statistically significant difference in scores for fair trade ($M = 55.90$, $SD = 13.401$) and conventional trade farmers ($M = 49.43$, $SD = 14.369$; $t(78) = 2.084$, $p = 0.040$, one-tailed). The magnitude of difference in the means (mean difference = 6.475, 95% CI: 12.660 to 0.290) was very small ($\eta^2 = 0.053$). Thus, there is statistically significant evidence to reject the null and accept the alternative hypothesis that there is a difference between *Age* for fair and conventional trade producers.

Recognising that conventional producers have a lower mean age, it is possible that they more likely to have spent longer in education, perhaps due to changing social and economic events within the country.

An interesting question is why the age profile of the fair trade producers is older than the conventional trade producers. It could be inferred that improved commodity prices in

recent years and higher educational standards of younger producers have reduced the incentive to join the cooperative, the younger producers not having experienced the same levels of price volatility as the older farmers. Furthermore, arguably the higher education standards of the younger producers may result in higher confidence levels meaning they do not believe that the cooperative will bring any additional positive gains.

4.16 Relationship Between Age of Producer and Child Education Level

Continuing the analysis of educational standards, tests are undertaken to examine the relationship between producer age and the education level attained by children. Based on data from the survey on the age of each child and educational attainment categorised as 'within or below primary level' and 'within or above secondary level'. As previously mentioned, the highest achieving child in the family determines the educational achievement reported. Since the results of previous tests show that older producers have more children. Thus affordability of education may be an issue. On the other hand, younger producers may not have children old enough to have completed education.

For the analysis, producers are separated into two groups according to the educational level of their children. Table 4.34 shows that there is a small difference between the mean age of producers with children who are either in, or have completed, primary education or below, compared to the mean age of producers with children at secondary level.

Table 4.34 Group Statistic Results for *ChildEduc* Level

ChildEduc		N	Mean	Std. Deviation	Std. Error Mean
Age	In or completed educ. Primary or below	32	52.22	14.970	2.646
	In or completed educ. Secondary or above	43	54.63	13.443	2.050

Based on the results in Table 4.34, the following hypothesis are constructed:

H₀: There is no difference in the mean age of the two groups

H_A: There is a difference in the mean age of the two groups

An independent-samples t-test is conducted using *ChildEduc* and *age* variables. Table 4.35 shows that there is no significant difference in the mean ages. The magnitude of differences in mean ages (mean difference = -2.41, 95% CI: -8.98 to 4.16) is very small (eta squared 0.007). Therefore, the null hypothesis is not rejected.

Table 4.35 Independent Samples T-test for *Age* and Standard of *ChildEduc*

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Age Equal variances assumed	.438	.510	-.73	73	.467	-2.409	3.295	-8.98	4.157
Age Equal variances not assumed			-.72	62.703	.474	-2.409	3.348	-9.09	4.281

This result suggests that the age of the producers does not affect the educational level of the children. A point of interest, however, is that one of the children in the survey had attained University level education and came from the fair trade producer group. Whilst not statistically significant in itself, this may be an indication of improved awareness of education opportunities by SOFA members as well as a result of the reduced need for children to work on the land. Indeed, SOFA provides members with grants to support their children's education and therefore it is possible that, over time, the standards of education within this group will increase.

4.17 Relationship Between Income and Child Education Level

In line with reports by the World Bank (2011) and Little, Indika and Rolleston (2011), it can be argued that higher incomes result in higher educational achievement of children due to affordability. A test is therefore carried out on the sample to see if such a relationship exists in the present context.

Using the same two producer groups defined in the previous section, and measuring income in log terms, Table 4.36 shows that the mean income of producers with children in the primary education category is 4.54 compared to 4.49 for those producers with children within the secondary education category.

Table 4.36 Income and Producer's Children Educational Statistics

	ChildEduc	N	Mean	Std. Deviation	Std. Error Mean
LogTealIncome	In or completed educ. Primary or below	31	4.5397	.23232	.04173
	In or completed educ. Secondary or above	42	4.4940	.20891	.03224

Based on Table 4.36 above, the following hypotheses are presented:

H₀: There is no difference in mean income between the two groups

H_A: There is a difference in mean income between the two groups

An independent-samples t-test is conducted using the *ChildEduc* and *LogTealIncome* variables and the results presented in Table 4.37 shows no significant difference in the mean levels of income. The magnitude of differences (mean difference = 0.046, 95% CI: 0.058 to 0.419) is very small (eta squared 0.011). Hence, the null hypothesis is not rejected and it cannot be concluded that there is a link between income and the educational level of producers' children.

4.37 Independent Samples T-test for *LogTealIncome* and Standard of *ChildEduc*

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
LogTealIncome	Equal variances assumed	.49	.48	.88	71	.382	.04567	.05188	-.057	.1491
	Equal variances not assumed			.87	60.7	.390	.04567	.05273	-.059	.1511

4.18 Fair Trade and Children's Education Level

One the objectives of fair trade is to allow children the freedom to attend school rather than work on the farm. As such, the development premium may be used to fund education, for example, by paying for school uniform and travel expenses.

Other comparable impact studies have found evidence of such effects. Lyon (2002) reports that, in Guatemala, higher prices did enable children to be educated, with producers' children attending school and many members having children at university. Ronchi (2002) found that, in Costa Rica, one-third of the fair trade producers sampled had prolonged their children's education. This was echoed by Utting-Chamarro (2005) for Nicaragua, where increased economic stability from involvement in fair trade had allowed producers to pay for their children's education.

A positive relationship between fair trade and child education might therefore be expected in Gampola. SOFA President, Bernard Ranaweera claims during an interview held as part of the study, for example, that the cooperative encourages children of producer members to find non-agricultural work. This is done through the provision of computer training and appropriate clothing for work off the farm. The cooperative states that it is also trying to change the attitude of its members so that children are encouraged by their families to find work outside of the farm. SOFA also supports education by paying for educational items such as school uniforms and books.

However, the relationship between fair trade participation and children's education is not expected to be strong in the present context as fair trade is still in its early years, with a maximum of 11 years experience of working on a fair trade farm. Children may still be in education, or have completed their education before farmers became involved in fair trade.

Crosstabulation of the relevant variables (Table 4.38) shows that, within fairtrade, 39.5% of producers have at least 1 child who has completed, primary education and 60.5% of producers have at least 1 child in, or completed, secondary education. This is compared with the results for children of conventional trade producers where 45.9% of producers have at least 1 child in, or completed, primary education or below versus 54.1% classified as in, or completed, secondary or above. This is consistent with both the age profile of the fair trade farmers such that their children are likely to be further into their education and also the support from fair trade to encourage children to pursue education as discussed in section 4.16.

Table 4.38 Crosstabulation of *Fairtrade* and *ChildEduc* Variables

		ChildEduc		Total
		In or completed educ. Primary or below	In or completed educ. Secondary or above	
Fairtrade 0	Count	17	20	37
	% within Fairtrade	45.9%	54.1%	100.0%
	% within ChildEduc	53.1%	46.5%	49.3%
	% of Total	22.7%	26.7%	49.3%
Yes	Count	15	23	38
	% within Fairtrade	39.5%	60.5%	100.0%
	% within ChildEduc	46.9%	53.5%	50.7%
	% of Total	20.0%	30.7%	50.7%
Total	Count	32	43	75
	% within Fairtrade	42.7%	57.3%	100.0%
	% within ChildEduc	100.0%	100.0%	100.0%
	% of Total	42.7%	57.3%	100.0%

Based on the results in Table 4.38 above, the following hypotheses are tested:

H_0 : The variable *Educ* is independent of the variable *fairtrade*

H_A : The variable *Educ* is not independent of the variable *fairtrade*

The results of a Chi-Square test for independence (with Yates Continuity Correction) are shown in Table 4.39. This indicates no significant association between *fairtrade* and *ChildEduc* $\chi^2 (1, n = 75) = 0.11, p = 0.74, \phi = 0.07$. The ϕ coefficient -0.07 is considered a small effect using Cohen's (1988) criteria of 0.10 for a small effect size. There is statistically significant evidence not to reject the null, and conclude therefore that the education level of children from fair trade families is equal to that of children from conventional trade families.

Table 4.39 Chi-square Test for *Fairtrade* and *ChildEduc* Achievement

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.321 ^a	1	.571		
Continuity Correction ^b	.111	1	.739		
Likelihood Ratio	.321	1	.571		
Fisher's Exact Test				.644	.370
Linear-by-Linear Association	.317	1	.574		
N of Valid Cases	75				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.79.

b. Computed only for a 2x2 table

It is notable that the percentage of children in the 'in or completed secondary or above' category for both sets of producers falls below the national average of 69% for girls and 65% for boys (Little, Indika and Rolleston, 2011). However, when compared to the World Bank (2011) data on Sri Lanka examining education as affected by poverty, 52% of children from the poorest quintile are enrolled in Secondary education and 77% from the richest quintile. Within these boundaries, the fair trade producer group are performing quite well.

4.19 Summary Logistic Regressions

To conclude the analysis of income and development impacts from fair trade, two logistic regressions are undertaken to assess the influence of a range of variables on the likelihood of respondents reporting an improvement in income (*Improvedincome*) or an improvement in household living standards (*PersonalDev*). A logistic regression employs a set of variables to predict or explain the categorical dependent variable, and, an assessment of the 'goodness of fit' provides an indication of the adequacy of the model. Furthermore, the regression provides an indication of the relative importance of each predictor variable and the interaction among these variables and allows for calculation of the sensitivity and specificity of the model and the positive and negative predictive values.

Sensitivity and specificity are statistical measures of the performance of a binary classification test, also known in statistics as a classification function. Sensitivity measures the proportion of actual positives which are correctly identified as such and is complementary to the false negative rate. Specificity measures the proportion of negatives which are correctly identified as such and is complementary to the false positive rate. A predictor would be described as 100% sensitive and 100% specific. However, theoretically, any predictor will possess a minimum error bound known as the Bayes error rate (Pallant, 2010, p171).

4.19.1 Logistic Regression: Improved Income from Tea

Firstly, direct logistic regression is employed to assess the impact of a number of factors on the likelihood that respondents report that their income has improved (*ImprovedIncome*). The model contains four independent variables (*fairtrade*, *age*, *educ*, and *Hoursworked*) and the results are presented below. Based on the results obtained so far, it would be expected that *ImprovedIncome* would be predicted most accurately by *Age* and *HoursWorked* since, as seen in sections 4.6.4 and 4.15 these variables have a positive relationship with improved income.

Table 4.40 shows the results of the analysis without any of the independent variables in the model. The overall percentage of correctly classified cases is 62.5%, given that, in this case, SPSS classifies all respondents into the 'improved income' category based on the fact more respondents answered yes to this question. This result serves as a baseline for comparing the model when predictor variables are included.

Table 4.40 Classification Table from Logistic Regression on *ImprovedIncome*

Classification Table^{a,b}

	Observed	Predicted		
		ImprovedIncome		Percentage
		Yes	No	Correct
Step 0	ImprovedIncome Yes	50	0	100.0
	No	30	0	.0
	Overall Percentage			62.5

a. Constant is included in the model.

b. The cut value is .500

The omnibus test of coefficients shown in Table 4.41 provides an overall indication of how the model (set of predictor variables) performs over and above the results reported in Table 4.40, when none of the predictors are included. This is referred to as a goodness of fit test. A highly significant value is required to illustrate that the result is better than the baseline estimate of 62.5%. In this case, the p value of 0.00 (*i.e.* < 0.0005) indicates significance and therefore the model is better than the baseline assumption made by SPSS that all respondents would report an improved income.

Table 4.41 Omnibus Test of Model Coefficients

	Chi-square	df	Sig.
Step	56.899	4	.000
Step 1 Block	56.899	4	.000
Model	56.899	4	.000

Further tests show that the model is worthwhile. Using the Hosmer and Lemeshow goodness of fit test reported in Table 4.42, the chi-square value of 1.064 with a significance (p value) of 0.998 suggests that the data is a good fit, in that there is no significant different between the predicted values of the model and actual observed values.

Table 4.42 Hosmer and Lemeshow Test

Step	Chi-square	Df	Sig.
1	1.064	8	.998

The Cox and Snell R^2 and Nagelkerke R^2 values (Table 4.43) provide further information on the usefulness of the model. The results provide an indication of the amount of variation in the dependent variable explained by the model. These are known as pseudo R^2 statistics, rather than true R^2 values reported in the multiple regression output (Table 4.45). In this model, the two values are 0.51 and 0.69 suggesting that between 51% and 69% of the variability is explained by the 4 variables.

Table 4.43 Model Summary for *ImprovedIncome* Logistic Regression

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	48.951 ^a	.509	.694

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Table 4.44 shows how well the model is able to predict the correct category for each case *i.e.* yes/no to improved income. Comparing this with Table 4.40 shows an improvement from 62.5% to 83.8% when the predictor variables are included in the model. Using the results below, the sensitivity and specificity of the model is determined. As shown in Table 4.44, the model accurately predicts 80% of people who reported an improved income and 90% of those who reported no improvement in their income.

Of those predicted by the model to report an improved income, 93% had actually reported an improved income as compared to 73% for the negative predictive value.

Table 4.44 Classification Table for Logistic Regression on *ImprovedIncome*

Classification Table^a

	Observed	Predicted			
		ImprovedIncome		Percentage Correct	
		Yes	No		
Step 1	ImprovedIncome	Yes	40	10	80.0
		No	3	27	90.0
	Overall Percentage				83.8

a. The cut value is .500

Table 4.45 reports information about the contribution of each of the predictor variables. The Wald test indicates which variables contribute significantly to the predictive ability of the model. Two variables (*Fairtrade* $p = 0.000$ and *HoursWorked* $p = 0.018$) are seen to be significant in affecting whether someone reports having improved income or not. The remaining 2 variables do not contribute significantly to the model.

Table 4.45: Logistic Regression on *ImprovedIncome* from Tea

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)		
							Lower	Upper	
Step 1 ^a	Fairtrade(1)	-6.623	1.656	15.992	1	.000	.001	.000	.034
	Age	.003	.031	.011	1	.916	1.003	.944	1.067
	Educ(1)	.167	.895	.035	1	.852	1.182	.205	6.827
	Hoursworked	-.642	.271	5.627	1	.018	.526	.310	.894
	Constant	5.441	2.972	3.351	1	.067	230.586		

a. Variable(s) entered on step 1: Fairtrade, Age, Educ, Hoursworked.

The positive or negative value of B shown in Table 4.45 indicates the direction of the relationship *i.e.* which factors increase or decrease the likelihood of respondents reporting higher income. *Fairtrade*, and *HoursWorked* all have negative B values indicating that, for example, the more hours someone works, the less likelihood there is of them responding

that their income has improved. The negative relationship between fair trade and improved income from tea is unexpected. One explanation is that fair trade producers have higher expectations for income improvement as a result of being in the scheme. *Age* and *Educ* both have positive B values implying that higher values of these variables increase the chances of respondents reporting an improved income.

The final important result from Table 4.45 is $\text{Exp}(B)$ which is the odds ratio for each of the independent variables. The odds ratio represents “the change in odds of being in one of the categories of outcome when the value of a predictor increases by one” (Tabachnick and Fidell, 2007, p461). According to the significance values reported previously, *fairtrade* and *HoursWorked* are significant predictors in the model. For *HoursWorked*, the odds ratio is 0.53, a value less than 1. For every extra hour of work, the odds of them reporting an improved income decrease by a factor of 0.53 (*Ceteris Paribus*).

This result is discussed further in chapter five but initial conclusions would indicate that farmers working more hours, which previous results in section 4.7 show are conventional trade farmers, do not feel their income is improving.

4.19.2 Logistic Regression: Household Development

Finally, direct logistic regression is used to assess the impact of a number of factors on the likelihood that respondents would report improved living standards through household development such as improvements to their home, ability to save and investment in their children’s education. The model contains nine independent variables (*fairtrade*, *age*, *Educ*, *Improvedincome*, *Incomesufficient*, *Child*, *HoursWorked*, *LogTealIncome* and *SecIncome*). The variable *Child* is included as a greater number of children may reduce the likelihood of

household development being reported since more income will be required to support the family size. Income sufficiency and existence of a second income may increase the likelihood of household development being reported if the responses are positive. The number of hours worked may conceivably have a negative effect given the results in section 4.7 of greater working hours not increasing income.

It might be expected that *ImprovedIncome* contributes significantly in explaining whether farmers are experiencing household development. Improving income may enable a producer to invest more in savings and/or home improvements thus leading to an improvement in their household development.

Table 4.46 presents the results of the analysis without any of the independent variables in the model. The overall percentage of correctly classified cases is 61%, given that all respondents are allocated to the 'yes' category based on the fact more respondents answered yes to this question in the survey. As previously, this null model serves as a baseline for comparison with the full model when predictor variables are included.

Table 4.46 Classification Table from Logistic Regression on *HouseholdDev*

Classification Table^{a,b}

Observed			Predicted		Percentage Correct
			HouseholdDev		
			Yes	No	
Step 0	Household	Yes	47	0	100.0
	Dev	No	30	0	.0
Overall Percentage					61.0

- a. Constant is included in the model.
- b. The cut value is .500

As previously explained, the omnibus test of coefficients shown in Table 4.47 provides an overall indication of how the model (set of predictor variables) performs over and above the null model and is referred to as a goodness of fit test. In this case, the p value of 0.061 (*i.e.* > 0.05) indicates that the result is not significant and therefore the model is not better than the null model with the baseline assumption made by SPSS that all respondents would report household development.

Table 4.47 Omnibus test of Model Coefficients

	Chi-square	Df	Sig.
Step 1 Step	16.274	9	.061
Block	16.274	9	.061
Model	16.274	9	.061

Although the results in Table 4.47 are not significant at the 5% level, the Hosmer and Lemeshow goodness of fit test shown in Table 4.48 reports a chi-square result of 4.47 with a significance level (p value) of 0.813. This is greater than the required 0.05 showing that the data is acceptable. As previously stated in section 4.19.1, this is the most reliable test of model fit available in SPSS and therefore based on this test, further consideration of the results is undertaken.

Table 4.48 Hosmer and Lemeshow Test

Step	Chi-square	Df	Sig.
1	4.466	8	.813

The Cox and Snell R² and Nagelkerke R² values reported in Table 4.49 provide an indication of the amount of variation in the dependent variable explained by the model. The two

values suggest that between 19.1% and 25.8% of the variability is explained by the nine variables.

Table 4.49 Model Summary for *HouseholdDev* Logistic Regression

Step	-2 Log likelihood	Cox & Snell R ²	Nagelkerke R ²
1	86.686 ^a	.191	.258

a. Estimation terminated at iteration number 20 because maximum iterations has been reached. Final solution cannot be found.

A classification table is presented in Table 4.50 to indicate how well the model is able to predict the correct category for each case *i.e.* yes/no to household development. There is an improvement from 61% to 70.1% when the predictor variables are included in comparison with the null model. Using the results below, the sensitivity and specificity of the model is determined. As shown in Table 4.50, the model accurately predicts 74.5% of people who reported household development and 63.3% of those who reported no household development.

Of those predicted by the model to report an improvement in household development, 76.08% had actually reported such improvements. Of those predicted by the model not to report an improvement in household development, 61.29% had actually responded in this way.

Table 4.50 Classification Table for Logistic Regression on *HouseholdDev*

Classification Table^a

Observed		Predicted			
		HouseholdDev		Percentage Correct	
		Yes	No		
Step 1	HouseholdD	Yes	35	12	74.5
	ev	No	11	19	63.3
	Overall Percentage				70.1

a. The cut value is .500

Table 4.51 reports B values to show the contribution of each of the predictor variables where it can be seen that there is one significant variable (*ImprovedIncome* $p = 0.019$). This variable is the major factor affecting whether a farmer reports having household development or not. The remaining eight variables are not seen to be statistically significant although the fair trade and education variables, are, arguably, on the margins of significance.

Table 4.51 Logistic Regression on *HouseholdDev*

	B	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 ^a								
Fairtrade	2.275	1.248	3.323	1	.068	9.726	.843	112.249
Age	.013	.031	.171	1	.680	1.013	.954	1.075
Educ	1.362	.795	2.935	1	.087	3.904	.822	18.547
ImprovedIncome	2.785	1.183	5.545	1	.019	16.199	1.595	164.493
Incomesufficient	20.521	23072.142	.000	1	.999	8.173E8	.000	.
Child	.229	.247	.857	1	.354	1.257	.774	2.041
Hoursworked	.028	.169	.028	1	.867	1.029	.738	1.433
LogTealIncome	.616	1.282	.231	1	.631	1.852	.150	22.849
SecIncome	.028	.743	.001	1	.970	1.028	.240	4.407
Constant	-27.713	23072.143	.000	1	.999	.000		

a. Variable(s) entered on step 1: Fairtrade, Age, Educ, ImprovedIncome, Incomesufficient, Child, Hoursworked, LogTealIncome, SecIncome.

As evident in Table 4.51, each of the variables has positive B value. Thus, all factors are positively related to the likelihood of respondents reporting that household development has taken place.

The final important result from Table 4.51 is $\text{Exp}(B)$ which, as previously explained, is the odds ratio for each of the independent variables. For *ImprovedIncome* the odds ratio is 16.19, a value greater than 1. This indicates that someone reporting improved income is more likely to report household development by a factor of 16.19, *Ceteris Paribus*.

In summary, direct logistic regression is performed to assess the impact of several factors on the likelihood that respondents report an improvement in household development. The model contains nine independent variables (*fairtrade*, *age*, *Educ*, *Improvedincome*, *Incomesufficient*, *Child*, *HoursWorked*, *LogTealIncome* and *SecIncome*). The full model containing all predictors is statistically insignificant, $\chi^2 (9, N = 77) = 16.27, p > 0.001$, indicating that the model is unable to distinguish between respondents who reported and did not report household development. The model as a whole explains 19.1% (Cox and Snell R^2) and 25.8% (Nagelkerke R^2) of the variance in household development, and correctly classifies 70.1% of cases. As shown in Table 4.51, only one of the independent variables makes a unique statistically significant contribution to the model (*ImprovedIncome*). This variable is the strongest predictor of reporting an improved household development with an odds ratio of 16.19. This indicates that those who report improved incomes are over sixteen times more likely to report an improvement in household development, controlling for other factors in the model.

This result is discussed further in chapter five but the result is in line with expectations that those farmers reporting an improvement in their income are more likely to report they are experiencing household development.

4.20 Summary of Statistical Tests

Table 4.52 Summary Table of Statistical Tests

Test	Hypothesis	Summary of Test	Outcome
1	<p>H₀: Fair Trade <i>LogTealIncome</i> is equal to Conventional Trade <i>LogTealIncome</i></p> <p>H_A: Fair Trade <i>LogTealIncome</i> is not equal to Conventional Trade <i>LogTealIncome</i></p>	Impact of fair trade involvement on income	Do not reject Null
2	<p>H₀: The variable <i>ImprovedIncome</i> is independent of the variable <i>fairtrade</i></p> <p>H_A: The variable <i>ImprovedIncome</i> is not independent of the variable <i>fairtrade</i></p>	Producer's perception of income improvement	Reject the Null
3	<p>H₀: <i>Hoursworked</i> and <i>LogTealIncome</i> are not correlated (correlation coefficient = 0)</p> <p>H_A: <i>Hoursworked</i> and <i>LogTealIncome</i> are correlated (correlation coefficient ≠ 0)</p>	Relationship between hours worked and income	Reject the Null
4	<p>H₀: There is no difference between <i>Hoursworked</i> for fair trade and conventional trade farmers.</p> <p>H_A: There is a difference between <i>Hoursworked</i> for</p>	Relationship between hours worked and fair trade	Reject the Null

	fair trade and conventional trade farmers.		
5	<p>H_0 = The mean number of hours producers work per day on tea is the same for the two groups</p> <p>H_A = The mean number of hours producers work per day on tea is not the same for the two groups</p>	Relationship between hours worked and second income	Do not reject the Null
6	<p>H_0: The variable <i>ExcessMoney</i> is independent of the variable <i>fairtrade</i></p> <p>H_A: The variable <i>ExcessMoney</i> is not independent of the variable <i>fairtrade</i></p>	Impact of fair trade on excess money	Reject the Null
7	Multiple Regression of <i>LogTealIncome</i> using <i>fairtrade</i> , <i>Age</i> , <i>Educ</i> , <i>Hoursworked</i> and <i>Child</i>	How much of the variance in <i>LogTealIncome</i> is explained by <i>age</i> , <i>fairtrade</i> , <i>Educ</i> , <i>Hoursworked</i> and <i>Child</i>	<i>Age</i> makes the strongest unique contribution to explaining variation in <i>LogTealIncome</i>
8	<p>H_0: Awareness of local development is independent of the variable <i>fairtrade</i></p> <p>H_A: Awareness of local development is not independent of the variable <i>fairtrade</i></p>	Awareness of local development	Reject the Null
9	<p>H_0: Household development and fair/conventional trade are independent</p> <p>H_A: Household development and fair/conventional trade are not independent</p>	Impact of fair trade on household development	Do not reject the Null
10	H_0 : Attainment of secondary level education		Reject the Null

	<p>is independent of fair and conventional trade participation</p> <p>H_A: Attainment of secondary level education is not independent of fair and conventional trade participation</p>	Impact of fair trade on producer's education level	
11	<p>H₀: Mean age of fair and conventional trade producers is the same</p> <p>H_A: Mean age of fair and conventional trade producers is not the same</p>	Relationship between fair trade and age	Reject the Null
12	<p>H₀: There is no difference in the mean age of the two groups</p> <p>H_A: There is a difference in the mean age of the two groups</p>	Relationship between age of producer and child education level	Do not reject the Null
13	<p>H₀: There is no difference in mean income between the two groups</p> <p>H_A: There is a difference in mean income between the two groups</p>	Relationship between income and child education level	Do not reject the Null
14	<p>H₀: The variable <i>Educ</i> is independent of the variable <i>fairtrade</i></p> <p>H_A: The variable <i>Educ</i> is not independent of the variable <i>fairtrade</i></p>	Impact of fair trade on child education level	Do not reject the Null
15	Logistic regression on <i>Improved Income</i> using <i>fairtrade</i> , <i>Age</i> , <i>Educ</i> , <i>ChildEduc</i> , <i>Child</i> , <i>HoursWorked</i> and <i>LogTealIncome</i>	Factors influencing the likelihood of a positive response to an improvement in income	Strongest indicator was <i>Hoursworked</i>
16	Logistic regression on <i>HouseholdDev</i> of <i>fairtrade</i> , <i>Age</i> , <i>Educ</i> , <i>ImprovedIncome</i> , <i>Incomesufficient</i> , <i>Child</i> , <i>HoursWorked</i> ,	Factors influencing the likelihood of a positive response to an improvement in household development	Strongest indicator was <i>ImprovedIncome</i>

	<i>LogTealIncome</i> and <i>SecIncome</i>		
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4.21 Summary

In this chapter, the empirical results for the thesis are presented. It is shown that, despite their being no statistically significant difference in incomes from tea, fair trade producers feel their income has improved compared to conventional trade producers. This is in line with fair trade producers being more likely to report having excess income, working fewer hours and being more aware of local development. Indeed, farmers are less likely to report improved income if they work longer hours. There are differences in age and education levels across the groups with fair trade producers tending to be older and less educated than the conventional trade producers. From the analysis as a whole, one result which stands out as important is the fewer hours fair trade farmers report working. This result leads to many other possible uses of their time but which may show up in other ways such as increased saving or time for work beyond the farm.

The intention of the next chapter is to provide some economic interpretation of the results. In addition, the empirical results are compared with those of other impact studies presented in chapter two. Moreover, in light of the empirical results, the implications for policy makers are considered.

Chapter Five

Discussion and Policy Recommendations

5.1 Introduction

The previous chapter presents quantitative analysis of the survey data gathered in Gampola under the broad headings of monetary and non-monetary impacts from fair trade for the two producer groups. The purpose of this chapter is to provide an economic interpretation of the results supplemented by insights gained from qualitative data and compare these with previous studies. In addition, the chapter presents policy implications arising from the results.

The rest of the chapter is organised into four sections. Section one considers the results of the analysis involving income indicators across the two producer groups, such as perceptions of income sufficiency and income improvements, and the availability of excess money and secondary incomes. Consideration is also given as to how these factors are related to the hours worked on the tea farm. Section two discusses the non-monetary impacts of fair trade including household development, education achievements and considers the links between fair trade participation and family size and age of the farmer. Section three examines the policy implications of the results of the thesis. Finally, section four provides some concluding remarks.

5.2 Monetary Impacts

The following discussion examines the monetary impacts of fair trade drawing on the empirical results from the previous chapter as well as qualitative data gathered from

surveys and interviews with producers and senior SOFA members such as the President and Treasurer.

Previous studies (Mayoux 2012, Lyon 2002, Ronchi 2002, Murray *et al* 2003, Bacon 2004 and Utting-Chamorro 2005, Schmelzer 2006) have found a range of income effects as a result of fair trade participation. Their findings are discussed in detail in chapter two and throughout this section are used to compare and contrast with the Sri Lankan study. Lyon (2002) argues that price incentives are the primary reason for producers to become involved in fair trade. However, it is argued that farmers, initially happy to accept stability and higher prices, then become accustomed to this and start to demand higher prices. An interesting question is whether such a pattern is likely to occur more generally, and if so, how long before such dissatisfaction sets in. There are some indications of this outcome starting to be replicated in the Sri Lanka study with 5 out of the 40 fair trade farmers wishing to see the tea price rise to a greater extent and a further 9 farmers asking for SOFA to provide additional tea plants so they can expand their output and increase income. It is unclear from Lyon (2002) how long the farmers in La Voz, Guatemala had worked for fair trade and hence the tipping point, when further price rises are desired, cannot be properly established. In Sri Lanka, the survey shows that the farmers have been part of the system for between 3 and 11 years, and it was those in the 3 to 4 year group who were more likely to request additional tea plants and equipment, suggesting that expectations are raised after such a period of time.

Although the expectation might be that fair trade participation would raise producers income, this is not universally found. The results of the test for mean differences in the tea income of conventional and fair trade farmers is shown in Table 4.5 of chapter four with no

significant difference in the tea income that fair and conventional trade farmers receive. This result is comparable to the case of the Kuapa Kokoo cooperative in Ghana (Ronchi, 2002b) where income benefits are only found to be significant when commodity prices slump. This relative similarity in income between the two groups is easily explained at one level given that market prices were above the guaranteed minimum throughout the period of study.

However, there are characteristics of the Gampola co-operative such that, producers are more protected than in some places. Closer examination of the Gampola cooperative shows that 100% of their output is sold to the exporter meaning that during those times when prices slump, the stability offered from fair trade is very important. Interviews with the SOFA President, Bernard Ranaweera, explains the buyer agreements with the exporter and how this ensures that members sell all of their product through fair trade rather than having to sell their excess to the local buyer. This agreement between SOFA and Bio Food PVT (Ltd) means that members do not face the same exposure to world price volatility that is identified in other impact studies. For example, in North Nicaragua, Bacon (2004) found that the coffee price received by farmers is lower than estimated monetary production costs (US\$0.49 to US\$0.79/lb). This is a result of 60% of coffee being sold through conventional markets. Thus, the actual price received by farmers is an average comprising the expected higher fair trade price of US\$0.56/lb and the conventional market price of US\$0.40/lb.

In keeping with fair trade requirements, when the market price exceeds the minimum fair trade fixed price, traders will pay farmers the market price plus the premium. According to Bernard Ranaweera, SOFA has “a unique approach to managing their producers’ output

that allows them to plan better for the future and pre-finance". This draws on the close links between Bio Foods (PVT) Ltd and the cooperative and they are "fortunate to be able to arrive at such agreements with ease". Unlike products such as coffee, tea does not have an international market price due to the array of qualities and types. Consequently, fair trade tea prices are negotiated between buyer and seller with the basic provision that the cost of production must be covered. This is a further example of how SOFA protects farmers in comparison to other contexts since the price cannot fall below cost as a consequence of the agreement with Bio Foods Pvt. Bio Foods Pvt pays the cooperative members a higher fixed price than the local buyer for example, 29 rupees per kg compared to 20 rupees per kg in 2009. In addition, the company receives an additional €1.00 per kg tea when it sells to the fair trade markets and this is paid into the development fund to be spent on projects as agreed by the Board of Members (BOM).

The result that there is no significant difference in tea incomes is important. Although it may be alleged that the fair trade movement fails to improve the income of farmers, this would be a narrow interpretation. The fair trade movement seeks to reduce the risk factors around farmers' incomes by means of the minimum guaranteed price. Indeed, the movement states that when world prices are above the minimum, farmers will receive the higher price and therefore, implicitly during these times, there will be parity between the incomes of conventional and fair trade farmers (assuming similar output levels). The benefits from fair trade are not therefore undermined by this result and the success or failure of the system should be evaluated by wider criteria such as, education benefits for the individual and/or family members and personal development indicators showing evidence of savings or lifestyle improvements. The stability in income²⁵ offered to farmers

²⁵ Assuming stable output levels

throughout periods of volatility, characterised by market prices falling below the minimum guarantee that fair trade offers, introduces the foundations for development through risk reduction, which is important for risk averse individuals. The consequences of this risk reduction on the behaviour of farmers and their lifestyle is explored in more detail throughout this chapter.

The significant result relating to improved income (shown in Table 4.9 of chapter four) provides further evidence that fair trade leads to development for the individual through income improvement. The guaranteed income allows for future planning and investment to take place over the long term since income can be maintained. Thus, an increased willingness to invest in home building or to build savings becomes more likely. Supporting evidence for this is found in the qualitative responses that farmers gave to questions about their spending choices.

Results presented in section 4.6.2 of chapter 4 show 97.5% of fair trade farmers felt their income had improved in the past 5 years compared to 27.5% of conventional trade producers. Survey questions examine how the reported improvement in income benefits the fair trade households and reveals 5 main areas to which improved income contributes. Making improvements to the family home, included purchasing new furniture or funding for necessary repairs, is identified by 20% of the respondents. Further to this, 15% of fair trade farmers reported that they were using the improved income to fund the construction of a new home for themselves or a family member. Some 15% of fair trade farmers explained that they used their improved income to support their children. This support included payments towards the costs of education or purchasing food for children who no longer live at the family home but are unable to fully support themselves financially.

Income improvements facilitated fair trade producers to save (17.5%) and to diversify (10%). Diversification included the ability of farmers to develop and extend their cultivation beyond tea and, in one case, to start a secondary business working as a self-employed dressmaker.

Farmers reported that they spent the most amount of money on food with 100% of respondents citing 'spending on food' as accounting for their largest financial outgoing. Farmers were questioned about their diet and the results showed that fair trade farmers were more likely to purchase meat (85%) indicating that they had the choice to purchase more meat compared to conventional farmers (52.5%). This result is especially important since almost every farmer in the survey responded that "food" accounted for the majority of their expenditure. A similar outcome is found by both Becchetti and Constantino (2006) and Jaffee (2009) who report that farmers in Kenya and Mexico respectively as having a higher relative consumption expenditure on food and improved diet compared to those outside of the fair trade system. In Sri Lanka, the average monthly household expenditure on meat is Rs 517. However, in the Rural province, this is reduced to Rs 455 indicating that it is less common for Rural inhabitants to purchase meat (Census and Statistics, 2011a). The fact that fair trade farmers in the survey are able to purchase more meat adds support to the view that fair trade membership provides benefits beyond measurable income gains, and contributes to the fulfilment of fair trade objectives on improving producers lives in developing countries.

The findings with regard to income improvement are also interesting when considered alongside the results relating to the existence of secondary income and excess income. Accepting that fair trade producers are no more likely to undertake activities to gain

secondary incomes than the conventional trade farmers, it nevertheless appears that fair trade producers are more likely to report having excess money despite there being no statistically significant difference in tea income for the two groups. This important combination of results indicates that a placebo effect from fair trade exists and is further supported by the qualitative data where farmers outlined what they did with excess money including spending on improving their home, paying for children's educational costs or saving, all of which enhance the household's standard of living.

In regards to excess money, 45% of fair trade respondents reported that this had enabled them to save regularly. Interviews held with the fair trade producers, indicated that this was facilitated by "the savings scheme implemented by SOFA" and derived from the "better prices and income" and "pre-finance" received by producers since joining the cooperative.

With respect to secondary incomes, the responses across the two groups are similar with respect to the activities undertaken, and often included the additional income that family members (spouse, children or even extended family) brought into the household. Sources of second income included working as a labourer on neighbouring farms or factories, selling excess fruit and vegetables to the local market or working as a driver in the nearby towns and villages. A small number of fair trade farmers indicated that they, or a family member, worked for the SOFA cooperative directly as a driver, purchasing officer or producer of reed baskets which are used to package the processed tea for retail.

In interviews held with the producers they were asked "do you feel that the income of SOFA members has improved over the past five years". It was clear that all of those interviewed felt that incomes had improved although, as discussed in more detail later, they did not

feel their income was sufficient. Farmers talked openly about their ability to save and to access pre-finance through the cooperative. One producer said “better prices, better income” and another stated that “SOFA gives a better price than the local buyer or institutes”. One farmer said that “SOFA is good with fixed price, and now I can save something”. Finally, a member said “SOFA always gives the right amount, if we need money, we get donations from SOFA”.

The findings reported by fair trade farmers relating to improved income from tea and excess money, resulting in greater saving and spending, appear inconsistent with the result of ‘no difference in tea income’. However, this is not necessarily the case. One factor is that the fair trade farmers feel more secure because of the minimum guaranteed price and are therefore less risk averse than the conventional producers thus, they spend money on household improvement more readily. A further explanation (discussed in section 4.6.2) is that these differences can be attributed to fair trade farmers perceiving that their income has risen as a consequence of their participation in fair trade and hence experiencing a form of money illusion. However, whilst these two factors are important, they fail to fully account for the additional spending and saving reported by fair trade farmers as they do not adequately explain how these producers have the funds to support the spending and saving. A factor that may be important in explaining this is the relative ease that fair trade farmers can obtain loans from the SOFA cooperative, resulting in fair trade producers borrowing more relative to conventional trade farmers. The availability of loans at an interest rate of 0% is discussed later in this section.

The subsequent discussion explores the operational activity of the cooperative such as when and to whom the product is sold, and how loans are provided before moving on to

an examination of producer's relative working hours. In interviews, fair trade farmers report feeling more secure now that their income has improved with one member saying they "now sell more, before we only sold once per month". Members also report that SOFA is more honest than the local buyer who "reduces the weight and price" or "does not give money straight away and deducts amounts for various reasons". These allegations against the local buyer are repeated by a number of producers and help to explain why farmers feel their income has improved as they are now receiving the correct value for the weight of their produce and thus have more trust in the process.

The quantitative and qualitative results imply that the ability to save and the availability of pre-finance, both directly a result of the cooperative, leads members to feel their income has improved and is evidenced by their ability to identify excess money, either in the form of savings or available to them as pre-finance should they require it.

The qualitative results outlined above are in contrast to those reported by Lyon (2002) in the context of coffee. According to Lyon (2002), a key difficulty with the fair trade initiative is that because the sale of coffee takes a considerable amount of time members in La Voz often have to wait several months after the harvest for payment. This encourages producers to sell their product to buyers "on the street" leading to difficulties for both the cooperative and producers. The former is unable to fulfil contracts whilst the producers receive lower prices. Wealthy cooperatives are better able to deal with this situation by paying farmers "street prices" as they bring their coffee harvest in, followed by a bonus after the coffee is sold on. This can strengthen the producers understanding of fair trade as the higher price bonus is received in a lump sum and is thus more visible to them.

A further negative outcome noted by previous fair trade studies is that, being part of the FLO register and hence receiving certification, “does not automatically bring buyers or pre-financing” (Taylor, 2002, p3). In a synthesis of several case studies forming part of a fair trade coffee research project, Taylor concludes that cooperatives do not sell all of their products to fair trade buyers, fair trade sales are part only of a wider strategy. In interview, the SOFA President stated that the future of small-scale producers lies in the organic market as both fair trade and conventional channels discriminate in favour of this. It can be concluded that if all of the output cannot be sold through the fair trade system then producers, ideally supported by the cooperative, need to find other higher priced markets.

In addition to a potential lack of fair trade sales for FLO registered producers, Taylor also reports that some cooperatives find fair trade financing slow to arrive. Buyers are not automatically providing advance finance, as producer organisations must satisfy creditworthiness requirements and coffee quality history before loans are granted (Taylor, 2002). However, there are also positive experiences of accessing finance, with one cooperative in such a strong financial position that it is able to lend money to its members for a wide variety of production-related needs. Thus, a variety of experiences and modes of operation exist which are the result of the nature of the product, ‘rules’ within the cooperative and previous success, ensuring the cooperative is in a strong financial position to support members.

Lyon (2002) found that the La Voz Cooperative in Guatemala initially lent up to £1,300 to members with a 25% interest rate. The money was used to improve plots and to invest in child education. However, the accumulated debt from the loans was deemed a disincentive to turn in the product with members choosing instead to sell their produce to the

middlemen for quick money. Subsequently, La Voz reduced its interest rates resulting in increased membership and a larger harvest. In contrast, in the present context of Sri Lanka, members can access loans from the cooperative at 0% interest for investment in their homes or farms.

Pre-finance is the receipt of income in advance of sale, enabling farmers to manage their finances in a more controlled manner and invest in crop development and improvement. Pre-financing leads to welfare gains through a reduction in risk and anxiety, as well as helping to reduce the incentive for producers to sell part of their crop to the local buyer in order to access cash quicker. One of the most obvious differences between fair trade and conventional trade farmers found in the Gampola study was their access to pre-finance. Members of the SOFA cooperative all responded positively to the question on their ability to obtain pre-finance whilst no conventional farmers were able to do the same. As noted, above the zero interest rate reduces the incentive to approach the local buyer, unlike the experience previously reported by Lyon (2002) in Guatemala.

In the context of an interview the SOFA President, made a number of suggestions to improve the current fair trade system with particular a focus on pre-financing. One recommendation was to increase the production volume required from small producers. At the moment 51% of production from small farmers has to be fair trade. The suggestion is to raise this level to 70% and eventually to 90%. Secondly, he suggested that increasing the fair trade price to account for increases in the cost of living was not useful as the product price will become too high. Instead, he suggested that a mechanism needed to be found where the importer pre-finances their purchase at a fixed price. Paying this fixed price during the low season would help to support producers when their incomes reduce

in line with the lower output. SOFA negotiates its own price with the exporter/processor (Bio Foods Pvt) which allows for pre-financing since they are able to pay farmers in advance as recommended in the earlier discussion by Lyon (2002). The recommendations put forward by the cooperative President in Sri Lanka are already in place at SOFA and he suggests that their approach is replicated by other fair trade organisations.

None of the previous impact studies appear to report any information on the working hours of producers. This study gathered information on hours worked on tea production in order to make comparisons between the two groups, and importantly to establish whether one group reported more free time than the other to spend on leisure and other activities both on or off the farm. As shown in Table 4.14 in chapter four, conventional farmers work more hours per day on average (7 hours) than the fair trade farmers (5.3 hours). Placing this result alongside the findings for tea income, the existence of secondary income and excess money, is important. Fair trade producers are working fewer hours for an income not significantly different from conventional trade producers nor are they significantly different in terms of their likelihood to be engaged in activities earning a secondary household income. Therefore, it can be argued that fair trade farmers are gaining important free time whilst earning an income equivalent to conventional trade. Assuming that these farmers are not working on secondary income activities off the farm during their free time indicates that they have an improvement in their standard of living. The farmers may be spending this time with their family or on diversification of their crop. This latter result is plausible since only 8 conventional trade farmers reported growing crops other than tea compared to all 40 of the fair trade producers who report vanilla, pepper, cinnamon, cloves and lemongrass as growing on their farm. Although income from spices was not measured in this research, the farmers did report that they sell the crop through SOFA for additional

income. This suggest that overall, the fair trade farmers will earn more income, overall, even though tea income might be similar.

5.3 Non-Direct Monetary Impacts

This section will examine the non-monetary impacts from fair trade. Of these, the most notable gains are derived from the fewer hours worked by fair trade farmers made possible by SOFA initiatives such as the provision of new tea plants and dolomite, both of which improve productivity. Thus there are benefits extending beyond the support for the price of the commodity. Whilst the majority of SOFA initiatives found in Gampola generate benefits for the fair trade farmers, roads and water projects benefit all.

5.3.1 Awareness of Local Development

As discussed in chapter four, section 4.11.1 there was a significant difference in awareness of local development across fair trade and conventional trade producers. Whilst the levels of awareness are different, both groups acknowledged similar types of development. In their qualitative responses to the development they had noticed in the village both conventional and fair trade producers' reported more tea cultivation taking place in the village, more tea and spices being grown, more production that is organic, better education and housing, tea collection centres, improved roads, and the water project (government initiative).

As reported in chapter four, differences emerge when analysing responses as to who was responsible for the improvements in the village - whether fair trade/SOFA or the government. The majority of fair trade producers (90%) state that SOFA alone were responsible for development witnessed in the local area. The remaining 10% state that

responsibility is split between SOFA and government. Of the conventional farmers, 60% attribute the development to the government, 7.5% claim that they are personally responsible for the development that has taken place with a further 7.5% not knowing where the responsibility lies. The remaining 25% did not provide an answer as they had stated, in a previous question, that they have not observed any development in their local area over the past 5 years.

Interestingly, as in other studies (Ronchi, 2002; Taylor, 2002; Lyon, 2002; Mayoux, 2012) where fair trade awareness levels are reported as low, no SOFA members in Sri Lanka mentioned fair trade as such in their responses on development responsibility. Their perceptions focused on the Co-op organisation. Thus there is support for Ronchi's (2002) view that communication of the role of fair trade needs to be improved to producer members and non-members. Such improvements in communication may then encourage more producers to join the cooperative and also increase the likelihood of farmers remaining loyal to the cooperative when prices are above the minimum guarantee i.e. they are willing to continue to pay certification costs.

The SOFA President states that the cooperative is willing to accept any new members who wish to join provided they are majority tea producers and organic producers, or willing to become so. Notwithstanding, some members of each village remain outside the system. Many farmers are not aware of fair trade and are unsure as to why they are not in the cooperative. When asked if they would like to join the cooperative, 72.5% of conventional producers said that they did not know. This indicates that, with improved information on the associated benefits, they could be encouraged to join the scheme.

Many farmers are content to continue to produce in the way they have always done without feeling the need for change, a common feature of primary producers in developing countries. In Sri Lanka, conventional trade farmers appeared to be wary of changing to a new system, saying that it “is not good for farmers to change”, that they “cannot afford to change”, that they are “too poor and it is too hard to change”. In this survey, it is farmers over 40 who are most likely to report resistance to change. As discussed in chapter two, the fear of change and its potential consequences are considered by Nicholls and Opal (2006) to be an example of how the assumptions of free trade are not met in developing economies. It is a characteristic of these countries that producers will continue to produce despite sometimes making a loss, since unsuccessful change has serious consequences for survival. This again reinforces the importance of communicating the opportunities associated with fair trade membership such as education on organic production techniques, pre-finance to help farmers to adjust and support for crop diversification.

Non-member farmers in the survey tend to recognise only one buyer in the area and do not realise they could be selling their crop to SOFA. One producer was even concerned that if they joined their buyer would abandon them. 17.5% of conventional trade producers commented that the fair trade tea looked worse than their own and hence feared output reduction, again an argument for improved information on organic farming and the differences in price achieved for the product. Only 1 producer had never heard of the cooperative indicating that generally people are aware of it but are not clear on the actual operations and benefits membership could provide. In all, only 2 farmers were considering joining the cooperative in Sri Lanka with responses of “maybe” and “would need more information”. However, the results above do show that there is potential to expand this with better information for conventional trade farmers. There appears to be a

misconception amongst conventional trade farmers regarding the impact of fair trade which the SOFA cooperative could address in the local area by providing more accurate information to those outside of the scheme. This is especially the case given that the majority of farmers said that they sold to the conventional market via the local buyer as they had “no choice” whilst others cited “less tea”, “smaller crop yields” and rumours that farmers had received lower incomes since joining SOFA.

5.4 Household Development

The study attempt to establish the extent to which household development takes place. Quantitative results reported in chapter four do not show a significant difference in household development between the two groups. However, analysis of the qualitative results shows that, for fair trade producers, 60% provided an example of household development such as, savings, development of cultivation, house improvements and funding for children’s education. A similar percentage of conventional trade farmers reported household development with examples similar to those in the fair trade group. These results are in line with those of Ronchi (2002) who found the majority of respondents within fair trade cited examples of household development including home improvements, repayment of debt and support of children’s education.

5.4.1 Education Gains

Analysis of the fair trade literature shows that the education level of producers and their children can contribute to the long-run success of a fair trade cooperative. Raynold (2002) argues that socio-economic factors such as education levels are an important characteristic in determining whether producers actually become fair trade members and also contributes to their success i.e. education is an ‘input’ into successful outcomes. Hayes

(2008) focuses on fair trade as facilitating long-run change. Increasing product diversification and a falling demand for children to work on farms (due to higher prices) is predicated to lead to higher educational levels in the long run and greater incentive for future generations to pursue employment away from the farm. Hence, higher educational levels is also an outcome of the fair trade process.

In this study where fair trade membership extends to 11 years at most, it is found that, education level does not encourage membership as in Raynold (2002) above. This result is attributed to the older age profile of the cooperative members in Sri Lanka and hence due to the changing socio-economic conditions in Sri Lanka, most notably the improved access to education for recent generations. Arguably, older farmers, may be more likely to see the benefits of a guaranteed price, having experienced price volatility in the past. Hence they account for the majority of SOFA members.

In these circumstances, rather than focusing on the producer's education level, which is likely to have been attained prior to the start of SOFA, the educational standard of children is therefore of more interest. Hayes (2008) sees fair trade as an inter-generational model with benefits of increased prices accruing to children and future generations. As discussed in chapter four, at this point in time a significant impact on children's educational achievement does not appear to be associated with fair trade membership. However, a true test of Hayes (2008) prediction of inter-generational development cannot yet be carried out since the maximum period of engagement with fair trade is 11 years.

5.5 Issues Associated with Cooperatives

Interviews with the SOFA cooperative President, Bernard Ranaweera, provided information on how the cooperative is organised and the involvement of member farmers. The cooperative operates on the principle of “bottom-up information flow” with minuted meetings held by Branch Society members each month. These Branch Societies are comprised of all SOFA members from the local village and will include a Treasurer, Secretary and President. The minutes from Branch Society meetings go to the Annual General Meeting (AGM) which is comprised of 7 members. The AGM considers the minutes from the village meetings and makes decisions which are passed to the Board of Members (BOM) which consists of 2 members from each village society, usually the local secretary or Treasurer and President. The BOM will also approve projects suggested within the minutes of village meetings, such as funding for a leaf collection centre or the supply of cattle to specific farmers. Once the BOM approves projects, they are implemented.

A key concern which emerged from the study related to supply. Almost all member farmers identified an increase in their output due to the provision of 200 tea plants per member by SOFA. This appears to undermine the aims of fair trade to not increase supply but instead to support existing farmers in their work. According to Bernard Ranaweera, the expected production is 600,000 units of green leaf tea annually for 2010 and beyond. An agreement has been made between SOFA and Bio Foods Pvt to buy all of their production and this exporter has a sourcing plan in place to find buyers for any excess production by SOFA. Therefore, a conclusion can be drawn that the increased supply is, in this specific case, not a problem. However, problems will arise if the agreement with Bio Foods Pvt is not maintained or if buyers cannot be found for any excess. Furthermore, the increasing supply, whilst arguably sustainable in this example and possibly attributed to low output levels

prior to fair trade participation, is against the principle of fair trade and, if replicated globally, would cause supply to increase without a guaranteed demand.

Despite the guaranteed fair trade price for tea from Sri Lanka of \$2.40/kg (Fairtrade Foundation, 2014), studies have shown the true price received by farmers is, in some cases, lower than the guaranteed price (Bacon, 2005; Utting-Chamorro, 2005) thus lowering incomes below what might be achieved. The findings of differing income impacts on producer groups are attributable to several factors, although a recurring theme is debt repayment. Often producers have borrowed money from the cooperative and repayments are withdrawn from their sales including interest. Alternatively, the cooperative as a whole may have borrowed money and part of the sales revenue is used to repay loans and interest.

Studies which are predominantly positive about the fair trade system still refer to the issue of prevailing poverty (VanderHoff, 2002). In the case of UCIRI in Oaxaca, Mexico, producers have found the fair trade premium being used to subsidise the coffee sold on traditional markets, as income received from coffee has fallen. Moreover, whilst in some contexts incomes have increased through sales to the fair trade market, VanderHoff (2002) notes that this is not sufficient to secure an adequate standard of living for producers and their families and hence they may need to acquire income from other sources.

In study of a cooperative in Nicaragua, for example, the lower price received by one group of farmers (between \$0.40 and \$0.85/lb of coffee) is the result of debts held by the cooperative and larger producer organisations which were incurred when a former producer organisation was declared bankrupt in 1985. (Utting-Chamorro, 2005).

In his study of Northern Nicaragua, Bacon finds several of the cooperatives also allocate a portion of the fair trade price to repay debts, as well as to invest in infrastructure and cover administrative costs. In two cases, he finds debt repayments accounting for as much as 50% of the fair trade premium. Clearly, this results in lower coffee prices paid to producers. Furthermore, because not all coffee beans are sold to the fair trade market, the average price received by the farmer “may be significantly less than prices paid in the different alternative markets” (Bacon, 2005, p505). Thus, while the fair trade cooperatives received US\$1.09/lb for the portion of coffee sold directly to the roaster, the average price paid to farmers for all coffee was US\$0.56/lb. This price is higher when compared with the US\$0.40/lb paid by the conventional trade only cooperatives Bacon examined. Bacon states that many of the average farm gate prices are below the cost of production which is between US\$0.49 and 0.79/lb. This problem is further exacerbated by the stage payment scheme used by some cooperatives which involves initial credit payments for harvest, payment upon receipt of the beans at the processing facility and a final payment once the product is exported and final prices calculated. Farmers wait an average of 73 days before receiving full payment for their organic coffee (Bacon, 2005).

Additional issues with the principal features of fair trade include the allocation of the premium. Although this feature of fair trade is generally cited as being one of the main benefits of the system, studies in Nicaragua revealed that few of the producers “reported any improvements in their community, and those who could were unable to identify fair trade as the source” (Utting-Chamorro, 2005: 594). In other cases, the premium was found to be insignificant as it was divided amongst all fair trade producers. There are several ways to explain the lack of evidence of the premium contributing to community development. The first of these is that communication needs to be improved so producers are given

information on how the premium has been spent. Secondly, some of the gains are not material, and are thus not easy to see, for example, reduced migration to the city and increased stability. Finally, the infancy of the fair trade projects in some regions means that many producers are still not aware the premium should be spent on improvements in the community. Although this message is getting through to those who attend training courses, it has not yet spread to the wider community.

During the Sri Lanka study, farmers were asked what was important about fair trade and the responses were predominantly focused on the role and support of SOFA. Farmers made reference to the additional tea plants provided and the “cultivation knowledge”, including the preparation of compost, and free agricultural equipment. Importantly, these benefits which were repeatedly raised by SOFA members are consistent with the increased productivity of fair trade participants as indicated by the fact that fewer working hours are reported by fair trade farmers. Farmers reported that previously abandoned farm land in their areas is now being used by cooperative members to produce tea (and spices) following advice and support from SOFA.

In addition to the direct support of farming and production, the members also identified the assembly hall in the village of Samarakooheena as being very useful for community and cooperative meetings. Furthermore, several farmers highlighted the benefits of educational scholarships for children.

The majority of fair trade farmers identified the higher price received for their tea produce as the most important part of fair trade involvement as well as the fact that the price is fixed. The response, on higher prices, was also reported regularly in reply to the question

“what is the difference between fair trade and conventional trade”. Farmers also identified being able to sell their output regularly, since prior to SOFA they only sold once per month to the local buyer. Fair trade farmers were very positive about the stability of the price and also the honesty of the cooperative. A number of farmers reported that not only had the local buyer reduced the weight of their tea output in order to pay them less, but had also delayed the payment time. One member reported that previously they got “25% of the price and now [they] receive 100% of the price”. SOFA pays all farmers the same percentage when they take their tea and the remainder is paid at the end of the month by the President. This is seen as being fair to all members as compared to the local buyer who treated each farmer differently.

With regard to the importance of fair trade, farmers also reported issues not directly associated with the price received such as the leaf collection centre in Gurukele village easing the difficulty of transportation. The additional support from fair trade/SOFA membership was also raised, with producers saying that the “local buyer only gives money, nothing more”. Farmers saw the additional tea plants, advice, compost and agricultural equipment that SOFA membership provides as being a key difference between the two markets.

Farmers were asked specifically what services the cooperative offered and “improved knowledge”, “better quality” “finance and admin support” as well as “agricultural equipment” were identified as some of the key services and advantages of cooperative membership. All of the fair trade farmers in the survey said that cooperative membership had no disadvantages.

It is clear that the cooperative members feel satisfied with the support they are receiving and identify both price stability and additional non-monetary benefits in their qualitative survey responses. These responses provide some insight into the benefits identified in the statistical analysis, with emphasis on non-monetary gains in the form of advice, additional tea crops and farming equipment, arguably resulting in greater yields and hence fewer working hours compared to conventional trade farmers. This result shows that the benefits of fair trade extend beyond price support with wider gains to farmers, including more time away from tea cultivation to focus on other activities.

The farmers in the survey were asked if there was any additional information they would like to add. In Samarakoohena only, farmers said that they would like better access to water as they knew other areas had this. Across the other regions surveyed, several farmers asked for additional tea plants and higher prices or general help to improve their home or farm including fencing, house refurbishments or cattle. None of the conventional trade farmers added any additional comments at the end of the discussion.

5.6 Summary of Findings and Policy Implications

The results of this thesis show that fair trade membership in the Gampola region of Sri Lanka has led to some measurable gains for producer members including reduced working hours arguably due to increased productivity. The fair trade model has led to income protection and uncertainty reduction and social capital effects such as support for access to education and household development. This section summarises the research findings and identifies focus areas for fair trade as a whole and for the SOFA cooperative.

5.6.1 Income Protection and Uncertainty Reduction

Fair trade offers farmers a guaranteed floor price for their produce should the world price fall below the specified threshold for each product. This income protection has not been in force during the research presented in the thesis since world prices have been maintained above the lower limit. However, there are arguably psychological gains for producers arising from the knowledge that their income is guaranteed at a lower limit. Furthermore, SOFA pays producers in a regular and predictable manner which facilitates better planning of expenditure. The combination of these points can lead to farmers feeling more positive about their income and future and may explain the statistically significant result relating to excess money discussed in sections 4.9 and 5.2. Given that farmers know that their income is received regularly and will not fall below a certain level, they may see additional earnings as being 'excess' as they can afford to use it for non-essential items in the knowledge they will continue to maintain a sufficient income in the long term. This positivity about the future is not replicated amongst the conventional trade farmers, possibly because they see all income as being required at some point to cover essentials, should the world price fall, and thus nothing is 'excess'.

If farmers feel more positive about their future and identify themselves as having excess income then their consumption behaviour will be different to those who maintain anxiety over future price falls. The fair trade farmers spend more on household investment and enjoy a superior diet to the conventional trade farmers. This results in positive spillover effects to the local community through higher spending and demand creation. In addition, the fair trade farmers may enjoy a higher standard of living through improved health and household quality derived from their improved diet and household investment.

5.6.2 Welfare Benefits

Further policy implications are associated with the improved productivity that fair trade farmers appear to show in this study. This improved productivity is in contrast to the argument of Mann (2008), presented in chapter two, that “the price premium paid by consumers is probably paid not only for better social conditions, but also for lower production efficiency” (Mann, 2008, p2041). These productivity gains, evidenced by the fewer hours fair trade farmers report spending on tea production compared to conventional trade farmers, are attributable to the additional support the SOFA cooperative provides. Putting this feature of fair trade participation alongside the guaranteed minimum price, improved diet and excess money reported in the survey it is clear that the fair trade producer’s standards of living are higher relative to the conventional trade producers. The fewer working hours allows the farmers more time to spend on alternative work such as growing additional crops or spices or on leisure time.

5.7 Focus Areas for SOFA and Fair Trade to Consider

This research identifies a number of issues that the fair trade system as a whole, and SOFA individually, could address as part of their long term strategies. Areas of focus for fair trade can be found in the successes identified at the SOFA cooperative such as the links with Bio Foods Pvt to ensure 100% of output is sold on the fair trade market, the savings initiative and availability of pre-finance at 0%. For SOFA, the age profile of members, issues associated with increasing the supply of tea and improved information to conventional producers in the region are identified as areas for further consideration in the development of strategies.

5.7.1 Focus Areas for SOFA

The specific areas of focus for SOFA are presented in this section. Overall, the study finds that the SOFA cooperative is doing well on the four critical factors, outlined in chapter one, which can deepen the contribution fair trade makes to rural development in agrarian communities (Fairtrade, 2013). These four areas are as follows:

- Evidence of the existence of information and knowledge among farmers on the fair trade system and the fact their cooperative is fair trade certified.
- Transparent and non-hierarchical organisational structure exists in the producer organisation.
- Good motivation and leadership of the fair trade organisation is evident.
- A significant share of sales into the fair trade market (Fairtrade, 2013).

Further improvements can be made with regard to the awareness farmers fair trade producers have on certification and affiliation of SOFA to fair trade as this is the one area where SOFA does not report good outcomes in the study.

1. Age of Cooperative Members

The age profile of fair trade farmers, discussed previously, shows that fair trade farmers have a higher mean age than conventional trade farmers. The ageing profile of fair trade producers requires a strategic review of fair trade objectives within Sri Lanka. On the one hand, future generations may seek work off the land indicating an improvement in their socio-economic position. This could lead to a natural decline in the demand for fair trade as people become less reliant on low income rural employment. Alternatively, if fair trade wishes to continue to operate in Sri Lanka, perhaps to ensure a sufficient supply of food to

the domestic market, it should focus on encouraging the younger generation to not only take up farming but to join the fair trade system. There is also potential here for the conventional trade farmers who appeared, from their qualitative responses, to have limited understanding of potential gains from fair trade, to be better informed and thus more likely to join the system.

2. Increased Supply

The second important issue coming out of the Sri Lanka study is the potential for increased supply to undermine the system. The objective of fair trade is not to increase supply but to support marginalised farmers to earn a sufficient income. However, in Sri Lanka, it was apparent that the farmers were being provided with additional tea plants and some farmers had moved into farming from alternative employment having joined the cooperative. The supply of 200 tea plants to each member was explained as “replacing old crop” by the SOFA President. However, it was clear from the interviews that the SOFA members were hoping to receive more tea plants from SOFA. Clearly, this is how they see their income improving if they stay in tea production as there are no economies of scale if production remains at a small scale. The SOFA President, in discussions, appeared to support these requests.

Expanding supply within the current operations at SOFA would be an effective way of increasing members’ income, since the agreement with Bio Foods Pvt to purchase 100% of output means that the product will be bought. However, this strategy is dependent on Bio Food Pvt continuing to honour the agreement and buy all of the output, even with an increase in supply. Given this risk, it may be more effective for SOFA to maintain the current output from members and increase supply to Bio Foods by encouraging conventional trade

farmers to join the cooperative. This would serve two purposes, to expand the gains from fair trade to a greater number of farmers, and to limit any negative impact from the ageing profile of the current members. To achieve this objective, SOFA could also provide support and guidance to farmers who are concerned that making the change to fair trade is too difficult. Furthermore, SOFA needs to improve the information provided to conventional farmers in the region and address misconceptions over the quality of output and associated income. Developing a strategy to explain the available support for change and the benefits derived from membership, such as access to pre-finance, replacement tea plants and farming equipment, may help to address some of the reasons for not wanting to join the scheme.

5.7.2 Focus Areas for Fair Trade: Lessons from SOFA

Fair trade is a form of 'agricultural support' but with an ethical dimension to generate wider benefits too. There are a number of lessons that fair trade could take from the SOFA cooperative to assist in attaining these wider benefits, such as organisation, use of pre-finance, allocation of the premium and the agreement in place with Bio Foods.

1. Organisation of the Cooperative

The first observation from the impact study undertaken in Sri Lanka is that the cooperative is very well organised and managed and the President demonstrated a genuine commitment to the principles of fair trade and poverty reduction in the region. His honesty and enthusiasm are reflected in the way that producers commended the differences in SOFA as compared to the local buyer. The requirements of fair trade to hold meetings and develop the knowledge of producer members was clearly evident in Sri Lanka. Ensuring that fair trade cooperatives have effective management is an important consideration for

fair trade when accrediting new cooperatives since this enables better outcomes for producers. By following the principles of fair trade such as having a democratic decision making process, support and advice on production techniques and allocation of the premium to community projects, the cooperative can maximise the benefits to its members.

2. Use of Pre-finance and relationship with Bio Foods Pvt

As identified in other impact studies (Lyon, 2002; VanderHoff, 2002; and Murray *et al.* 2003) the credit program offered by SOFA has supported farmers to invest in their farms allowing them to smooth their income flows over the year. Most notably, the SOFA cooperative provides loans to members at an interest rate of 0% which is the lowest rate reported in any of the impact studies. Investigating how SOFA is able to do this and replicating it in other areas would lead to benefits, since Lyon (2002) reports that lower interest rates on loans decreases the likelihood of fair trade farmers switching to the local buyer in order to avoid repayment.

The agreement established with Bio Foods Pvt and SOFA meaning that all of the tea produced is sold through the fair trade system results in maximum premium income for the output. This 100% sale of output through the fair trade system is a notable achievement in itself especially when considered against the fact Fairtrade (2013) reports tea producers, on average, sell only 10% of their total output through the system.

3. Saving Scheme

It was clear from the results that fair trade farmers were more likely to report excess money. As already noted, SOFA has set up a savings account for its members within a

government bank account and farmers can choose to deposit 10 rupees from every kilo of tea sold resulting in 17 members reporting that they are building up their savings. Opportunities for savings to be deposited within specific bank accounts have been identified in Mexico (Vanderhoff, 2002) but these funds were open to the cooperative for added capital. However, in other impact studies, savings schemes have not typically been reported. Fair trade should consider a requirement for cooperatives to support savings following a similar model to SOFA.

4. Productivity Improvements

The SOFA cooperative provides members with 200 tea plants when they first join the scheme as a replacement for any lost or damaged crops on their farm. In addition, SOFA provides dolomite, other crops such as pepper and lemongrass, agricultural equipment and information on the best production techniques. All of these support systems help to ensure that tea productivity (and productivity on the farm generally) increases on fair trade farms. The most notable impact observed in the study was the lower number of hours fair trade farmers spent cultivating tea on their farms. This free time is then spent as the farmer chooses on leisure, off-farm work or tending to diversified crops provided by SOFA, earning them extra money as such crops can also be sold through the cooperative fair trade links.

Replication of the kind of support that SOFA provides would enable other fair trade farmers to increase productivity. In some cases, although not relevant to Sri Lanka, this may allow children to attend school rather than requiring them to work on the farm. Alternatively, it may lead to farmers diversifying their crop base and hence lead to a reduction in the reliance on agricultural support.

5.8 Summary of Findings

In light of all the evidence presented in the thesis, the main findings are listed with the subsequent discussion offering further explanation:

1. No significant difference in tea income between the two groups
2. Fair trade producers work fewer hours in tea production
3. Fair trade producers are more likely to report an improved income
4. Fair trade producers are more likely to report excess income, better spending on food and savings
5. No difference in reporting of secondary activities and types off the farm
6. Fair trade farmers are more diversified

The non-significant result relating to tea incomes is expected given that the price support mechanism was not required during the period under study. However, reconciliation of this point with some other findings such as, the perception of an improved income, better spending and greater saving reported by fair trade farmers is required. A placebo affect from fair trade participation may be one factor but is not sufficient in explaining the reported differences between fair and conventional trade farmers.

One contributing factor is that the regular, stable payment SOFA ensures members receive, partly through pre-financing, leads to the farmers feeling that their income has improved. This could be a consequence of the farmers not receiving a regular income prior to joining fair trade or volatility in the amount of income leading to underestimations of the actual value. Importantly though, the farmers report that they are able to save more and spend more on better food, hence this is a clear indicator that they do actually have more income.

This greater income may be earned from other crops or other types of employment off the land. The study does not gather information on the actual size of producer's second income but indirect evidence indicates that fair trade farmers have more time to devote to secondary activities. Hence, it is highly likely that income from such sources will be greater. Furthermore, the fair trade farmers may take out loans from SOFA to fund their spending especially as these are available with zero interest.

The fact that price support has not actually operated in the period under study allows for a focus on price support as a safety net, generating more security and a focus on other aspects of fair trade which contribute to the well-being of fair trade farmers and the wider community. Therefore, although it could be argued that the similarity in price received by both types of farmers is a drawback to the study, it does allow other characteristics of the fair trade system to be more evident such as better payment arrangements, agricultural advice and support and security in the knowledge of an existing floor price.

5.9 Summary

In this chapter, an attempt has been made to present analysis, comparison and policy implications of the empirical results of this thesis. It broadens the discussion of the empirical results in chapter four by incorporating evidence gained from the qualitative responses in the questionnaire and interviews with the President of SOFA. The findings have been placed within the context of previous impact studies and comparisons are drawn.

It appears that the main benefit of fair trade membership is represented by the associated reduction in working hours leading to a number of benefits extending beyond simply price

control. The fair trade initiative supports farmers through training and education on crop management, supply of tea plants and fertiliser to improve productivity and hence reduce the time required to cultivate tea crops. This benefit could result in farmers having more time to pursue leisure activities or diversify their crops including for subsistence purposes. For the cooperative, effective management is integral to its success since it leads to the engagement and support of producers facilitating the realisation of gains achievable through fair trade participation. Finally, the chapter summarised the findings and policy suggestions for the overall fair trade system as well as for the SOFA cooperative.

Chapter Six

Conclusion

6.1 Introduction

In the context of a growing market for fair trade sales and increasing numbers of producers joining fair trade cooperatives, this thesis has examined the importance of fair trade using an impact study performed in the Central Province of Sri Lanka. The purpose of the study is to inform fair trade producers and cooperatives, as well as the wider fair trade system, of the impacts of fair trade to identify benefits from participation, good practice and weaknesses in order to develop policy for the key stakeholders. The study analyses the data from surveys and interviews undertaken in July 2009 with 40 fair trade and 40 conventional trade tea producers across 7 villages to investigate any measurable impacts on factors such as income, household development, familial interactions and education using both quantitative and qualitative research methods.

During the period of study, price support has not actually been required as the market price has exceeded the guaranteed minimum. The consequence of this is that the farmers in the survey have not reported a significant difference in their incomes from tea. However, this has allowed the analysis to focus on other aspects of fair trade which contribute to the well-being of fair trade farmers and the wider community, such as better payment arrangements, agricultural advice and the support and security arising from the knowledge of an existing floor price.

The specific research questions addressed in the research are as follows:

1. Does fair trade participation result in any direct monetary gains for tea producers when compared to conventional trade tea farmers?

2. Does fair trade participation result in any non-monetary gains for tea producers when compared to conventional trade tea farmers?
3. Are there any positive effects for conventional trade farmers from producing in a region where fair trade takes place?
4. How does SOFA perform against the four criteria that Fairtrade (2013) considers to be critical to deepen the contribution of fair trade to rural development in agrarian communities? Specifically:
 - “The level of information and knowledge among farmers and workers about the fact that their organisation is Fairtrade certified, and how Fairtrade works;
 - The quality of organisational structures in the producer organisation, particularly where these contribute to transparent and non-hierarchical ways of communicating and working;
 - The motivation of the leadership and management of Fairtrade certified producer organisations;
 - The share of sales into the Fairtrade market. A significant share of sales ensures that the organisation has the means to earn Fairtrade premium income, which can be used for investments in development projects” (Fairtrade, 2013).

To address these questions, an initial review of existing literature is undertaken in chapter two. This literary review indicates that although fair trade is not the subject of a significant degree of economic research, there have been notable contributions (Dragusanu *et al*, 2014; Hayes, 2005, 2006, 2008; LeClair, 2002). Hayes and LeClair debate the welfare benefits and conclude that the outcome is dependent on the definition of ‘subsidy’ applied within in the model. A number of studies (Murray and Reynolds, 2000; Vanderhoff, 2002; Renard, 2003; Lewis, 2005; Le Velly, 2007; Hayes, 2008; Dolan, 2009; Elliott, 2012) consider

the long-run suitability of the fair trade model. The review of existing literature reveals several challenges to the long-run viability of fair trade such as the consequences of increased supply, diversification of product and labour, the mainstreaming of fair trade products, satisfying quality standards and poverty alleviation.

An evaluation of existing impact studies is contained within chapter two to provide an overview of global impact studies. This highlights how some of the issues identified in the literature review are reflected in the actual experiences of producers. These impact studies seek to establish the overall impact of fair trade, rather than just monetary benefits, and have been carried out by a number of organisations and academics. The purpose of these studies is to increase understanding of the role that fair trade plays in supporting small producers.

The review of impact studies finds that common themes can be identified despite the findings being very specific to the individual context. Positive findings relate to uncertainty reduction from the floor price, the impact of the premium on local development and gains for the organisational capacity of farmers through working within a cooperative. Areas of concerns which are highlighted concern the existence of continuing inequalities, levels of fair trade awareness within certified producer groups, farm-gate prices and financing. As well as adding important detail to the literary review, the previous impact studies have also informed the methodological approach adopted in this study.

The present study uses statistical analysis of data drawn from questionnaires to measure the relationship between producers and fair trade participation. The impact of fair trade is further explored using qualitative responses to the questionnaire and interviews with

cooperative members and key management personnel. This concurrent mixed methods approach can lead to a better understanding of the research issues and importantly allows for benefits which cannot be monetarised to be included in the analysis. The qualitative responses add important insights into the experiences of producers and their behaviour to contextualise the statistical analysis and improve understanding of the results. Understanding the factors affecting the decision of a producer to join the cooperative can be explored in more detail by examining the reasons given for choosing to join the cooperative or to remain outside. Furthermore, the detail on specific examples of household development, consumption behaviour and activities generating secondary income can be analysed to add depth to the statistical results obtained.

Within the discussion of results, an attempt is made to draw comparisons with previous studies on fair trade impact resulting in the identification of appropriate policy implications.

The main findings of the thesis are summarised as follows:

1. No significant difference in tea income between the two groups
2. Fair trade producers work fewer hours in tea production
3. Fair trade producers are more likely to report an improved income
4. Fair trade producers are more likely to report excess income, better spending on food and savings
5. No difference in reporting of secondary activities and types off the farm
6. Fair trade farmers are more diversified

The non-significant result relating to tea incomes is expected since the price support mechanism was not in operation during the period under study. The study concludes that the regular, stable payments that SOFA makes to members, partly through pre-financing,

leads to the farmers to feel that their income has improved compared to their experience prior to joining fair trade. Arguably, it may be that previous income may be underestimated, due to the uncertainty and irregular payments farmers reported receiving from the local buyer. Nevertheless, well-being is improved through more stable and predictable income.

In terms of improved income, evidence for this is seen in the increased saving and investment in household development of fair trade farmers. The study concludes that this income is earned from the cultivation of other crops or other types of employment off the land. This is facilitated by the fewer working hours that fair trade farmers spend on tea production thus freeing up time for crop diversification and secondary income generating activities. Finally, it is concluded that fair trade farmers may take out loans from SOFA to fund their spending especially as these are available with zero interest.

Recommended focus areas are identified for consideration by general policymakers, the SOFA cooperative and fair trade in a wider context. With respect to policymakers, the study recommends the following:

- A greater emphasis on the benefits arising from fair trade relating to income protection and uncertainty reduction even during times when commodity prices are above the minimum guaranteed price.
- Greater emphasis on the welfare benefits arising from fair trade such as productivity improvements, availability of excess money and improved diet.

Enhancing awareness of these issues will help to increase the likelihood of existing fair trade producers being loyal during times of high commodity prices as awareness of benefits

beyond the guaranteed income are communicated to them. Furthermore, raising awareness amongst conventional trade producers of the broad benefits arising from fair trade may help to encourage them to become part of the scheme and join the local cooperative.

For the SOFA cooperative, the study suggest focus on the following areas:

- Age profile of the cooperative members. For the long run sustainability of the cooperative, a strategy is required to encourage younger generations to join the scheme, so as to increase the membership and to mitigate against the consequences of an ageing member profile. This includes increasing the awareness of conventional trade farmers on the advantages of cooperative membership and addressing misconceptions that exist within this producer group e.g. that the output from fair trade farmers appears to be of lower quality.
- Increased supply. For long term success, the cooperative needs to ensure that the planned increase in supply can be absorbed by the buyer and/or seek additional buyers for any excess produce.

The study identifies four important aspects of the SOFA cooperative that may enhance the success of other fair trade schemes and should be taken into consideration by the broader fair trade organisation. These include the following:

- Organisation of the cooperative. This study finds that the management of the cooperative is critical to its success since better leadership results in effective support for fair trade producers and appropriate management of payments and premium allocation.

- Use of pre-finance and relationship with Bio Food Pvt. The relationship established with the buyer has resulted in 100% of output from fair trade producers being sold to via the fair trade system. This contrasts favourably with the global average output tea producers sell through fair trade channels, reported by Fairtrade (2013) to be only 10%. Further, the pre-finance and availability of loans at zero interest results in reported benefits such as reduced uncertainty and better expenditure planning.
- Savings scheme. The fair trade producers in this study are more likely to report excess money and savings. It is concluded that this is in part a consequence of the savings scheme that SOFA has initiated to allow members to save a percentage of their income from fair trade sales.
- Productivity improvements. Fair trade producers report working fewer hours than conventional trade producers. The study finds that this can be attributed to the support for productivity improvements such as the provision of dolomite, advice on agricultural techniques and the supply of additional tea plants to members.

Effectively addressing the reported concerns and implementation of the policy recommendations requires collaboration between local cooperatives and the overall fair trade organisation. For the SOFA cooperative, the ageing profile of members poses a threat to the long-run viability of the cooperative and hence encouraging younger members to join is recommended. Achieving this requires improved information flows to the wider community, most notably conventional trade farmers, on the benefits of joining fair trade. The most effective way to achieve this is through the fair trade organisation providing funding and support to the local cooperative to pursue a local awareness campaign. It is important that the information flows from the SOFA cooperative rather than from a 'top

down' approach as their understanding of local needs is likely to be greater leading to a more effective campaign.

Further to the funding of schemes to raise awareness of fair trade and encourage membership, there are examples of good practice observed within this study that the wider fair trade organisation could invest in replicating in order to ensure that the benefits observed in Sri Lanka are extended to the wider system. This includes investment in the management and organisation of cooperatives through training for the key management personnel, support and guidance for cooperatives to establish savings schemes for their members and investment in productivity improvements via provision of fertiliser and training producers in the most efficient methods of producing their product. Investment in each of these areas will assist other cooperatives in achieving the positive outcomes observed at the SOFA cooperative. As per the improved communication, achieving these outcomes requires a collaborative approach between the cooperative and fair trade organisation. Firstly, the fair trade organisation can facilitate funding for these recommendations and secondly provide support and training to the local cooperative to effectively implement and run the training or savings facility at a local level.

Finally, it is important that the fair trade organisation continues to invest in impact studies to ensure that the experiences of producers and cooperatives are subject to continuous monitoring and improvement.

These policies and actions must be viewed within the constraints facing all stakeholders including culture, timing and funding. For example, the methods used to, for example, improve communication of fair trade benefits and raise awareness amongst conventional trade farmers effective in one country may not be as effective in another. Therefore, any approach that is adopted needs to be adapted to country specific requirements and take account of differing investment capabilities.

With regard to addressing the specific research questions:

1. *Does fair trade participation result in any direct monetary gains for tea producers when compared to conventional trade tea farmers?*

It is found that fair trade participation does result in direct monetary benefits for tea producers as compared to conventional trade tea producers. These monetary gains include access to pre-finance at zero interest rates, an increased likelihood of reporting both excess money and improved incomes.

2. *Does fair trade participation result in any non-monetary gains for tea producers when compared to conventional trade tea farmers?*

It is found that fair trade tea producers work fewer hours, have a better diet and a more diversified crop than conventional trade producers. Therefore, there is evidence of non-monetary gains from fair trade involvement.

3. Are there any positive effects for conventional trade farmers from producing in a region where fair trade takes place?

None of the conventional trade farmers in this study attributed the local development that they had observed to fair trade or the SOFA cooperative. The majority of stated that the government were responsible. The responses from the conventional trade producers indicate that they do not recognise any positive effects from producing in a region where fair trade exists. However, consideration of the qualitative responses with respect to any local development observed over the past 5 years (such as increased tea cultivation and improved roads and housing) highlights a need for the conventional farmers to be better informed since these improvements can be attributed to fair trade and hence the SOFA cooperative. Furthermore, the communal buildings, provided through the fair trade premium, are available for conventional trade producers to use for weddings and meetings and not exclusively for SOFA members. Hence, there are benefits derived to conventional trade producers operating in the region.

4. How does SOFA perform against the four criteria that Fairtrade (2013) consider critical to deepen the contribution of fair trade to rural development in agrarian communities.

The research finds that SOFA performs very well against three of the four criteria including organisational structure, leadership and motivation, and the sale of produce to the fair trade market. Indeed, as previously stated, 100% of the output from fair trade producers is sold, via Bio Foods Pvt. through fair trade channels. However, there is scope for improving the awareness of producers with regard to fair trade and the fact that the SOFA cooperative is fair trade certified.

6.2 Contribution to the Existing Literature

The thesis has contributed to the existing literature on whether and how fair trade is able to improve the well-being of small producers.

The focus of a fair trade impact study on the Central Province of Sri Lanka is the first study within this region resulting in the analysis of original data and hence the reporting of unique results. Furthermore, the focus on tea rather than the more widely researched produce of coffee and bananas is a valuable extension to the analysis of fair trade impacts. Furthermore, the comparisons made with existing literature in these areas reveals similarities in fair trade producer experiences, regardless of product type, such as the importance of communication to the success and long term viability of the cooperative and fair trade system.

The collection of primary data has permitted a broader study than is the case in previous impact studies as the data captures a breadth of indicators within a single study such as working hours on tea, household development and secondary income activities along with the more widely researched income impacts.

The impact on fair and conventional trade producers is evaluated along with the role of the cooperative leading to new insights into the importance of cooperative management, working hours, productivity improvement, effective savings schemes and pre-finance arrangements. The mixed method approach used to evaluate the intervention has demonstrated the importance of qualitative analysis. The statistical analysis shows the significance of each variable whilst the qualitative impact shows that factors such as household development and secondary income activities should not be underestimated or

omitted from the study as they provide important insights into the experience of the producers.

6.3 Limitations of the Study

Whilst the study makes a contribution to the body of evidence on the impacts of fair trade there are nevertheless some limitations in the study. The most notable limitation relates to the cross-sectional nature of the data potentially leading to causality problems and Neyman Bias. The convenience of a cross section study in terms of time and cost factors is balanced with the ability to establish causality as the distinct variables are measured at the same point in time. In the current context, the data are able to show that the variables are related somehow but cannot positively determine the direction of causality. The study attempts to address the issues identified by asking about some factors, such as income improvement, household development and local development, over the last 5 years.

Neyman Bias, arising in data gathered through interview or questionnaire is mitigated against in the study as far as possible. However, even with a completely objective questionnaire respondents cannot answer questions relating to past events with perfect accuracy and tend to magnify or minimise certain variables, thus affecting the results.

The study is also limited due to the time and financial support available for undertaking the impact study. Therefore the study has, to some extent, a small sample size of 40 fair trade and 40 conventional trade producers. Although this compares favourably with some studies (Jafee, 2009; Ronchi 2002) it is smaller than others (Dragusanu and Nunn, Ruben and Fort, 2012; 2014; Beuchelt and Zeller, 2011; Mendez, *et al*, 2010; Bacon, 2005). A larger

sample size increases the confidence in the reported results and would enhance the validity of the findings.

6.4 Further Research

The scope for future extensions to the study include a follow-up of the original 80 farmers in order to gather data to see if changes occur, using this 'panel' approach. Also, economic circumstances may have changed such as the difference in tea prices between the two groups. Furthermore, the differences between the two groups may be greater for factors such as household development and education given the additional time fair trade farmers have been receiving support from SOFA.

Further to this, a wider study could be undertaken to compare the Gampola region to two other tea producing regions in Sri Lanka. The approach to this study will be to group the 80 farmers used in this study into a single group representing an area where fair trade exists. The responses from these farmers will be compared with those from two independent groups of tea producers from regions in Sri Lanka where fair trade production does not take place. The intention of this research is to evaluate whether operating in a region where fair trade is taking place has any measurable impact on the farmers using variables such as household development, income and education.

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Appendix

Appendix 1 Questionnaire for Fair Trade Affiliated Producers/landowners

Standard of living for the producers and their families

Personal details

Name..... (This will be removed for reporting results)

Sex.....

Age.....

Affiliation of the producer:

Cooperative

No- affiliation

Company produce is sold to:

.....

Type of (tea) produced:

Organic

Conventional

Social indicators and indicators of regional development

1. Are you married?

Yes

No

2. How many children do you have?

.....

3. What is the highest education level you have?

Primary

Secondary

University

Not finished education

No education

Other

7. How long have you lived in this village?

More than 20 years

Less than 20 years

Less than 10 years

Less than 5 years

Born here

a. If you were not born here, where did your family live before coming here?

.....

b. How far away is this? (miles)

.....

8. Do you have access to a doctor/medical facility?

Yes

No

a. How far away is the doctor/medical facility?

.....

b. What do you do in medical emergencies?

.....

9. What type of food products do you cultivate? (List the three most important)

.....

.....

.....

10. What type of food do you purchase in the local store? (List the three most important)

.....

.....

.....

11. What are the most important foods for your family's consumption? (List the three most important)

.....
.....
.....

12. What are the changes you have noticed in this village over the last five years? (List the three most important)

.....
.....
.....

a. What has caused these changes and/or what do you think is responsible for these changes?

.....
.....
.....

Economic Indicators

13. What is your view of how the price of (tea) has changed in the last five years?

- | | | |
|-------------------|-----------------------|-------------------|
| Unchanged | Gone down | |
| Gone up 0% – 5% | Gone up 5% – 10% | Gone up 10% – 15% |
| Gone up 15% – 20% | Gone up more than 20% | |

14. What is your annual income from tea cultivation? (specify currency)

.....

a. How many acres/hectares do you cultivate? (specify hectares or acres)

.....

b. For the acres/hectares, how much crop do you get? (please specify unit)

.....

15. Where do you sell your main product?

a. Local market Yes No

What percentage do you sell to the local market?

0% – 5% 5% – 10% 10% – 15%
15% – 20% More than 20%

b. Conventional/Other market Yes No

What percentage do you sell to the conventional/other market?

0% – 5% 5% – 10% 10% – 15%
15% – 20% More than 20%

c. Cooperative Yes No

What percentage do you sell to the cooperative?

0% – 5% 5% – 10% 10% – 15%
15% – 20% More than 20%

16. Why do you prefer to sell the majority of your product in the market you have indicated?

.....
.....
.....

17. Is your income from your main product, sufficient to support your family?

Yes No

a. Do you think your income has improved over the last five years?

Yes No

b. If yes: How has this affected you? (List the three most important ways)

.....
.....

c. What other type of activity do you do to improve this income? (List the three most important)

.....

18. What do you spend the most money on? (List the three most important things)

.....
.....
.....

19. In your family, who makes the important decisions about what to spend the money on?

- | | |
|----------|-------------------|
| You | Your husband/wife |
| Together | Other |

20. What do you do with money not spent on housing, food and clothes?

.....
.....
.....

Production of (tea)

21. How many hours do you spend cultivating (tea)? (approximately per day)

a. During the crop season?

- | | |
|-------------------|-------|
| More than 8 hours | other |
|-------------------|-------|

b. At normal times (during production)

- | | |
|-------------------|-------|
| Less than 8 hours | other |
|-------------------|-------|

22. Who in your family participates in the production of (tea)?

- | | |
|----------|-------|
| Everyone | other |
|----------|-------|

a. If others in your family do not participate in (tea) production, what do they do?

.....
.....

23. Do you employ workers?

Yes

No

a. If yes: How many workers have you employed during the last season?

.....

b. How much do you pay per day? (Specify currency)

.....

c. Is food and housing included?

Yes

No

d. Have you increased the number of workers you have in the last 5 years?

Yes

No

24. Is your product organic?

Yes

No

a. If yes: Do you also apply these methods to the other foods you cultivate?

Yes

No

a. If you do not apply these methods to other foods you cultivate, please explain why.

.....

.....

.....

b. How did you learn about organic production?

.....

.....

.....

c. What are the advantages of this method? (List the three most important)

.....
.....
.....

d. What are the disadvantages of this method? (List the three most important)

.....
.....
.....

25. Has your output changed in the last five years?

Yes

No

a. By how much has it changed?

Gone down

Gone up 0% – 5%

Gone up 5% – 10%

Gone up 10% – 15%

Gone up 15% – 20%

Gone up more than 20%

Relationship with the cooperative, fair trade and commercial market

26. How many years have you worked in the production of (tea)?

Always

less than 5 years

more than 5 years

more than 10 years

b. What are the disadvantages from being in the cooperative? (List the three most important)

.....
.....

32. Does your cooperative give access to pre-financing or the advancement of payment?

Yes No

a. With what type of financial institutions?

.....
.....
.....

Questions solely for women

36. Do you work on the farm?

Yes No

a. If yes: How many hours per day?

During the crop season?

More than 8 hours other

At normal times (during production)

Less than 8 hours other

37. Do you have work off the farm?

Yes No

a. If yes: What is this work?

.....
.....
.....

38. Do you actively cooperate in the life of the cooperative?

Yes No

Appendix 2 Questionnaire for Conventional Trade Affiliated and/or Organic Producers/Landowners

Standard of living for the producers and their families

Personal details

Name..... (This will be removed for reporting results)

Sex.....

Age.....

Affiliation of the producer:

Cooperative

No- affiliation

Company produce is sold to:

.....

Type of (tea) produced:

Organic

Conventional

Social indicators and indicators of regional development

4. Are you married?

Yes

No

5. How many children do you have?

.....

6. What is the highest education level you have?

Primary

Secondary

University

Not finished education

No education

Other

7. What is the highest level of education each of your children has?

a. First child age.....

Primary	Secondary	University
---------	-----------	------------

Not finished education	No education	Other
------------------------	--------------	-------

b. Second child age.....

Primary	Secondary	University
---------	-----------	------------

Not finished education	No education	Other
------------------------	--------------	-------

c. Third child age.....

Primary	Secondary	University
---------	-----------	------------

Not finished education	No education	Other
------------------------	--------------	-------

d. Fourth child age.....

Primary	Secondary	University
---------	-----------	------------

Not finished education	No education	Other
------------------------	--------------	-------

8. Does your house have pipe-borne drinking water?

Yes	No
-----	----

9. Does your house have electricity?

Yes	No
-----	----

10. How long have you lived in this village?

More than 20 years

Less than 20 years

Less than 10 years

Less than 5 years

Born here

a. If you were not born here, where did your family live before coming here?

.....

b. How far away is this? (miles)

.....

11. Do you have access to a doctor/medical facility?

Yes

No

a. How far away is the doctor/medical facility?

.....

b. What do you do in medical emergencies?

.....

12. What type of food products do you cultivate? (List the three most important)

.....

.....

.....

13. What type of food do you purchase in the local store? (List the three most important)

.....

.....

.....

14. What are the most important foods for your family's consumption? (List the three most important)

.....

.....

15. What are the changes you have noticed in this village over the last five years? (List the three most important)

.....
.....
.....

a. What has caused these changes and/or what do you think is responsible for these changes?

.....
.....
.....

Economic Indicators

1. What is your view of how the price of (tea) has changed in the last five years?

- Unchanged Gone down
- Gone up 0% – 5% Gone up 5% – 10% Gone up 10% – 15%
- Gone up 15% – 20% Gone up more than 20%

2. What is your annual income from tea cultivation? (specify currency)

.....

3. How many acres/hectares do you cultivate? (specify hectares or acres)

.....

4. For the acres/hectares, how much crop do you get? (please specify unit)

.....

5. Where do you sell your main product?

a. Local market Yes No
What percentage do you sell to the local market?
0% – 5% 5% – 10% 10% – 15%

15% – 20% More than 20%

b. Other market Yes No
What percentage do you sell to the conventional/other market?
0% – 5% 5% – 10% 10% – 15%

15% – 20% More than 20%

c. Cooperative Yes No
What percentage do you sell to the cooperative?
0% – 5% 5% – 10% 10% – 15%

15% – 20% More than 20%

d. Why do you prefer to sell the majority of your product in the market you have indicated?

.....
.....
.....

e. Is your income from your main product, sufficient to support your family?

Yes No

6. Do you think your income has improved over the last five years?

Yes No

a. If yes: How has this affected you? (List the three most important ways)

.....
.....
.....

7. What other type of activity do you do to improve this income? (List the three most important)

.....
.....
.....

8. What do you spend the most money on? (List the three most important)

.....
.....
.....

9. In your family, who makes the important decisions about what to spend the money on?

- | | |
|----------|-------------------|
| You | Your husband/wife |
| Together | Other |

10. What do you do with money not spent on housing, food and clothes?

.....
.....
.....

Production of (tea)

11. How many hours do you spend cultivating (tea)? (approximately per day)

a. During the crop season?

- | | |
|-------------------|-------|
| More than 8 hours | other |
|-------------------|-------|

b. At normal times (during production)

- | | |
|-------------------|-------|
| Less than 8 hours | other |
|-------------------|-------|

12. Who in your family participates in the production of (tea)?

- | | |
|----------|-------|
| Everyone | other |
|----------|-------|

a. If others in your family do not participate in (tea) production, what do they do?

.....
.....
.....

13. Do you employ workers?

Yes

No

a. If yes: How many workers have you employed during the last season?

.....

b. How much do you pay per day? (Specify currency)

.....

c. Is food and housing included?

Yes

No

d. Have you increased the number of workers you have in the last 5 years?

Yes

No

14. Is your product organic?

Yes

No

a. If yes: Do you also apply these methods to the other foods you cultivate?

Yes

No

b. If you do not apply these methods to other foods you cultivate, please explain why.

.....

.....

.....

c. How did you learn about organic production?

.....

.....

.....

d. What are the advantages of this method? (List the three most important)

.....

.....

.....

e. What are the disadvantages of this method? (List the three most important)

.....
.....
.....

15. Has your output changed in the last five years?

Yes

No

a. By how much has it changed?

Gone down

Gone up 0% – 5%

Gone up 5% – 10%

Gone up 10% – 15%

Gone up 15% – 20% Gone up more than 20%

Producers who are organic but NOT involved in fair trade

Non-fair trade OR organic producers – GO DIRECTLY TO QUESTION 32

16. How many years have you worked in the production of (tea)?

Always

less than 5 years

more than 5 years

more than 10 years

17. How many years have you produced organic (tea)?

Always

less than 5 years

more than 5 years

more than 10 years

18. Why do you not participate in fair trade? (List the three most important reasons)

.....
.....
.....

a. If you could participate, would you?

Yes

No

19. Are you affiliated with a cooperative?

Yes

No

a. If yes: How is the cooperative organised?

.....
.....
.....

b. If yes: What advantages are there from being in the cooperative? (List the three most important)

.....
.....
.....

c. If yes: What are the disadvantages from being in the cooperative? (List the three most important)

.....
.....
.....

d. If no: Why are you not affiliated with the cooperative? (List the three most important)

.....
.....
.....

e. If no: Are there any advantages from not being in the cooperative? (List the three most important)

.....
.....
.....

f. If no: Are there any disadvantages from not being in the cooperative? (List the three most important)

.....
.....
.....

Producers who do NOT take part in fair trade OR organic farming

22. How many years have you worked in the production of (tea)?

- Always less than 5 years
- more than 5 years more than 10 years

23. Why do you not participate in fair trade? (List the three most important reasons)

.....
.....
.....

d. If you could participate, would you?

- Yes No

24. Are you affiliated with a cooperative?

- Yes No

a. If yes: How is the cooperative organised?

.....
.....
.....

b. If yes: What types of advantages are there from being in the cooperative? (List the three most important)

.....
.....
.....

c. If yes: What are the disadvantages from being in the cooperative? (List the three most important)

.....
.....
.....

d. If no: Why are you not affiliated with the cooperative? (List the three most important reasons)

.....
.....
.....

e. If no: Are there any advantages from not being in the cooperative? (List the three most important)

.....
.....
.....

f. If no: Are there any disadvantages from not being in the cooperative? (List the three most important)

.....
.....
.....

g. If no: Do you know how the cooperative is organised?

Yes

No

If yes: please explain how the cooperative is organised.

.....
.....
.....

35. What is your opinion of fair trade?

.....
.....
.....

a. Can you see any differences between fair trade and the other/conventional market?

Yes

No

c. What are the differences? (List the three most important)

.....
.....
.....

36. Would you like to produce for fair trade?

Yes No

a. If yes: Do you know how to do this?

Yes No

b. If yes: Please explain how you would do this.

.....
.....
.....

c. If no: Why not? (List the three most important reasons)

.....
.....
.....

Questions solely for women

37. Do you work on the farm?

Yes No

a. If yes: How many hours per day?

During the crop season?

More than 8 hours other

At normal times (during production)

More than 8 hours other

38. Do you have work off the farm?

Yes No

a. If yes: What is this work?

.....
.....
.....

b. Are you a member of the cooperative?

Yes No

a. If yes: Do you actively cooperate in the life of the cooperative?

Yes No

Appendix 3 De Vaus (2002) Question Wording Checklist

1. Is the language simple?
2. Can the question be shortened?
3. Is the question double-barrelled?
4. Is the question leading?
5. Is the question negative?
6. Is the respondent likely to have the necessary knowledge?
7. Will the words have the same meaning for everyone?
8. Is there a prestige bias?
9. Is the question ambiguous?
10. Is the question too precise?
11. Is the frame of reference for the question sufficiently clear?
12. Does the question artificially create options?
13. Is personal or impersonal wording preferable?
14. Is the question wording unnecessarily detailed or objectionable?
15. Does the question have dangling alternatives?
16. Does the question contain gratuitous qualifiers?
17. Is the question a “dead giveaway”?

Appendix 4 Interview Questions for Gampola Study

Questions for SOFA Management

1. Please can you tell me why the SOFA cooperative was established?
2. What regions does SOFA operate in?
3. What products does SOFA support producers to cultivate?
4. Has SOFA always had fair trade certification?
5. How do you maintain the certification from fair trade?
6. Do you have a good relationship with fair trade?
7. How many villages does SOFA operate in?
8. Do you know the total output of the members?
9. On average, what is the size of the plot used for tea production?
10. How many members are currently registered with the SOFA cooperative?
11. How is the cooperative structured?
12. Do you have meetings and, if so, how often do you meet?
13. If you have meetings, who would attend the meetings?
14. Are female members able to attend the cooperative meetings and partake fully in all activities?
15. How do you decide on the allocation of the premium?
16. What has the premium been spent on in the past 5 years?
17. How do you ensure that the output reaches the fair trade market?
18. Are there any arrangements in place for pre-finance?
19. Do you offer loans, grants or subsidies to producer members?
20. Are there any systems to improve the productivity of the members?
21. Does the cooperative provide any support for crop diversification?
22. How do you ensure that the farmers are aware of the fair trade certification SOFA has?
23. Do you plan to expand the number of members in the future?
24. How, if at all, do you engage with the conventional trade farmers in the region?
25. Is there anything else you would like to tell us about the cooperative or your relationship with fair trade?