

Sector overview

# Tea

Michael Groosman

Oct 2011



the sustainable  
trade initiative

## Table of Content

<b>Acronyms and Abbreviations</b> .....	<b>2</b>
<b>Introduction</b> .....	<b>1</b>
<b>Supply Chain</b> .....	<b>1</b>
Producers .....	2
Processors .....	3
Trade Phase.....	3
Blenders .....	4
Retail .....	4
<b>Market Overview</b> .....	<b>5</b>
Global Market .....	5
Production and Export .....	6
Consumption and Import .....	7
Developments and trends in the tea market .....	8
<b>Sustainability</b> .....	<b>9</b>
Sustainability issues in the sector .....	9
Social issues.....	10
Environmental issues .....	10
Economic issues .....	10
Current approaches to sustainability .....	10
<b>Conclusions</b> .....	<b>12</b>
Priorities for future investment .....	12
<b>References</b> .....	<b>13</b>

## Overview of Tables and Figures

Figure 1 Overview of major players in the tea value chain	2
Figure 2 Simplified supply-chain for the Tea sector from producer to consumer	2
Figure 3 Main Tea Producing Countries	5
Figure 4 Projected production and export values of black tea and green tea in 2019.	5
Figure 5 Estimated Production and Export values 2010 in metric tons of top 10 countries	6
Figure 6 EU-27 tea imports for consumption 2010 (metric tons)	7
Figure 7 Apparent global consumption of tea 2001-2010 (in 1000 metric tons)	8
Figure 8 Changes in Mombasa tea price between august 2006 and May 2011 (US cents per kg)	8
Figure 9 Volumes of certified tea (tons) compared with global tea production	12
Table 1 Ratio of smallholders to estates and number of workers in main producing countries	3
Table 2 Top 5 importing non-producing countries	7

## Acronyms and Abbreviations

BLF	Bought-Leaf Factory
ETP	Ethical Tea Partnership
IDH	the Sustainable Trade Initiative
ITC	International Tea Committee
KNVKT	Koninklijke Nederlandse Vereniging voor Koffie en Thee (KNVKT)
KTIB	Koffie en Thee Informatie Bureau
MNC	multi-national companies
RA	Rainforest Alliance
SAN	Sustainable Agriculture Network
TCC	Tropical Commodity Coalition

## Introduction

Tea is a very popular beverage—second only to water—and is consumed all around the world. Millions of people are engaged in the production and processing of tea, and many more rely on it for their livelihoods. West-European countries such as the UK and the Netherlands have long, historical ties with the tea trade: Dutch merchants already became familiar with tea in the 17<sup>th</sup> century during their journeys to the Far East, and the UK began building fast ships especially to get tea from the Orient around 1840. Later, the British built tea plantations in India and Sri Lanka (Ceylon, at the time), and the Dutch established plantations on Java and Sumatra (KTIB website). Nowadays, the international tea trade is largely in hands of multinational companies (MNC) with British and Dutch roots, e.g. Unilever, Twinings and Tata Global Beverages.

In the past few years, however, a variety of problems have emerged. Historically, the tea market has shown a persistent state of oversupply, which has kept a downward pressure on prices. Even though falling prices might sound like good news for tea consumers, they represent a threat to the long-term economic health of the industry. Low margins and under-investment jeopardize productivity and quality, and act as barriers to the improvement of the working conditions and livelihoods of growers, creating a downward spiral that make it hard for the sector to act in a more sustainable manner (IDH 2010: 9). Furthermore, fluctuating weather patterns, primarily drought in producing countries, have also been reflected clearly in price fluctuations in the past few years (TCC 2010: 3). There is a substantial fear that the high prices realized at the moment could lead to a new supply and demand imbalance due to over stimulated production.

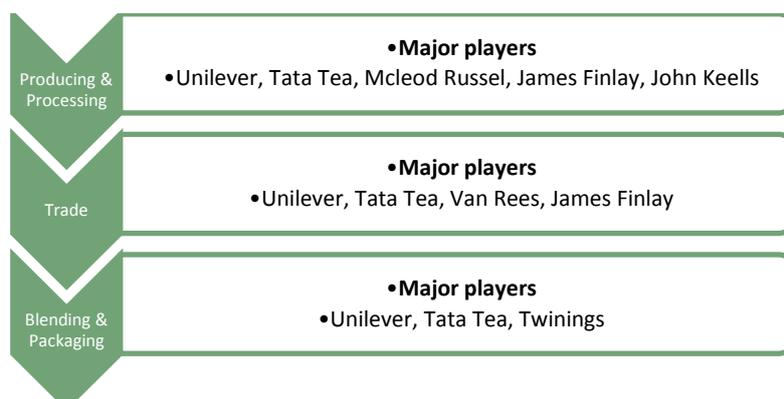
This sector overview presents basic information on the supply chain, major markets, trends and sustainability in the tea sector. As part of IDH's goal to capture and disseminate the latest knowledge on sustainability, this overview aims to serve as a starting point for general understanding of the sector, and present complementary information for organizations, governments and industry partners active in the tea sector. For civil society actors, this report may present relevant market analysis and trends, while for companies it may give a quick summary of sustainability issues and initiatives in the sector. The analysis is based on a desk research of publicly available sources solely. This initial report was completed in August 2011. As the IDH tea program progresses, we expect more information and data to be generated.

## Supply Chain

Tea comes from an evergreen bush—*Camellia Sinensis*—that grows best at a fairly high altitude. It can take from 5 to 7 years after being planted for the tea bush to become suitable for commercial exploitation, after which it can remain productive for over 100 years. All types of tea—black tea, green tea, white tea, Oolong tea, etc.—are produced from the buds and leaves of the same plant; the difference is in the processing. Technically, tea is harvested all year round, but there are also certain peak seasons. For example, the highest quality (and most expensive) Darjeeling tea is plucked in April (Deccan Herald 2011). After plucking, the tea leaves need to be delivered to a factory, preferably within 5 to 7 hours after harvesting to prevent loss of quality (TCC 2010: 4).

Although most plantations have their own processing units, small growers need to sell their green leaf to independent Bought Leaf Factories (BLFs) or to estate factories nearby. At the processing plant, the tea leaves go through a process of drying and crushing, resulting in factory tea—also known as “made tea”. This processed tea is then sold in packets and chests through auctions and international traders, ending up at the tea blenders, retail and eventually the consumer (ibid).

The tea supply chain is characterized by a very strong vertical integration by just a few multinationals (Figure 1). At the global level, 85% of global production is sold by multinationals (CBI 2011b). Direct links between manufacturers and producers are common. The main packers, Unilever (12% of the global market) and Tata Tea (4% of the market) are key players in the consumer market. They dominate the trade, have a strong influence on transport companies, and source part of their supplies from their own plantations.



**Figure 1 Overview** of major players in the tea value chain (Source: TCC 2010: 5, company websites)

Figure 2 below shows a simplified scheme of the tea sector supply chain. (TCC 2010:2).



**Figure 2**

**Producers** of tea were traditionally large estates, but the numbers of smallholders are rising rapidly. China, India, Kenya and Sri Lanka are the main producers. On estimate, there are 13 million workers involved in tea production worldwide, of which around 9 million are smallholders (IDH 2010: 12).

**Processing** (drying, fermenting and/or cutting of tea leaves) is carried out in processing plants. Estates usually have their own plant or one located nearby. Smallholders often need to travel.

**Trade** between producers and buyers usually takes place at auctions, facilitated by brokers. Brokers communicate information regarding supply and demand, and indirectly determine the price of tea. 70% of the global tea production is sold through auctions.

**Tea companies (also called packers/blenders)** buy the tea through brokers. Although the processed tea technically is a finished product, downstream stages such as blending, packing and marketing are the most profitable.

**Retail:** Direct links between buyers and tea packers are often established, making access by smaller companies or local producers/processors more difficult.

**Consumers:** Roughly 3/5 of the world production is consumed locally in the producing countries. Only 2/5 is consumed in non-producing countries.

Each of these stakeholder groups will be described in more detail below.

### Producers

Although it is very difficult to put an exact number on the amount of workers active in tea production, estimates suggest there are roughly 3 million workers active in Kenya alone (ETP 2011a, see table 1 below). Tea production has long been dominated by large plantations, but especially since liberalization of markets in the mid 1990s, smallholdings are on the increase. In Kenya and Sri Lanka, about two-thirds of all tea is cultivated on smallholdings (TCC 2010). For these farmers, cultivating tea provides work and income throughout the year, with a low risk of complete crop failure.

Tea is a very labor intensive crop. Plantations and small farmers employ thousands of workers to maintain and harvest their tea fields. Work in tea gardens is usually gender specific. Harvesting, generally referred to as plucking, absorbs the most amount of labor and is carried out almost exclusively by female workers. There is typically a daily wage for tea plucking, with a stipulated minimum quantum of leaves to be plucked. Male workers are generally employed only for pruning, applying fertilizers and agrochemicals, or hauling heavy loads. As these are largely seasonal or occasional activities, men sometimes have work only for 10-15 days in the month (TCC 2010).

**Table 1** Ratio of smallholders to estates and number of workers in main producing countries

Country	Smallholder – Estate ratio	No. of tea workers (estimate)
China	80 – 20	8 million
India	27 – 73	1.3 million
Kenya	60 – 40	3 million
Sri Lanka	65 – 35	1 million

Source: TCC 2010, ETP 2011a

### Processors

Most of the processing of tea leaves takes place in the countries of origin, as processing the tea leaf should begin within 5-7 hours after harvesting to avoid deterioration in quality. Processing is done in independent BLFs or estate factories (TCC 2010), through controlled fermentation of the liquor present. The two main methods of black tea production—the most widely produced tea—are ‘orthodox’ and ‘CTC’ (crushed-torn-curved or cut-torn curled), where the leaves are cut and rolled in several special ways. Both types come in different grades or qualities, based on the size of the processed and dried leaves. In green tea production the natural fermentation process is halted by first drying (heating or steaming) the freshly picked leaves before further processing. Tea quality and price are determined on the basis of liquor, aroma/flavor and leaf appearance. The processed factory tea (also known as “made tea”) is sold in packets and chests.

### Trade Phase

#### Auctions

Roughly 70% of global tea production is traded through auctions (Lines 2006). Brokers constitute an important link between tea producers and buyers, since they communicate information regarding supply and demand (TCC 2010). Unlike the coffee and cocoa trade, there is no single indicator price for tea. Instead, pricing is dominated by the auction system, where the price of tea from each estate is determined on a day-to-day basis, according to the quality and supply and demand on the day. This is because tea quality will vary considerably even from the same factory and region on a weekly or monthly basis. The average prices at the three most important auction centers (Kolkata, India; Colombo, Sri Lanka; and Mombasa, Kenya) are a reference for the world market price (TCC). The local auction centre is used for rapid delivery and lower costs: there are 6 auction centers in India, and one each in Sri Lanka (Colombo), Indonesia (Jakarta), Malawi (Limbe), eastern Africa (Mombasa) and Bangladesh (Chittagong). Chinese tea is sold at commodity fairs in Guangzhou.

At auctions, buyers bid for one particular grade from a particular tea garden at a time, after tasting the tea and judging its value. The auctioneer plays an important role in the tea market. Apart from personally tasting and evaluating each individual invoice, he has to use his knowledge of the world demand and marketing skill in judging the marketability of the tea. He has final jurisdiction and his judgment to a certain extent determines the selling price of the tea (Lines 2006).

### *Brokers*

A few firms dominate the sales in each auction centre. The largest tea broker in the world, J. Thomas & Co. Pvt. Ltd., handles over 155 million kg of tea a year, i.e. one-third of all tea auctioned in India (J. Thomas & Co. Pvt. Ltd. website). Carritt Moran and Co. Ltd., the world's second largest tea broker, handles 24% of auctioned teas in India (Carritt Moran and Co. Ltd. website).

Brokers must be registered with the appropriate tea board in order to operate, which limits the number of auction houses where tea can be sold. 11 brokers are registered with the Tea Board of Kenya, while there are 4 registered brokers at Calcutta (J. Thomas & Co., Carritt Moran & Co., Contemporary Targett and Paramount Tea Marketing). Together these brokers sell the majority of Darjeeling tea (Lines 2006).

The concentration of buyers in most auction centers has traditionally been very high. New buyers are inherently discriminated against for a number of reasons. Firstly, brokers generally do not accept bids from buyers they do not know as they feel it increases their risk. Secondly, the new buyers are disadvantaged by the fact that the tea has to go to the processing and packaging plants most of which are owned by the other companies competing with them in the same auction (ibid).

### **Blenders**

Tea is generally exported with minimal processing to importing consumer countries, where it is blended and packaged by the tea companies. Blending is the most lucrative part of the tea trade, meaning the largest proportion of the profits does not end up in the tea-producing countries, but abroad (TCC 2010; Lines 2006). Whilst many producers try to export pre-processed tea, the export of 'ready-for-use' tea is often hindered by the absence of money for expensive marketing strategies.

The consumer markets are dominated by the popular blended brands (over 70% of the UK market) (CBI). These blends can contain up to 36 different types of tea (TCC), blended in the consuming country. They are designed to keep their taste constant despite the loss of any tea-source due to adverse weather or high prices.

By exporting tea in bulk, developing countries are missing the opportunity for significantly increased export earnings. Producing countries currently sell tea most often as a generic without branding and packaging, despite the increase this could mean in prices; branded tea fetches prices six times higher than bulk export. Sri Lanka is an exception, and has succeeded in capturing more value in the supply chain through value-added production (Ceylon tea) (Lines 2006)

### **Retail**

With the growth of the supermarkets in Europe and North America, the character of tea buying changed quite dramatically in the 1990s. There has been a centralization of tea buying, increased buying by individual companies and the bypassing of wholesalers through direct links between the tea buyers and tea packers. Leading companies spend a great deal on promotion of their products. In Japan the advertising expenditure was 8%, compared to 4% in the US and 2.5% in the UK (Lines 2006). A great amount of money is also spent on trade promotions to retail outlets to try to persuade them to carry their brands, particularly by smaller companies. Retailers generally seem to add small margins on the tea but make their money from these promotional margin allowances from the packers.

## Market Overview

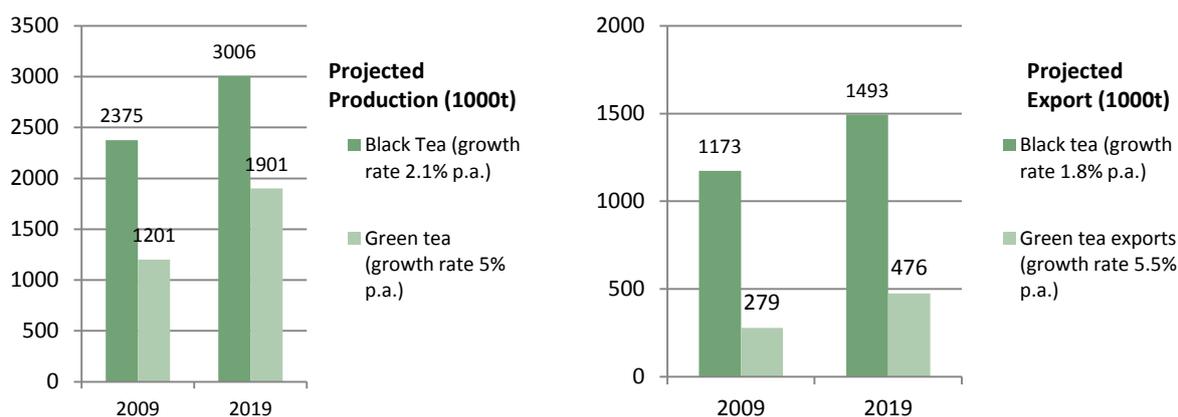
### Global Market

Although the *Camellia sinensis* (the evergreen bush from which its fresh leaves and buds tea is produced) is originally native to mainland China, South and Southeast Asia, today the plant is cultivated across the world in tropical and subtropical regions (see Figure 3). Global tea production totaled an estimate of 4 million metric tons in 2010 (ITC 2010), providing employment for millions worldwide.



**Figure 3** Main Tea Producing Countries Source: FAOSTAT (2008)

In the global tea market, the two most important types of tea produced are Black Tea and Green Tea (KNVKT 2009, Teeverband 2011). In 2009, 61% of global production was Black Tea (38% CTC, 23% Orthodox) and 31% was Green Tea (ITC 2010). Black tea is predominantly produced and exported by Kenya and Sri Lanka. Green tea is mainly grown and consumed in China (TCC 2010:4) Although Black tea is by far the most produced and exported tea, production and exports of green tea are rapidly increasing, as shown in the projections in Figure 4 (FAO 2011). Other major tea types are Oolong, Jasmine and Pu'erh teas, mostly from China.



**Figure 4** Projected production and export values of black tea and green tea in 2019. Source: FAO 2011

Box 1: Tea Production in Kenya

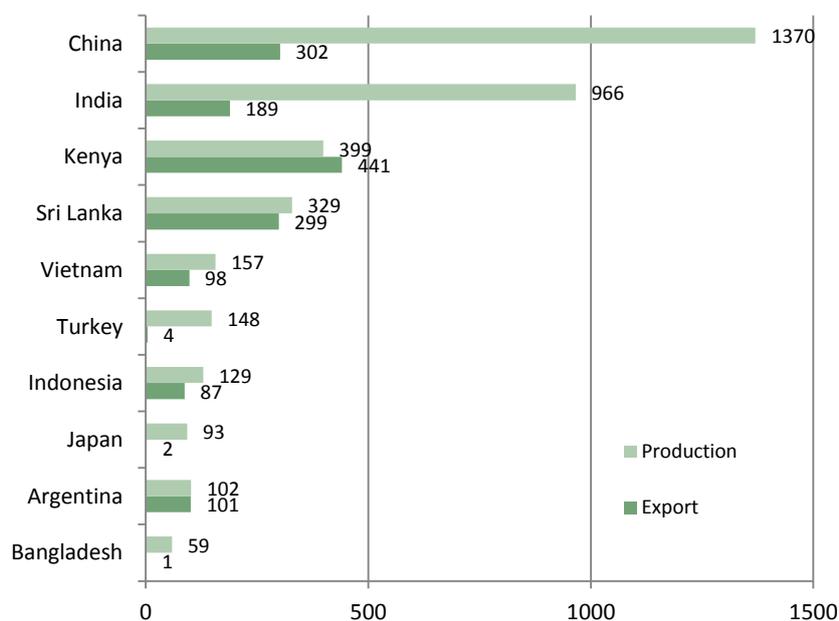
Although Kenya is not the largest producing country (8% share), it is the most important exporting country (22% share). In 2009, Egypt was the main importer of Kenyan tea, with the UK ranking second and Pakistan third (ITC 2010).

Smallholders accounted for over 60% of tea production in 2009, whereas multinational owned large-scale tea estates contribute for almost 40%. However, persistent droughts have resulted in a crop loss of over 30 million kg, mostly amongst smallholders, where the share dropped from 60% to 55% of national production.

Kenyan smallholder farms are typically less than half an acre, but some can be up to 3.5 acres. Farmers usually grow tea in parallel with other crops such as maize, vegetables and beans, in addition to livestock. However, roughly 3 million people and their families heavily rely on tea (ETP: 3). Although tea prices have been kept at a low level for the past three decades, the risk of complete crop failure is low and tea remains a crucial cash crop for smallholders.

**Production and Export**

Although tea is produced in more than 35 countries, three-quarters of global production occurs in only a handful of these countries. China was responsible for 35% of world production in 2009, India for 25%, Kenya for 8%, and Sri Lanka for 7% (ITC 2010). Other important producing countries are Turkey (4%), Viet Nam (4%) and Indonesia (3,5%) (ibid).



**Figure 5** Estimated Production and Export values 2010 in metric tons of top 10 countries  
Source: ITC 2010

Figure 5 shows the production (in million kg) and exports of the top 5 producing and top 5 exporting countries. More than half of the tea produced by China and India- the largest producers - is for their domestic markets (TCC). Roughly 60% of the world production is consumed domestically in the producing countries; only 40% (1,609,700 ton) in 2010 was exported to non-producing countries (TCC 2010, ITC 2010). The major consuming

countries are also the major producing countries—China and India, respectively accounting for 24% and 21% of global consumption in 2009 respectively (ITC 2010). The major exporting countries are Kenya, China and Sri Lanka, which together control almost 60% of world exports (ITC). It must be noted however although Kenya ranks number one in quantities, exports from Sri Lanka have a substantially higher monetary value (FAOSTAT)

### Consumption and Import

Contrary to coffee and cocoa, the affluent populations of North America, Western Europe and Japan are not the largest markets for tea. Over 50% of global tea exports are destined to the Middle East, North Africa and the former Soviet Union countries. Tea consumption in the non-producing countries is led by the Russian Federation (4.5%), the United States of America (3.2%) and the United Kingdom (3%); see table 2 (ITC 2010).

**Table 2** Top 5 importing non-producing countries

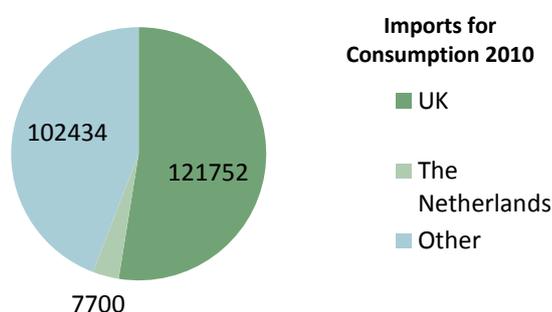
Country	Import (metric tons)
Russian Federation	179,000
USA	126,836
UK	121,752
Pakistan	120,345
Egypt	86,000
World total	1,609,700

Source ITC,2010

The tea of choice in countries like China, Viet Nam and Indonesia is green tea; in other markets Black tea is still predominant. Premium loose tea markets, like Germany and Japan are known to go for the leafy teas of higher quality. Tea bags are preferred in the Western consuming countries like the USA, UK and the Netherlands. There is also an increasing trend in the consumption of non-traditional tea products such as iced tea, lemon tea, herbal infusions etc. (TCC 2010: 5). According to the American tea board, roughly 85 - 90% of the tea imported in the USA is destined for the production of ice-tea and other ready to drink beverages “on ice” (Northjersey.com)

#### EU market

The West European market is only accounts for 6 percent of the world tea consumption (TCC 2010: 7), and is largely dominated by a few main players. In 2010, the combined import of tea for consumption of the UK and the Netherlands was 129,452 tons for consumption (173,157 tons including re-exports), forming roughly 56% of EU-27’s imports, as is shown in figure 6 below. Certified teas are becoming more popular in these markets.



**Figure 6** EU-27 tea imports for consumption 2010 (metric tons) Source: ITC 2010

The United Kingdom is the largest tea consumer in Western Europe, with a market share of 63% (TCC 2010). Tea consumption amounted to almost 122,000 ton in 2010 (ITC 2010), of which more than half the volume was sourced from Kenya, UK’s most important supplier. Other important suppliers are India, Indonesia and China.

In the Netherlands, less than half of the tea imports are for the domestic market—tea consumption amounted to 7,700 ton in 2010 (ITC 2010), constituting 4% of the Western European market. According to the Dutch Central Statistics Bureau (CBS), tea imports not adjusted for re-exports amounted to 23,700 ton in 2009 (KNVKT 20010). The total Dutch export of tea amounted to 11,000 ton in 2009, with Germany as its main destination (KNVKT 2010). The main suppliers are Indonesia, Malawi, Argentina and China (TCC 2010). Sara Lee is with a market share of 65% the main player in the Dutch tea market, followed by the retailer Albert Heijn (15%) and Unilever (5%) (ibid). Although the Netherlands is a relatively small market, it is an absolute frontrunner in terms of certified tea: by 2015 an estimated 80% of the available volume of tea will be certified (TCC 2010).

### Developments and trends in the tea market

Historically, the tea market has shown a persistent state of oversupply, which has kept a downward pressure on prices (IDH 2010). Despite severe droughts in India, Sri Lanka and Kenya, the total global crop has continued to increase, at a rate of 1.8% in 2009, buoyed by the continuing growth in China, and global supply is still larger than demand, see figure 7 below (ITC 2010). If corrected for inflation, world market prices for tea in the period from 2000 to 2005 were half what they were in the 1980s. As production costs have not been falling at the same rate and have increased lately, this has obviously put pressure on profitability in the industry, representing a threat to the long-term economic health of the industry. The most important cause for decreasing prices is a persistent situation of oversupply on the international market. There is fierce competition between a number of producing countries for market share, by expanding production.

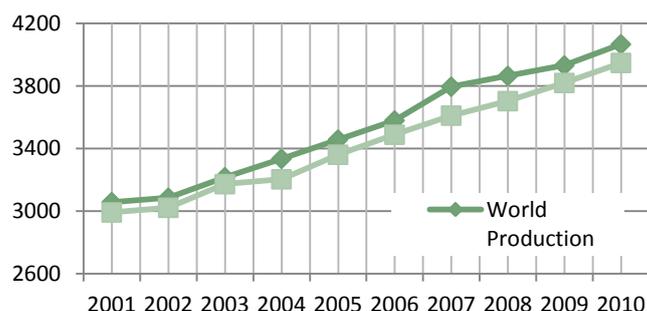


Figure 7 Apparent global consumption of tea 2001-2010 (in 1000 metric tons) ITC 2010

However, this trend changed in 2009. World tea prices reached record levels in 2009, around 30% higher than in 2008, due to supply shortages caused by drought in major producing countries, notably India, Sri Lanka and Kenya (Agritrade 2010). While the prices fell again with improving weather patterns, severe drought, especially in Kenya, have driven prices up again in 2011- see figure x below (The Public Ledger July 2011: 1).

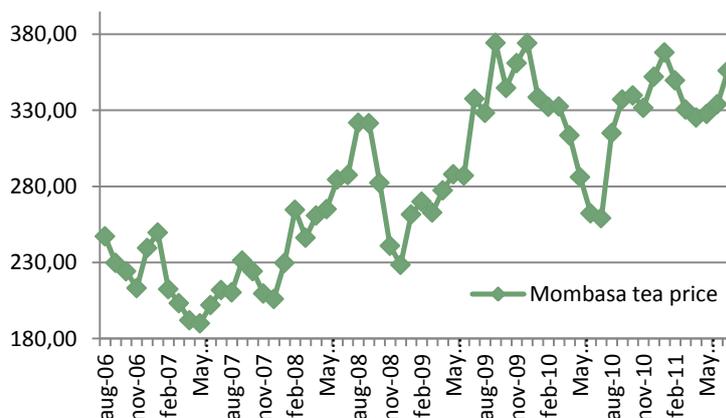


Figure 8 Changes in Mombasa tea price between August 2006 and May 2011 (US cents per kg)  
Source: International Monetary Fund via indexmundi.com

Aside from the decrease in supply, the increase prices have also been spurred by an increase in demand, which can be attributed to several factors. Among these are the perceived health benefits of tea, which are increasingly attractive for consumers. Especially green tea and new herbal infusions are gaining popularity fast over the last past years among health-conscious consumers, often at the expense of other hot drinks, especially black tea consumption (CBI 2011c).

The increase in tea prices resulted in a 7% increase in export earnings at the global level, significantly affecting rural incomes and household food security in tea producing countries, particularly in Kenya and Sri Lanka, where tea export earnings account for 35% and 50% of total agricultural export revenue respectively. In addition, export earnings from tea paid for about 60% of Sri Lanka's food import bill, while in Kenya tea exports covered the country's entire food import bill (FAO 2011).

In terms of price transmission to consumers, there was a distinct difference between developed and developing country markets. Although the FAO composite price increased by 13% in 2009, transmission to the retail level in developed countries was 5% at supermarkets across Europe, because of intense competition in the beverages market. In contrast, consumers in developing countries received a transferred price increase averaging about 12% during the same period (FAO 2011).

With the decrease in supply, and increase in demand, the growth of tea consumption outpaced production by an estimated 0.8% between 2005 and 2009 (ITC, 2010). In the medium term, the projections suggest that supply and demand of black tea will be in equilibrium in 2019, which would promote relatively stable prices at slightly higher than the historical average, but lower than recent price hikes (FAO 2011). However, if there is an over reaction to recent high prices, the results can be quite alarming. If producers get carried away with the high prices and make the supply too large, prices will drop heavily. Therefore, caution needs to be exercised. In addition, efforts should be directed at expanding demand. For example, there is a scope for increasing per capita consumption in producing countries such as Kenya and Sri Lanka, which are low compared to traditional import markets (FAO 2011).

## Sustainability

### Sustainability issues in the sector

In its current state, sufficient supply and quality of tea is not guaranteed for the sector. Several social, economic, and environmental issues, combined with the finite nature of natural resources and rapidly growing populations, lie at the root of this situation. Supported by a growing public awareness in the West of social, economical and environmental issues associated with tea cultivation, the sector has become increasingly interested in sustainability (TCC 2011).

**Table 3** Overview of the social, economical and environmental issues (Source: TCC 2010:6)

	Estate and factory workers	Small-scale farmers
Social Issues	<ul style="list-style-type: none"> <li>- High discrimination, gender inequality</li> <li>- Low representation of workers</li> <li>- Poor living conditions on estates</li> </ul>	<ul style="list-style-type: none"> <li>- High reliance on tea for livelihood</li> <li>- Low level of farmer organization</li> <li>- Lack of land title deeds</li> </ul>
Economical Issues	<ul style="list-style-type: none"> <li>- Low wages</li> <li>- High level of casual/temporary labor</li> <li>- Uneven value distribution</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of market information, market access &amp; (technical) training</li> <li>- Low productivity and low prices versus high production costs</li> <li>- Uneven value distribution</li> </ul>
Environmental Issues	Small-scale farmers and estate and factory workers <ul style="list-style-type: none"> <li>- Deforestation / loss of biodiversity due to conversion of forests into tea farms</li> <li>- Soil erosion, low soil fertility</li> <li>- Agrochemical use</li> <li>- Pollution and energy inefficiency in processing tea</li> </ul>	

### Social issues

There are several social issues that influence the overall quality of the tea produced and the productivity in general. Workers on tea estates face discrimination, harassment and gender inequality, combined with poor living conditions, little access to healthcare and low representation (ETP 2011). The income of tea farmers is low. This is often around their individual country's minimum wage levels, although this does not normally constitute a living wage in tea-producing countries. Their wages are quickly under pressure when market prices for tea go down, as the cost of labor represents about 55 to 73% of made tea production costs (tea processing factory gate price not retail price). Picking makes up approximately 75% of these costs (Lines, 2006).

Although traditionally tea is produced on estates, smallholders are on the increase. Two thirds of all tea cultivated in Kenya and Sri Lanka is from smallholdings (TCC 2010). However, while smallholders in Kenya are often a member of the Kenya Tea Development Agency (KTDA, ETP 2011), most smallholders elsewhere do not have such organizations or representation. Furthermore, poor yields and quality have led to high vulnerability of smallholders' livelihoods (TCC; IDH 2010).'

### Environmental issues

Tea cultivation has multiple environmental effects. According to Clay, the main harmful environmental impact of tea production is habitat conversion (Clay 2003). Large areas of biodiversity rich forests have been replaced by monoculture in North East India (RA website). In East Africa, forests are still being cleared in order to make way for new plantations (McLennan 2011). Next to loss of biodiversity, land clearance also alters the natural flow of water, leading to an increase in soil erosion, which on its turn leads to the loss of wetland habitats and the pollution of rivers and lakes (ibid). In some countries, such as India, Sri Lanka and Vietnam, abundant and wrong application of pesticides is also negatively affecting the local and wider environment. As tea plants are grown in monoculture, they provide ideal conditions for a number of pests. The result is that a number of toxic, harmful pesticides are widely used (ibid). Lastly, energy consumption for tea processing is energy intensive (Asian Institute of Technology 2002). As the machinery used is often outdated, energy use for tea processing is also very inefficient (IDH 2010).

### Economic issues

Due to the remoteness of tea plantations, and the small time window the freshly plucked tea needs to be processed, farmers lack both market information and bargaining power. Furthermore, although tea is 'ready to drink' when exported by producing countries, the downstream stages such as blending, packing and marketing are the most profitable. This part of the value chain is controlled by a handful of multinational tea packers and brokers, which as a result can considerably influence world prices. While real prices for tea on shop shelves have remained stable, average real auction prices in the years 2000-2008 were roughly half of those in the eighties (ITC 2010). As an effect of the low market price for tea, farmers were not able to adequately invest for inputs or new planting material. This leads to poor quality and yields, resulting in low pricing, thus creating a vicious cycle. In 2009 and currently, prices are high due to severe droughts in several tea producing countries. A fear is that—motivated by the high prices—farmers will produce too much tea, resulting in oversupply and subsequently a plunging price.

### Current approaches to sustainability

In contrast to the coffee and cocoa sectors, there are no global governance initiatives such as multi-stakeholder round tables, to improve the social, environmental and economic conditions of tea producers worldwide (TCC). Nevertheless, there is a growing public awareness in the West of the social hardship associated with tea production. Various standard systems seek to address these concerns. Codes of conduct require suppliers to meet standards on food safety, working conditions and environmentally friendly production practices. Certified tea is commonly defined as tea that includes the three pillars of sustainability, namely 'economic viability for farmers,' 'environmental conservation' and 'social responsibility.' Certification entails the written assurance by an independent third party certification body that the quality of the tea and the production process has been assessed, and conforms to specified requirements.

### Existing certification standards

The four major certification standards in the tea sector are Rainforest Alliance (RA), UTZ Certified, Fair trade and Organic. Another important ethical initiative is the Ethical Tea Partnership (ETP). Please see the table below to for more information on the individual schemes.

**Table 4** Overview of attributes and objectives of main Tea Certification schemes.

Source: Fair trade 2010, Standards websites

Scheme	Key attributes and objectives
Ethical Tea Partnership (ETP)	<ul style="list-style-type: none"> <li>- Non-commercial alliance of over twenty international tea packers.</li> <li>- Vision of a socially just and environmentally sustainable tea sector.</li> <li>- Not a certification body itself, but works closely with key certification bodies, including Fair trade, Rainforest Alliance Certified, and UTZ CERTIFIED</li> <li>- Fundamental principles are those of the Ethical Trading Initiative's Base Code.</li> </ul>
Rainforest Alliance Certified	<ul style="list-style-type: none"> <li>- Environmental, social and economic standards set by the Sustainable Agriculture Network (SAN)</li> <li>- The SAN standards have a special emphasis on workers and wildlife.</li> <li>- Began working with tea farmers in 2006</li> </ul>
UTZ CERTIFIED	<ul style="list-style-type: none"> <li>- Industry-producer partnership which has recently expanded its certification program to the tea sector.</li> <li>- Aims to provide an assurance of responsible production and sourcing.</li> <li>- Independent certification against the UTZ CERTIFIED code of conduct</li> <li>- Focus on traceability, using a Track and Trace system and Chain of Custody criteria.</li> </ul>
Organic	<ul style="list-style-type: none"> <li>- Set of standards which define what farmers can and cannot do</li> <li>- Strong emphasis on the protection of wildlife and the environment. Pesticides are severely restricted and artificial chemical fertilizers, animal cruelty, genetically modified feed and routine use of drugs and antibiotics are all disallowed.</li> <li>- Often dual certified, matching organic with other certification schemes.</li> </ul>
Fair trade	<ul style="list-style-type: none"> <li>- Focus on poverty reduction and sustainable development.</li> <li>- Aims to create opportunities for producers and workers who have been economically disadvantaged or marginalized by the conventional trading system.</li> </ul>

RA seems to be the dominant certification system, as it is used by the three largest global brand owners- Unilever, Tata tea and Twinings (TCC 2010). The market share of certified teas has grown rapidly over the last 3 years; while it was just 1% in 2007, it was projected to reach 10% of the world production by end 2010. The volume of teas certified by the four standards systems in the market in 2009, and estimates for 2010 and 2011, is presented in the graph below. All expect the demand to increase; with Rainforest Alliance and UTZ Certified doubling their volumes within a year.

**Table 5** Future commitments of the 3 global brand owners.

Source: TCC 2010; Unilever, Tata Tea websites

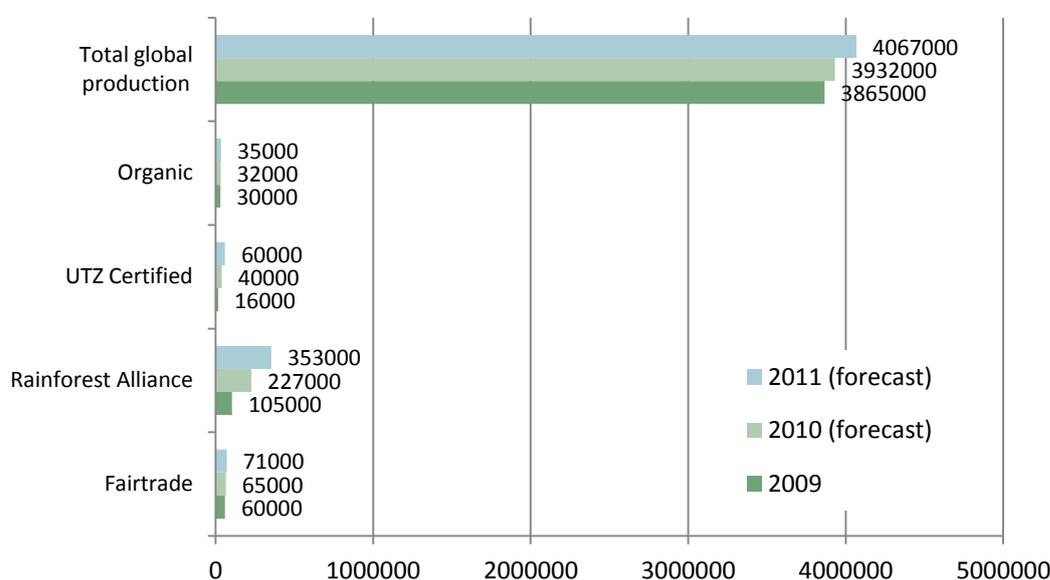
Company	Share of global market (%)	Future commitment
Unilever	12	<p><u>Western Europe</u>: all Lipton yellow Label and P&amp;G Tips 100% certified by 2010</p> <p><u>Global</u>: All Lipton tea 100% certified by 2015</p>
Tata Tea	4	Tetley product line 100% certified in UK and Canada by 2011; USA, Australia, Europe starting in 2012
Twinings	3	Everyday tea line, starting in 2010 towards 100% certified

## Conclusions

### Priorities for future investment

In developing countries, a sustainable tea sector can help move farmers out of poverty and transform their operations into viable businesses, reduce the environmental impact, and stimulate local economies. For consumer countries and major importing/processing companies, it guarantees the long-term supply of qualitatively good, responsibly grown tea.

The current certification standards have focused especially on the (Western) European market so far. Although this market is important, it only accounts for 6% of global consumption (TCC 2010). As can be seen in the graph below, certified tea still only accounts for a small part of tea production. The main challenge ahead lies in reaching the huge domestic markets of large producing countries such as India, China and Turkey (ETP).



**Figure 9** Volumes of certified tea (tons) compared with global tea production  
Source: TCC 2010, UTZ 2011

Domestic markets of large producing countries however faces considerable sustainability challenges. On the one hand, pushing tea sustainability from the demand side is not straightforward in India, since it is difficult to demonstrate sustainability in a non-branded, commoditized market. In addition, market research shows that consumers of branded-tea in India had little interest in how the tea is produced. On the other hand, pushing tea sustainability from the supply side is also challenging. Producers do not perceive sustainability to be leading to benefits such as improved yields, safety of products and economic improvement of local communities.

Another challenge lies in reaching and certifying the millions of smallholders. Certification in Kenya has proven to be successful. The success of this program in Kenya was largely due to

- 1.) Having found local partners that were able to quickly and effectively reach out to a large base of smallholders and engage them in the certification process, and
- 2.) because Kenya already had the needed scale for a quick roll-out, as smallholders are well organized through the KTDA (Kenyan Tea Development Agency) around factories.

Engaging smallholders in countries where they operate on a one-to-one basis (not as a group) with factories, and where there are no strong smallholder associations such as the KTDA is definitely challenging (IDH 2011).

## References

- Agritrade. 2010. 'Tea: Executive Brief'.
- <http://agritrade.cta.int/Agriculture/Commodities/Tea/Tea-Trade-issues-for-the-ACP>
- Asian Institute of Technology. 2002. "Small and Medium scale Industries in Asia: Energy and Environment Tea Sector.  
[http://www.serd.ait.ac.th/smi2/SMI/roadmap/Publications/Project\\_Publications/ARRPEEC2/Tea\\_Report.pdf](http://www.serd.ait.ac.th/smi2/SMI/roadmap/Publications/Project_Publications/ARRPEEC2/Tea_Report.pdf)
- Carritt Moran & Co. Pvt. Ltd. website. <http://www.carrittmoran.com/>
- CBI. 2011a. *Prices and price developments for tea.*
- CBI. 2011b. *Trade structure and channels for tea.*
- CBI. 2011c. *Trends and segments for tea.*
- Clay, Jason. 2003. *World Agriculture and the Environment.* Washington DC: Island Press.
- Deccan Herald. February 2011. "Storm brewing in tea cups of Darjeeling."  
<http://www.deccanherald.com/content/141651/storm-brewing-tea-cups-darjeeling.html>. Accessed 8-3-2011.
- The Ecologist. 2011. *What's really in your cuppa?.* [http://files.theecologist.org/Pdfs/Whats\\_in\\_your\\_cuppa.pdf](http://files.theecologist.org/Pdfs/Whats_in_your_cuppa.pdf)
- ETP website. <http://www.ethicalteapartnership.org/>
- ETP. 2011a. *Climate change adaption in the Kenyan tea sector* <http://www.ethicalteapartnership.org/wp-content/plugins/download-monitor/download.php?id=Climate+change+report+from+Kericho>
- Index mundi. <http://www.indexmundi.com/commodities/?commodity=tea>. Accessed 8-24-2011.
- Fairtrade website. [http://www.fairtrade.org.uk/producers/tea/mabale\\_growers\\_tea\\_factory/default.aspx](http://www.fairtrade.org.uk/producers/tea/mabale_growers_tea_factory/default.aspx)
- Fairtrade. 2010. *Stirring up the tea trade: Can we build a better future for tea producers?.*  
[http://www.fairtrade.org.uk/includes/documents/cm\\_docs/2010/f/1\\_ft\\_tea\\_report\\_artworkfinal\\_for\\_web.pdf](http://www.fairtrade.org.uk/includes/documents/cm_docs/2010/f/1_ft_tea_report_artworkfinal_for_web.pdf)
- FAO. 2010. *Report of the nineteenth session of the intergovernmental group on tea: New Delhi, India, 12 – 14 May 2010.* [http://www.fao.org/unfao/bodies/ccp/tea/2010/index\\_en.htm](http://www.fao.org/unfao/bodies/ccp/tea/2010/index_en.htm)
- FAO. 2011. *EATTA 2011 market trends presentation.*  
<http://tea-convention.eatta.com/presentations.php>. Accessed 8-2-2011.
- FAOSTAT. <http://faostat.fao.org/default.aspx>
- Finlays website. <http://www.finlays.net/>
- IDH. 2010. *Case study Unilever sustainable tea Part 1: Leapfrogging to mainstream.*  
<http://www.idhsustainabletrade.com/thee-learning>
- IDH. 2011. *Case study Unilever sustainable tea Part 2: Reaching out to smallholders in Kenya and Argentina.*  
<http://www.idhsustainabletrade.com/thee-learning>
- IFOAM/Organic website. [http://www.ifoam.org/about\\_ifoam/standards/index.html](http://www.ifoam.org/about_ifoam/standards/index.html)
- International Tea Committee (ITC). 2011. Annual Bulletin of Statistics Supplement 2010.
- J. Thomas & Co Pvt. Ltd website. <http://www.ithomas-india.com/>
- KNVKT. 2010. *KNVKT Jaarverslag 2009.*  
[http://www.knvkt.nl/content/index.php?option=com\\_content&view=article&id=258&Itemid=231](http://www.knvkt.nl/content/index.php?option=com_content&view=article&id=258&Itemid=231)
- KTDA website. <http://www.ktdateas.com/>
- KTIB website <http://www.koffiethetee.nl/landing/>
- Lines, Thomas. 2006. *Sustainable Livelihoods for Indian Tea Workers: The International Dimension.*  
<http://www.dfid.gov.uk/r4d/SearchResearchDatabase.asp?OutPutId=177792>.
- Lipton website. [http://www.lipton.com/nl\\_nl/#FAQ-3,155](http://www.lipton.com/nl_nl/#FAQ-3,155)
- McLeod Russel website. <http://www.mcleodrusselindia.com/>
- Northjersey.com. 2011. "Market for iced tea, fresh-brewed or bottled, explodes in U.S."  
[http://www.northjersey.com/news/123209428\\_Market\\_for\\_iced\\_tea\\_fresh-brewed\\_or\\_bottled\\_explodes\\_in\\_U\\_S\\_.html](http://www.northjersey.com/news/123209428_Market_for_iced_tea_fresh-brewed_or_bottled_explodes_in_U_S_.html)
- Oxfam International. 2002. *The Tea Market – a background study.*  
<http://www.maketradefair.com/assets/english/TeaMarket.pdf>

- The Public Ledger. July 2011. *Special edition EATTA 2011*. Kenya: Mombasa
- Rainforest alliance website. <http://www.rainforest-alliance.org/agriculture/crops/tea>
- Tata Tea website. <http://www.tataglobalbeverages.com/Pages/index.aspx>
- TCC. 2010. *Tea Barometer 2010*. <http://www.teacoffeecocoa.org/tcc/Publications/Our-publications>
- Teeverband. 2011. *Tee als Wirtschaftsfaktor 2011*. [http://www.teeverband.de/jahresbericht\\_2010.pdf](http://www.teeverband.de/jahresbericht_2010.pdf).
- UTZ CERTIFIED website. <http://www.utzcertified.org/en/products/tea>
- UTZ CERTIFIED Good Inside. 2011. *Annual Report 2010*.  
<http://www.utzcertified.org/de/nachrichtenredaktion/neuigkeiten/2109-utz-certified-annual-report-2010>
- Van Rees website. <http://www.vanrees.com/>