

Sustainable Practices,
Certifications and Ecolabels
in Tea & Coffee Industries - A Bibliography

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**ENVIS (Environmental Information System) Ministry of Environment, Forest and Climate Change Government of India New Delhi** 

Year 2020-21

Compiled by

**CERC - ENVIS Resource Partner on Environment Literacy: Eco-labelling and Eco-friendly Products** 

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## **Foreword**

Coffee and Tea are beverages consumed extensively and these are most-traded commodity in the world. These beverage retailers and consumers alike have begun to advocate more environmentally friendly production methods and encourage these industries as a whole to use them. Moreover, they likewise promote profitable operating models for these producers within a context of environmental awareness, social benefits and global sustainable development reflections.

An increasingly large number of products are marked with morally loaded labels such as 'fair-trade', 'organically produced' and 'environment-friendly'—labels associated with social or environmental responsibility that speak to our conscience. 'Moral' labeling serves as a marketing device for attracting consumers with preference for social fairness or environmental altruism and some individuals are indeed willing to pay a premium for labeled products. As a coffee lover, when you walk into your local coffee shop you will find different roasts available. Somewhere below the name of the roast are a plethora of colourful eco-labels proclaiming the coffee to be Fairtrade, USDA Organic, Rainforest Alliance, or Bird-Friendly certified.

The Eco-labels of different countries have the mission to encourage cleaner production and influence consumers to promote a circular economy. Eco labels promote a willingness to pay more for the product. Previous research indicates that consumers must perceive high quality in order for a food product to command a premium and that consumer are not prepared to pay extra for the sake of environment alone. As consumer demand for safe and healthy food has increased over time, recent studies on the subject of consumers' attitudes toward products bearing certification labels have been undertaken. It is found that when organic products feature an organic certification label and a product features environment-friendly, a consumer's purchasing intention increases. It indicates that organic food certification and eco-labeling increases consumers' purchasing intentions and concurs that these foods are also relatively safe, secure and good for environment also.

Many institutes, research scientist, NGOs, international and national organisations have undertaken study to identify, measure, practice, implement and evaluate whether these certifications/labeling are enhancing sustainability or not. Research articles focus on measuring and evaluating the impacts of these certifications on sustainable farming through better ecological, social, or economic processes.

In order to fill the information gap on the subject "Product certification and ecolabelling for Tea and Coffee" the CERC-ENVIS Resource Partner has collected information from secondary sources. It is bringing out in an annotated bibliography. This bibliography will be useful as background as well as additional information on research projects, as reference tools and information tools. It will make readers aware of recent research on the subject to facilitate the writing of reports or publications.

It will be a good collection for libraries. It will make librarians or information officers aware of existing material on the subject. It covers the research articles, peer reviewed research papers, thesis, general articles and books indexed from 2004 to 2020.

We welcome comments and suggestions from users to enable us to improve.

### Mapping collaboration in international coffee certification research

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Scientometrics, Volume 124, 2020, 2597-2618p.

ISSN: 1588-2861 | 0138-9130

This article aims to map scientific production and cooperation networks on the theme of certified coffee in the Scopus and Web of Science databases for the period from 2009 to 2019. To this end, bibliometric analysis tools are used—collaborative networks, co-citation, co-authorship and bibliographic coupling—on a set of 209 articles from Scopus and 306 articles from the Web of Science database. The results of this study allow us to conclude that although the scientific production on coffee and certification has increased in Scopus and Web of Science during the last decade, the research on the theme has a low prevalence of collaborative networks and is concentrated in a small number of journals. It is noteworthy that environmental and sustainability studies play a leading role, while there is a scarcity of studies in the economic area.

Keywords: Certification, Label, Sustainability, Coffee, Certified Coffee

### Sustainability certification as a pillar to promote Indonesian coffee competitiveness

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IOP Conference Series: Earth and Environmental Science 418, 2020, 11p.

Coffee is an important agricultural product traded in global market. Coffee exportshave contributed significantly to the economic growth of Indonesia, reducing the trade deficitand partly solved the problem of poverty reduction for people, especially in rural area. The demand of high-quality coffee is growing fast. The demand from consumers for certified coffeeis also growing, and the price they are willing to pay has caught the attention of traders and producers. In global scope Authors have some sustainable coffee certifications including: Organic, Fair Trade Certified, Rainforest Alliance, Smithsonian Bird Friendly, UTZ Certified, and 4CCommon Code. The objective of this review is: (1) perspective analysis of sustainable coffeecertifications, (2) analysis of Indonesia coffee industry, and (3) strategy formulation inimproving practices and accountability of Indonesia coffee development in global supply chains. There is evidence for a range of social, economic, and environmental benefits of certification.

These certifications have the potential to create value for smallholders, as certain certified coffeecarries a market premium. In order to meet market demand, coffee farmers have had to adapt a good farming practice to qualify for certification.

**Keywords:** Sustainability, Certification, Competitiveness, Coffee, Fairtrade Label, Ecolabel, Label, Bird Friendly, UTZ Certified



EARTHTALK, January 06, 2020

This article talks about different ecolabels of coffee. There are some common eco-labels that all can vouch for given decades of trustworthy certifications. There is trustworthy eco-label seen often on coffee, fruits, tea, paper or furniture is "Rainforest Alliance Certified," a designation for foods and building materials sustainably sourced from tropical rainforests. The non-profit Rainforest Alliance runs this program in part by vetting producers throughout the tropics. There are products buy are sourced sustainably by workers who were not exploited and were paid a living wage, look for the "Fair Trade Certified" label. Almost a million workers across 45 different countries currently benefit from the sourcing or production of Fair Trade items. The "Certified Organic" label signifies that a food contains at least 95% organic ingredients. Some other trustworthy labels include: LEED, GreenSeal, FSC-Certified, Salmon-Safe, WaterSense and Non-GMO Project Verified.

Key words: Consumer Products, Ecolabeling, Coffee, Sustainability, Fairtrade Label, Ecolabel, Label, Consumer

### A brief history of ecolabels and sustainability standards

Saurab Babu Environment blogger at Eco-intelligent

Eco-Intelligent: Making the World Ecologically Intelligent, April 7, 2020

This is the first post of the ecolabels series. In this series, author explores what ecolabels are sustainability standards are, how they work and how understanding them can make you a responsible consumer. These ecolabels are common on consumer goods today and come with an assurance of environmental and social protection. But there were no such labels or standards till the 1980s. How did ecolabels emerge? And why, within just a few decades, did they become almost a necessity in the world market? The history of sustainability standards can be traced back to early public demand for ethical production in the late nineteenth century. It narrates how it started with Indonesian coffee plantations. A sustainability standard provides a list of specifications on how a product must be produced, emphasizing on avoiding environmental and social harm. Any producer who implements the specifications may display a label—an ecolabel—on their product so they can be recognized for their compliance with the standard.

**Keywords:** Sustainability, Standard, Coffee, Ecolabeling, Environment, Ecolabel



Kiowa County Press, Jan 1, 2020

With countless products now available labelled as "eco-friendly," "safe for the environment" or "organic," it's hard to know which ones are actually good for the planet. Many are legitimate, but lots of others feature deceptive or unsubstantiated claims. And even the legitimate labels vary a lot in meaning. Truly valid ecolabels are awarded by independent third parties, not the companies who sell products on which they're featured. These days, many companies are placing misleading claims and nonsense labels on their products to create the illusion of environmental friendliness, a practice known as "greenwashing."Third parties, on the other hand, require that products meet certain specific criteria before granting the right to display their eco-label. When consumers know they are trustworthy, eco-labels can serve as a potent means for altering consumer behavior in a way that benefits the environment. It provides information on some ecolabels which are reliable and trustworthy.

**Keywords:** Eco-labels, Coffee, Ecolabelling, Certification, Labels, Fair Trade, Coffee labels, Ecolabels, Ecofirendly, Greenwashing

# Coffee Landscapes Shaping the Anthropocene: Forced Simplification on a Complex Agroecological Landscape

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Current Anthropology, Volume 60, Number S20, August 2019, 236-250p.

#### ISSN: 0011-3204 | 1537-5382

Coffee was introduced to Mexico in the late eighteenth century, but it was not until the late nineteenth century that wealthy European immigrants purchased "unregistered" land and invested in coffee cultivation. Displaced farmers, mostly indigenous, returned to the region as plantation workers and learned how to cultivate coffee. After the Mexican Revolution and when land reform reached the southern states, small farmers began cultivating coffee. Coffee transformed landscapes and people in southern Mexico and today continues to do so. Focusing on the Soconusco region of the state of Chiapas in southern Mexico, we examine how coffee landscapes affect people and nonhuman nature. In particular, we discuss how "technified" coffee landscapes affect biodiversity and created the conditions that may have led to the coffee rust outbreak in 2012. Authors also discuss the impact of the plantation system on social relations and the impact that this system has on permanent and temporary farm workers. Finally, they explore potential connections between the ecological and social impacts of the plantation system in the Soconusco region.

Keywords: Coffee, Coffee Production, Certification, Coffee Landscape, Mexico

#### Effects of Fair-Trade Certification Standards on Performance of Coffee Cooperatives in Rwanda

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International Journal of Science and Research, Volume 8 Issue 10, October 2019, 278-283p.

#### ISSN: 2319-7064

Coffee farming in Rwanda is the major contributing crop to foreign exchange in agriculture sector. Its production has declined constantly, and it has not recovered since 1992 because of existing production are inefficient. Therefore, this study was designed to assess effects of fair-trade certification standards on performance of coffee cooperatives in Rwanda. Specifically, the study analyzed the effect of fair labor conditions on performance of coffee cooperatives in Rwanda. The study adopted descriptive study design. The target population included the staff of coffee cooperatives in Rwanda, which are producing and selling coffee. A sample of 152 staff members was computed from a population of 296 using Yamane's formula. Proportionate, stratified random sampling techniques were applied in this study in selecting the sampling size. The study adopted multiple regression models to explain the relationship between certification standards and cooperative performance. Data were presented in form of tables and charts and then, findings

showed that all coffee cooperatives in Rwanda are certified and largely comply with FLO certification standards. The findings further showed that fair labor conditions have positive significant effect on cooperative performance. The study recommends that cooperatives should give certification standards highest priority in a bid to improve their performance. For example, fair treatment of laborers should be embraced through offering competitive remunerations, conducting continuous training and abiding labor laws.

**Keywords:** Certification Standards, FLO Certification, Fair Labor Conditions, Coffee Cooperative Performance, Certification, Coffee

#### Ensuring Economic Viability and Sustainability of Coffee Production

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Columbia Center on Sustainable Investment, October 2019, 155p.

Coffee, the world's favorite beverage, provides livelihoods for at least 60 million people across dozens of countries. Yet this beloved drink is experiencing a sustainability crisis. A sustained decline in world coffee prices has squeezed coffee producers, and thrown a tremendous number of producers below the global extreme poverty line. This report presents research into sustainability within the coffee sector, including the results of analytical and empirical modeling, and provides several recommendations. Based on the research, authors believe there is a clear opportunity for coffee sector actors to work together to achieve greater sustainability within coffee production and in coffee growing regions.

**Keywords:** Economic Viability, Sustainability, Coffee Production, Global Extreme Poverty Line, Sustainability Crisis, Sustainability, Coffee

## Measuring Consumer Preferences and Willingness to Pay for Coffee Certification Labels in Taiwan

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Sustainability, Volume 11, Issue 5, 2019, 13p.

ISSN: 2071-1050

Sustainability certification labels have become an important tool for aiding consumers in evaluating food safety, health concerns, and environmental friendliness. Few studies have explored the attributes of consumers'

environmental consciousnesses from the perspective of environmental concerns; hence, Authors focus on that lack. Our study contributes to the need to better understand consumer attention to sustainability information when making coffee certification attribute choices.

Authors aimed to explore the importance that consumers attach to coffee certification attributes paid to these attributes while choosing and to willingness to pay (WTP). There were 650 questionnaires completed by those who had purchased coffee beans habitually in Taiwan; after factoring out the invalid questionnaires (i.e., those with omitted answers, incomplete answers, or those in which answers to all the questions received the same scale points were all deemed as invalid and removed), 568 valid ones were collected with a recovery rate of 87.4%. The results indicate that the respondents' WTP attributes ranked from highest to lowest are traceability, organic, graded, environmentally friendly, and fair-trade certifications. This study provides insights into how consumers' preferences relate to selection of coffee certification attributes.

**Keywords:** Environmental Friendliness, Choice Experiment, Sustainability Labels, Sustainability, Ecolabel, Coffee, Certification

## Nordic Ecolabelling for Coffee services

Nordic Council of Ministers Ecolabelling Norway Henrik Ibsens gate 20 NO-0255 Oslo

100 Coffee services, Version 1.2, 16 December 2019, 17p.

This document details the information on Nordic Swan Ecolabelled Coffee service. What are different services provided and why it is important to choose the Nordic Swan Ecolabel. It details what thecoffee service must cover the parts for Nordic Swan Ecolabelled. It details the process of application and what specifications are required for applying the services. It explains all points like Quality and environmental management requirements of the service, Environmental requirements, Requirements for transports, Requirements for chemicals in the usage phase, Energy requirements for the coffee machine, Environmental and health requirements for the coffee machine's components. It details Regulations for the Nordic Ecolabelling of services. The document covers services that include coffee machines, supplies and maintenance. This document is useful for those who are interested in adopting Nordic Ecolabelling for Coffee services.

Key words: Consumer Products, Ecolabeling, Coffee, Sustainability, Nordic Ecolabelling, Ecolabel

## What's in a label? Separating credible eco-labels from "greenwash"

Hamish Van DerVen

Corporate Knights: The voice for green capitalism, May 3, 2019

This article provides information for companies looking to bolster their green credentials, choosing the right ecolabel is far from straightforward. It demystifies a plethora of colourful eco-labels proclaiming the coffee to be Fairtrade, USDA Organic, Rainforest Alliance, or Bird-Friendly certified. Consumers may pause and wonder to themselves "do any of these labels really mean anything?" Does opting for one blend over another actually help to preserve the rainforest, improve worker wages, or keep toxic chemicals out of the food chain? The most credible eco-labels are the ones that are developed with close participation from all relevant stakeholders.

If an eco-label promotes sustainable coffee production, then it should involve coffee farmers, scientists, processers, NGOs, and community members (amongst others) in standard-setting. Sometimes, stakeholders will lack the means to attend important meetings. In these cases, it is incumbent on the standard-setter to set aside funds to help marginalized stakeholders participate in a meaningful way. Bringing lots of stakeholders to the table is the best way of ensuring that an eco-label is relevant to local conditions, sets the bar appropriately high, and avoids privileging some interests over others. This article illustrates many case studies and eco-labels that follow best practices.

**Keywords:** Eco-labels, Coffee, Ecolabelling, Certification, Labels, Fair Trade, Coffee labels, Ecolabels, Ecofirendly, Fair Trade Certified, USDA Organic, Rainforest Alliance, Bird-Friendly

### Why Food Reformers Have Mixed Feelings about Eco-Labels

Dan Charles Correspondent, Food and Agriculture Washington, USA

NPR, The Salt, WHAT'S ON YOUR PLATE, June 12, 2019

In this article author has described about the benefits of fair trade coffee. Explained that most fair trade products come from small farmers who are organized into cooperatives and that the certification guarantees a minimum price for their products. Defined some ethical labels and what they mean like Organic, Non-GMO, Cage-Free, Free range, Pasture raised, Grass-fed and fair trade. These labels are found on different foods. The article also described the benefits of fair trade coffee.

Keywords: Eco-labels, Coffee, Ecolabelling, Certification, Labels, Fair Trade

## What Are We Getting from Voluntary Sustainability Standards for Coffee?

Kimberly Ann Elliott Center for Global Development 2055 L Street NW, Fifth Floor Washington DC 20036

Washington, DC: Center for Global Development, CGD Policy Paper 129, August 2018, 34p.

Demand for and supply of "sustainable" coffee (and other commodities) has grown markedly for two decades, as has the literature analyzing the effects of voluntary sustainability standards for coffee. The evidence for assessing the impacts for smallholder producers and the environment remains relatively weak, however. A relatively small number of studies use methods that allow researchers to attribute observed outcomes to sustainability certifications. This paper reviews research from the past decade on the effects of coffee sustainability schemes to see what we have learned about the impact of such schemes, and whether positive livelihood effects are mainly the result of relatively better off households choosing to participate. Overall, the available research suggests that certification schemes can be beneficial, but context matters and the poorest, most vulnerable smallholder producers are able to comply with sustainability standards only with substantial external help.

Keywords: Sustainability, Certification, Coffee Certification, Costa Rica, Fair Trade, Sustainable Standards

#### The Effects of Fair Trade Certification: Evidence from Coffee Producers in Costa Rica

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NBER Working Paper Series, Working Paper 24260, 2018, 44p.

Authors study the effects of Fair Trade (FT) certification of coffee on producers and households in Costa Rica. Examining the production dynamics of the universe of Costa Rican coffee mills from 1999–2014, Authors find that FT certification is associated with a higher sales price, greater sales, and more revenues. These effects are greater when global coffee prices are lower and the FT guaranteed minimum price is binding. Looking at households, Authors find robust evidence that FT is associated with higher incomes for farm owners. Part of this is due to a transfer of incomes from farm owners to intermediaries whose incomes decrease due to FT. Authors found no effect of FT on unskilled workers, who are the more disadvantaged group within the coffee sector.

Keywords: Sustainability, Certification, Coffee Certification, Costa Rica, Fair Trade, Fairtrade

### The Impact of Coffee Certification on the Economic Performance of Indonesian Actors

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Ph. D Thesis, 2018, 183p.

### ISBN: 978 94 6159 820 2

The prevailing assumption among Western consumers is that buying certified coffee contributes positively to the economic performance of Southern actors, particularly smallholder farmers. Previous studies also show that economic prospects are among the most important reasons for farmers to participate in certification. However, studies researching the impacts of certification on farmers' livelihoods show conflicting and inconclusive results. Some reveal that certification has a direct and positive impact on farmers' income by guaranteeing minimum prices and contributing to a higher coffee productivity. Others however, conclude that certification negatively affects coffee yields and production costs, and therewith-coffee revenues, whereas a third group of research concludes that certification has no significant impact on economic performance at all. With this dissertation author connects to this inconclusiveness, as she wanted to contribute to a better understanding of the influence of coffee certification on the economic performance of Indonesian smallholder farmers.

Keywords: Sustainability, Certification, Coffee Certification, Indonesia, Fair Trade, Fairtrade, Western Consumer

### Analysis of coffee quality along the coffee value chain in Jimma zone, Ethiopia

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African Journal of Agricultural Research, Volume 13, Number 29), July 2018, 1468-1475p.

#### ISSN: 1991-637X

This study assesses the effect of cooperative, certification, private trader, farmers, sorting and processing methods on Arabica coffee quality. Coffee samples were collected from certified cooperatives, non-certified cooperatives, private traders and farmers (members of certified cooperatives, non-certified cooperatives and non-members of cooperatives). The study showed that coffee beans sampled from cooperatives had higher quality scores and were classified as specialty 1 (Q1) (33%) or specialty 2 (Q2) (67%). About 78% of coffee beans sampled from private traders fall in grade 3, while 22% of their beans qualified for Q2. Coffee certification, in general, did not add any value to coffee quality. No quality differences were also observed between coffee beans sampled from farmers. Coffee quality differences were observed between coffee processing methods. Dry processing method improved coffee quality. However, this can only be achieved by using ripe red cherries. Cherry sorting also improved coffee quality and the percentage of coffee samples that fall in Q1. In general, proper coffee cherries type together with site specific coffee processing approach helps coffee actors to produce high quality coffee.

Keywords: Arabica Coffee, Flavor, Body, Specialty, Cherry, Acidity, Certification, Coffee

# Looking good on paper: Review of recent research on the impact of sustainability certification on working conditions on large farms

Sanne van der Wal

The Netherlands: Stichting Onderzoek Multinationale Ondernemingen (SOMO), October 2018, 25p.

ISBN: 978-94-6207-138-4

For this research, SOMO reviewed published evidence about the effectiveness of sustainability certification initiatives on labour conditions at large-scale farms in low- and middle-income countries from 2014-2017. The evidence included field research by SOMO and researchers from SOMO compared this evidence with internationally agreed labour standards. The study reveals a pattern of recurring labour right violations on farms certified by almost all the well-known sustainability certification initiatives, such as Fairtrade and Rainforest Alliance. Only a handful of studies demonstrate some improvements in working conditions for farm workers as the result of sustainability certification schemes. SOMO concludes that changes and improvements are urgently needed for ambitious sustainability certification initiatives to help improve working conditions on farms across the developing world.

Keywords: Rainforest Alliance, Tea, Certification, Fairtrade, Certification, Sustainability, Coffee, SOMO

# Do private coffee standards 'walk the talk' in improving socio-economic and environmental sustainability?

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Global Environmental Change, Volume 51, July 2018, 1-9p.

ISSN: 0959-3780

Private sustainability standards cover an increasingly large production area and involve an increasing number of farmers worldwide. They raise expectations among consumers about the economic, ethical and environmental implications of food production and trade; and attract donor funding to certification schemes. The sustainability impact of standards remains unclear as research focuses on either economic or environmental implications. Authorsanalyze both the socio-economic and environmental impacts of coffee standards in Uganda and show that these are not in line with expectations created towards consumers. Authorsfind that standards improve either productivity and farm incomes or biodiversity and carbon storage but fail to eliminate trade-offs between socioeconomic and environmental outcomes, even when combined in multiple certifications. Our analysis is based on a unique combination of economic survey data and ecological field inventory data from a sample of certified and non-certified coffee farms. Our findings are relevant for farmers, food companies, policy-makers, donors and consumers. They imply that combining different standards in multiple certification is counterproductive; that the design of standards could improve to mitigate observed trade-offs between economic and environmental outcomes; and that this requires increased productivity within ecological boundaries, rather than a price premium and added control mechanisms through multiple certification.

**Keywords:** Food Standards, Private Food Standard, Coffee Certification, Sustainability, Sustainable Agriculture, Sustainable Food Production, Sustainable Food Consumption, Biodiversity, Carbon Storage, Agricultural Productivity, Poverty, Rural Development, Africa, Certification, Ecolabel

## Fairtrade and Sustainability: Motivations for Fairtrade Certification among Smallholder Coffee Growers in Tanzania

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Sustainability, Volume 10, Issue 5, 2018, 1551

Drawing on a survey of 148 Fairtrade-certified smallholder coffee farmers in the Kagera region of Tanzania, a quantitative investigation was performed on the farmers' motivations for Fairtrade certification. A factor analysis approach was used to analyze the importance of economic, social, and environmental motivations in farmers' decision-making on Fairtrade-labeled coffee certification. Moreover, three ordered log it models were estimated to assess the determinants of motivational behavior for Fairtrade certification among different socioeconomic groups in the survey sample. Overall, the results indicate that Fairtrade certification is predominantly economically motivated. Particularly, farmers are relatively less environmentally motivated to adopt the Fairtrade system. However, female coffee farmers are significantly more environmentally driven to adopt Fairtrade certification. Surprisingly, the results suggest that farmers' level of education has no significant influence on their motivation for Fairtrade certification. Moreover, lower-income and smaller-scale coffee farmers are less economically and environmentally motivated for Fairtrade certification. In light of these findings, Authorssuggest that efforts to promote Fairtrade certification among smallholder growers should be designed in ways that balance economic, social, and environmental outcomes. Furthermore, the findings call for targeted measures to strengthen Fairtrade's commitment to empowering disadvantaged smallholder farmers, including women, to achieve sustainable development goals in the region.

**Keywords:** Fairtrade, Small Farmers, Coffee, Tanzania, Factor Analysis, Ordered Logit Model, Certification, Ecolabel, Sustainability

# Eco-Label Effects in the Built Environment: Does Labeling a Light Source Environmentally Friendly Influence Performance and Judgment?

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SAGE Open, Volume 8, Number 2, 2018

ISSN: 2158-2440 | 2158-2440

Built environments with objects that are labeled "environmentally friendly" appear to change people's behavior. For example, one study has shown that labeling a desktop lamp "environmentally friendly" can enhance color discrimination, in comparison with when the lamp is labeled

"conventional," even though there is no physical difference between the two lamps. This article explored the generalizability and replicability of this label effect by asking participants to conduct a proofreading task on a desk lit up by a desktop lamp that was either labeled "environmentally friendly" or "conventional"; in reality, the two lamps were identical. Participants high in environmental concern performed better when the lamp was labeled "environmentally friendly." Moreover, the light from the lamp labeled "environmentally friendly" was rated as more comfortable. Taken together, the results seem to suggest that people's beliefs about the source (an environmentally friendly or a conventional lamp) from which the light originates change both rating of comfort and performance. Theoretical explanations and applied implications of these effects are discussed. In this study researcher considered coffee as a product.

Keywords: Eco-Label Effect, Environmentally Friendly, Lamp, Label, Environmental Concern, Coffee, Ecolabel, Label

### Environmental-friendly Eco-labeling Matters: Evidences from an ERPs Study

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Frontiers Human Neuroscience, Volume 12, 2018, 417p.

ISSN: 1662-5161

Nowadays, the international community is becoming increasingly concerned about the sustainable utilization of natural resources. In order to protect the environment and reward sustainable practices, eco-labeling that signifies the environmental friendliness of the labeled food is already widely promoted in many regions around the world. Thus, it is of great importance for researchers to study consumers' attitudes toward eco-labeled food as food is supposed to satisfy consumers' needs. This study employed the event-related potentials (ERPs) approach to investigate consumers' attitudes toward eco-labeled food by comparing their neural processing of visual stimuli depicting eco-labeled and non-labeled food. Results showed that behaviorally, participants preferred to buy eco-labeled food rather than non-labeled one. At the neural level, Authors observed markedly smaller P2 and N2 amplitudes when pictures of eco-labeled food were presented. Furthermore, Authors also found that amplitudes of P2 were negatively correlated with participants' purchase intention. Therefore, current findings suggest that, while the environmental-friendly eco-labeling was not to one's own interests, it might still be evocative, which induce consumers' positive emotion, bring less cognitive conflict to the purchase decision-making and then result in a greater purchasing intention. This effect might be the result of the delivered value of social desirability. Authors considered coffee in their studies under food category.

Keywords: Eco-Labeling, ERPS, P2, N2, Emotion, Purchase Intention, Coffee, Ecolabel, Label

#### What Are Authors Getting from Voluntary Sustainability Standards for Coffee?

Kimberly Ann Elliott Center for Global Development 2055 L Street NW, Fifth Floor Washington DC 20036 202-416-4000



Demand for and supply of "sustainable" coffee (and other commodities) has grown markedly for two decades, as has the literature analyzing the effects of voluntary sustainability standards for coffee. The evidence for assessing the impacts for smallholder producers and the environment remains relatively weak, however. A relatively small number of studies use methods that allow researchers to attribute observed outcomes to sustainability certifications. This paper reviews research from the past decade on the effects of coffee sustainability schemes to see what Authorshave learned about the impact of such schemes, and whether positive livelihood effects are mainly the result of relatively better off households choosing to participate. Overall, the available research suggests that certification schemes can be beneficial, but context matters and the poorest, most vulnerable smallholder producers are able to comply with sustainability standards only with substantial external help.

Keywords: Coffee, Certification, Sustainability, Ecolabel, Standards

#### Coffee certification in India: Awareness, practices and sustainability perception of growers

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Agroecology and Sustainable Food Systems, Volume 42, Number 1, 2018, 448-474p.

#### ISSN: 2168-3565 | 2168-3573

Certification programmes and voluntary standards for sustainability are now a common feature of many agricultural landscapes worldwide. The rapid expansion of such programmes has only recently been accompanied by concerted attempts to assess the lived experience of enrolled producers. This article reviews empirical research assessing the impact of certification programmes on coffee smallholder livelihood assets, and presents an initial framework for both conceptualising and analysing change in livelihood assets resulting from certification. Several of the reviewed studies identified enhanced livelihood assets arising from certification under specific institutional and contextual settings, but causation was difficult to establish. A greater number of studies found either neutral or mixed impacts, and a small number reported negative impacts. While a consensus has yet to be reached regarding all livelihood impacts of certification programmes, Authors present a series of propositions that reflect widely reported impacts. Further findings drawn from the review include: (i) stronger pre-existing institutions within the producer community are more likely to result in benefits for individual households; (ii) the value chain structures through which certification programmes are implemented are highly varied and strongly influence livelihood outcomes; and (iii) methodologically, existing studies rarely present either reliable baseline data or a realistic control group for comparison, making causation difficult to establish.

**Keywords:** Smallholders, Livelihoods, Coffee, Certification, Sustainability, Standards, Value Chains, Fair Trade, Ecolabel

### The State of Sustainable Markets 2018: Statistics and Emerging Trends

Julia Lernoud, Jason Potts, Gregory Sampson, Bernhard Schlatter, Gabriel Huppe, Vivek Voora, Helga Willer, Joseph Wozniak and Duc Dang International Trade Centre, Geneva

Geneva: International Trade Centre, October 2018, 198p.

#### ISBN: 978-92-9137-408-3 | 978-92-1-047447-4

This third global report provides new insights into the evolution of certified agriculture and forestry. This year's report is based on a global survey on voluntary sustainability standards, funded by the Swiss State Secretariat for Economic Affairs (SECO). The Research Institute of Organic Agriculture (FiBL), the International Institute of Sustainable Development (IISD), and the International Trade Centre (ITC) jointly produced this report, building on their complementary and in-depth expertise on sustainability standards. The data presented here cover the year 2016, where available, as well as earlier years. The report offers a comprehensive snapshot of significant growth in the adoption of global sustainability standards across nine sectors: bananas, cocoa, coffee, cotton, palm oil, soybeans, cane sugar, tea, and forestry. It provides market and statistical data on the nine sectors as well as ataglance tables on products and standards by country.

This report covers the following standards: 4C Association, Better Cotton Initiative, Bonsucro, Cotton made in Africa, Fairtrade International, Forest Stewardship Council, GLOBALG.A.P., IFOAM — Organics International, the Programme for the Endorsement of Forest Certification Schemes, ProTerra Foundation, Rainforest Alliance, the Roundtable on Sustainable Palm Oil, the Round Table on Responsible Soy, and UTZ.

**Keywords:** Sustainability, Certification, Competitiveness, Coffee, Fairtrade Label, Ecolabel, Label, Tea, Agriculture Products

### The State of Sustainable Markets 2018: Statistics and Emerging Trends

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**Keywords:** Sustainability, Certification, Competitiveness, Coffee, Fairtrade Label, Ecolabel, Label, Tea, Agriculture Products

# Looking good on paper: Review of recent research on the impact of sustainability certification on working conditions on large farms

Sanne van der Wal Senior Researcher SOMO, Sarphatistraat 30 1018 GL Amsterdam Netherlands

The Netherlands: Stichting Onderzoek Multinationale Ondernemingen (SOMO), October 2018, 25p.

#### ISBN: 978-94-6207-138-4

For this research, SOMO reviewed published evidence about the effectiveness of sustainability certification initiatives on labour conditions at large-scale farms in low- and middle-income countries from 2014-2017. The evidence included field research by SOMO and researchers from SOMO compared this evidence with internationally agreed labour standards. The study reveals a pattern of recurring labour right violations on farms certified by almost all the well-known sustainability certification initiatives, such as Fairtrade and Rainforest Alliance. Only a handful of studies demonstrate some improvements in working conditions for farm workers as the result of sustainability certification schemes. SOMO concludes that changes and improvements are urgently needed for ambitious sustainability certification initiatives to help improve working conditions on farms across the developing world.

Keywords: Rainforest Alliance, Tea, Certification, Fairtrade, Certification, Sustainability, Coffee, SOMO

### Coffee Certification and Forest Quality: Evidence from a Wild Coffee Forest in Ethiopia

Ryo Takahashi and Yasuyuki Todo Waseda University, Tokyo, Japan

World Development, Volume 92, April 2017, 158-166p.

ISSN: 0305-750X

Shade coffee certification programs that aim to conserve the forest and to prevent forest degradation have attracted an increasing amount of attention. However, such programs' impact on forest degradation remains unclear because of the absence of empirical evidence. In addition, there is heated debate about whether certification programs create an incentive for producers to expand their coffee-growing areas, which may accelerate forest degradation in the surrounding natural forest. This study, which was conducted in Ethiopia, aimed to evaluate the impact of a shade coffee certification program on forest degradation. Additionally, to provide empirical evidence for the debate, Authors examined the spillover effects of certification to surrounding forest areas and used remote sensing data of 2005 and 2010 to classify forest areas based on their density. Authors applied matching methods, such as the propensity score matching with different algorithms, to compare forest coffee areas with and without the certification. They found that the certified forest coffee areas slightly increased in forest density. By contrast, they observed drastic forest degradation in the forest coffee areas without certification. Authors checked the sensitivity of our results and found that our results are robust to potential hidden bias. Furthermore, our empirical results revealed that the natural forest areas within a 100-m radius from the forest coffee boundary area exhibited significantly reduced forest degradation compared with forest areas under similar environmental conditions but that such positive and significant impact diminished after 100-m distance. These results indicate that the certification program is effective in alleviating forest degradation in the certified area and in the surrounding natural forest.

Keywords: Shade Coffee, Coffee, Certification, Impact Evaluation, Remote Sensing, Ethiopia, Africa, Sustainability

### Coffee Certifications as Potential Pathways to Women's Empowerment in Costa Rica

Laura N. Stein

University of Montana, Missoula, MT, USA

Graduate Student Theses, Dissertations, & Professional Papers, 11101, Fall 2017, 149p.

The market for certified coffee is rapidly expanding and influencing the environmental, economic, and social conditions of global coffee production. Overarching goals of coffee certification schemes, such as fair trade, include encouraging sustainable production practices and promoting equitable trade relations that enhance economic stability and quality of life for producers. Women play a significant role in the coffee industry; yet, they typically have little control over resources and harvest proceeds and limited participation in decision-making processes. Although some certification schemes, namely Fairtrade International, include gender equality and women's empowerment initiatives, knowledge and understanding of how certifications can create pathways to women's empowerment remain limited. To address this gap in knowledge, this research consists of a case study comparing two coffee organizations in Costa Rica: CoopeAgri, a mixed gender fair trade- certified cooperative, and ASOMOBI, an all-women's non-fair trade certified association. Qualitative methods were employed to obtain in-depth data exploring women's experiences in the Costa Rican coffee industry and their perspectives on certification schemes and empowerment. Data was analyzed using Jo Rowlands' (1995) framework conceptualizing empowerment as a result of cultivating forms of "positive power."

Results suggest that while certification schemes minimally contribute to some components of empowerment, primarily through increased incomes and access to resources in organizations, economic and social factors (e.g. low consumer demand for certified coffee, persistence of traditional gender roles) limit certifications' capacity to create pathways to empowerment. This study also explores how the scale and structure (i.e. women-only versus mixed-gender) of local organizations influence their ability to facilitate women's empowerment. Results indicate that smaller-scale; women-only settings may be more effective for creating pathways to empowerment for women in the Costa Rican coffee industry. Results of this preliminary study provide a base upon which future research examining certification schemes and women's empowerment can be built.

**Keywords:** Social Capital, Voluntary Certifications, Coffee Cooperatives, Costa Rica, Certifiction, Ecolabel, Label, Fairtrade, Fair Trade

### Social Capital and Sustainable Coffee Certifications in Costa Rica

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Human Ecology, Volume 45, 2017, 235-249p.

#### ISSN: 0300-7839 | 1572-9915

Social capital has many applications in the adoption and management of voluntary certifications such as Fair trade, Rainforest Alliance, Utz, and CAFE Practices. We used a mixed-methods approach to assess social capital in five Costa Rican coffee cooperatives. We applied this information to its effects on the management of sustainable coffee certifications. We found that the level of social capital affects the manner in which cooperatives manage certifications in terms of incentivizing certified members, distributing the profits from certification, and cooperating with outside organizations. Generalized trust was found to have an important link with voluntary participation in Rainforest Alliance certification when no financial incentive was provided. However, given the small differences among the cooperatives in micro-scale social capital, we conclude that certifications have not or have not yet made great impacts on the social capital on the micro-scale. This research presents important considerations for employing certifications and other sustainable development projects in different national contexts.

**Keywords:** Generalized Trust, Social Capital, Voluntary Certifications, Coffee Cooperatives, Costa Rica, Certification, Ecolabel, Label, Fairtrade, Fair Trade

#### Environmental-economic benefits and trade-offs on sustainably certified coffee farms

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Ecological Indicators, Volume 79, August 2017, 330-337p.



Coffee with diverse shade trees is recognized as conserving greater biodiversity than more intensive production methods. Sustainable certification has been proposed as an incentive to conserve shade grown coffee. With 40% of global coffee production certified as sustainable, evidence is needed to demonstrate whether certification supports the environmental benefits of shade coffee. Environmental and economic data were taken from 278 coffee farms in Nicaragua divided between non-certified and five different sustainable certifications. Farms were propensity-score matched by altitude, area of coffee and farmer education to ensure comparability between non-certified and certified farms. Farms under all certifications had better environmental characteristics than non-certified for some indicators, but none were better for all indicators. Certified farms generally received better prices than non-certified farms. Farms with different certifications had different investment strategies; C.A.F.E. Practice farms had high investment and high return strategies, while UTZ and Organic farms had low investment, low productivity strategies. Tree diversity was inversely related to productivity, price and net revenue in general, but not for certified farms that received higher prices. Certification differentiates farms with better environmental characteristics and management, provides some economic benefits to most farmers, and may contribute to mitigating environment/economic trade-offs.

Keywords: Carbon stocks, Certification, Organic, Shade Coffee, Tree Diversity, Ecolabel, Coffee, Sustainability

#### A Turn in Green Purchase Intentions through Eco-Labelling

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International Journal of Engineering Research & Technology (IJERT), Volume 5, Issue 11, Special Issue-2017, 6p.

#### ISSN: 2278-0181

To catch the customer and sustain in the market, Eco-labeling is emerging as a buzzword in the market. Eco labels are defined as an apparatus which influences the Purchase Intentions of the customer. It has been recognized that Eco Labeling leads to Consumer Attrition influence the purchase decision of the customer. Existing Research explore a discussion that how Eco labels build consumer attrition and influence buying decision or behavior of the customer. This is a review conceptual paper which represents the synthesis of all the possible factors for measuring the pre buying behavior of the customer. A framework is proposed which haul customers towards Green Buying Decision through Eco labeling. As Eco labeling create customer attrition with various factors like generating awareness, knowledge, trust and so on to influence purchase intentions of the customer. Finding shows that Eco Labeling coerce the Green Purchase Intentions of the customer and considered as a unique source for the Marketers. Conclusion Drawn out as Eco labeling aids customer attraction & trust towards the labeled product which directs to influence the purchase intentions of the customer. Authors considered coffee in their studies as ecolabelled product.

Keywords: Eco-Labeling, Consumer Attrition, Green Purchase Intentions, Consumer Perception, Coffee, Ecolabel

### Green Products Recognition, Understanding, and Preference: The Case of Coffee Eco-Labels

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SSRN: Elsevier, December 21, 2017, 37p.

Author conducted a survey to gauge consumer awareness, understanding, and preferences for coffee eco-labeling. The survey covers the following labels: Rainforest Alliance Certified, Fair Trade Certified, USDA Organic, Bird Friendly and UTZ. The results, based on more than 800 responses, show that the USDA Organic label was the most recognized, followed by Fair Trade, Rainforest Alliance, Bird Friendly, and lastly UTZ. Rainforest Alliance, Bird Friendly, and UTZ were the least understood eco-labels. Respondents were given definitions of each eco-label and then asked how appealing certain components of the coffee certification are. They rated each component on a scale of 1 (not appealing) to 7 (very appealing). "Environmental sustainability" had the highest average response, followed by "no pesticides", "social justice", "animal welfare", "birds", and lastly "third-party certification." The descriptions of the Fair Trade and USDA Organic labels had a positive effect on respondents' willingness to make future purchases of coffee products displaying these labels. The description of the UTZ label had the least enthusiastic response. Generally, the majority of respondents reacted favorably, indicating they were likely, very likely, or extremely likely to purchase coffee from any of the five labels after having read a description of what the labels represent. Participants were also asked about their attitudes towards the environment and their perceived altruism using the New Economic Paradigm (NEP) and the Altruism (ALT) scales.

Keywords: Ecolabels, Green Products, New Economic Paradigm, Altruism, Coffee, Eco Labels, Fairtrade

# How Can High-Biodiversity Coffee Make It to the Mainstream Market? The Performativity of Voluntary Sustainability Standards and Outcomes for Coffee Diversification

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Environmental Management, Volume 59, 2017, 230–248p.

#### ISSN: 1432-1009 | 0364-152X

This article investigates the outcomes of mainstream coffee voluntary sustainability standards for high-biodiversity coffee diversification. By viewing voluntary sustainability standards certifications as performative marketing tools, Authors address the question of how such certification schemes affect coffee value creation based on unique biodiversity conservation properties in coffee farming. To date, the voluntary sustainability standards literature has primarily approached biodiversity conservation in coffee farming in the context of financial remuneration to coffee farmers. The performative analysis of voluntary sustainability standards certification undertaken in this paper, in which such certifications are analyzed in terms of their effect on mutually reinforcing representational, normalizing and exchange practices, provides an understanding of coffee diversification potential as dependent on standard criteria and voluntary sustainability standards certification as branding tools. Authors draw on a case of high-biodiversity, shade-grown coffee-farming practice in Kodagu, South-West India, which represents one of the world's biodiversity "hotspots".

**Keywords:** Voluntary Sustainability Standards, Biodiversity, Marketing Performativity, Coffee, Certification, Label, Sustainability

### What Do Coffee Certifications Really Mean?

Royal Cup P.O. Box 170971 Birmingham, AL 35217-0971

Royal Cup Coffee and Tea, March 29, 2017

Today, coffee certification is everywhere -- in grocery stores, restaurants, and even offices. Today the consumer wants to know where their purchases are coming from. This is especially true in the food supply chain, and coffee is no different. This article details different types of coffee certifications and different blends of coffee.

Keywords: Coffee, Certification, Sustainability, Standards, Ecolabel, Certification Programs, Certified Coffee

#### Reviewing the impacts of coffee certification programmes on smallholder livelihoods

Joshua G. Bray and Jeffrey Neilson School of Geosciences, Sydney University, Sydney, Australia

International Journal of Biodiversity Science, Ecosystem Services & Management, Volume 13, Number 1, 2017, 216–232p.

#### ISSN: 2151-3732 | 2151-3740

Certification programmes and voluntary standards for sustainability are now a common feature of many agricultural landscapes worldwide. The rapid expansion of such programmes has only recently been accompanied by concerted attempts to assess the lived experience of enrolled producers. This article reviews empirical research assessing the impact of certification programmes on coffee smallholder livelihood assets, and presents an initial framework for both conceptualising and analysing change in livelihood assets resulting from certification. Several of the reviewed studies identified enhanced livelihood assets arising from certification under specific institutional and contextual settings, but causation was difficult to establish. A greater number of studies found either neutral or mixed impacts, and a small number reported negative impacts. While a consensus has yet to be reached regarding all livelihood impacts of certification programmes, Authors present a series of propositions that reflect widely reported impacts. Further findings drawn from the review include: (i) stronger pre-existing institutions within the producer community are more likely to result in benefits for individual households; (ii) the value chain structures through which certification programmes are implemented are highly varied and strongly influence livelihood outcomes; and (iii) methodologically, existing studies rarely present either reliable baseline data or a realistic control group for comparison, making causation difficult to establish.

**Keywords:** Smallholders, Livelihoods, Coffee; Certification, Sustainability, Standards, Value Chains, Fair Trade, Ecolabel, Environment Friendly



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Thesis for the fulfillment of the MBA course, 2017, 19p.

This paper examines Starbucks' corporate strategy of sustainable efforts in Ethiopia, particularly in the sustainable sourcing Arabica coffee. The paper discusses the value chain of coffee, issues surrounding the coffee supply chain and the need for sustainable coffee production. In addition it also discusses Starbucks' position and influence on the coffee trade, and the measures that Starbucks is taking to ensure sustainability efforts throughout the coffee supply chain. Coffee affects the lives of over 25 million farmers in more than 70 countries around the world, many of which are developing regions. The coffee value chain is made up of the four main phases: Cultivation, Processing, Roasting, and Consumption. Each phase in the process has environmental, social, economic and governance issues that affect the future sustainability of extracting the coffee bean. Traditional coffee production methods can often adversely affect the surrounding environment through the use of harmful chemicals and unnecessary deforestation. Social issues arise due to poor labor practices combined with unfair wages and low prices of coffee.

**Keywords:** Smallholders, Livelihoods, Coffee; Certification, Sustainability, Supply Chain, Value Chains, Fair Trade, Ecolabel, Environment Friendly, Starbucks, Starbucks' CAFÉ program

# Credibility of propensity score matching estimates. An example from Fair Trade certification of coffee producers

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Applied Economics, Volume 48, Issue 44, 2016, 4227-4237p.

ISSN: 0003-6846 | 1466-4283

Propensity score matching (PSM) is an increasingly popular method for evaluation studies in agricultural and development economics. However, statisticians and econometricians have stressed that results rely on un-testable assumptions, and therefore, guidelines for researchers on how to improve credibility have been developed. We follow one of these guidelines with a data set analysed by other authors to evaluate the impact of Fair Trade certification on the income of coffee producers. Authors provide thereby a best practice example of how to evaluate the credibility of PSM estimates. They find that a thorough assessment of the assumptions made renders the data we use not suitable for a credible PSM estimation of the effects of treatment. Authors conclude that the debate about the impact of Fair Trade certification would greatly benefit from a detailed reporting of credibility checking.

**Keywords:** Credibility, Propensity Score Matching, Evaluation, Coffee, Certification, Ethiopia, Sustainability, Labelling, FairTrade

## Impact of Fair-Trade Coffee Certification on Smallholder Producers: Review Paper

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Global Journal of Management and Business Research: B Economics and Commerce, Volume 16, Issue 5, Version 1.0, 2016, 9p.

#### ISSN: 2249-4588 | 0975-5853

This paper focuses on the impact of Fair trade-certified coffee and the impact of the broader social movement termed Fair Trade. Many of the studies focus on the outcomes (e.g. higher incomes, or new skills) or livelihood impacts. In this paper different dimension of Fair trade impact including: economic, quality of life/wellbeing, social, empowerment and environmental impacts are explored.

Keywords: Fair Trade, Income, Social, Environments, Sustainability, Certification, Coffee, Fairtrade

### Sustainably Developing the Vietnamese Coffee Industry

Fang Zhang Cornell University Ithaca, NY 14850, United States

Cornell Policy Review, April 15, 2016, 7p.

Nearly 125 million people around the world depend on coffee for their livelihoods. In the last decade of the twentieth century, Vietnam's GDP increased at an average of 7.7%, with coffee an important contributor to the country's overall economic expansion. The significant growth in coffee production has enabled a large number of Vietnamese farmers to make a living from coffee; while in 1994 some 60% of the Vietnamese population lived below the poverty line, now less than 10% do. Small-scale coffee-growing farmers, for whom coffee is their main source of income, comprise the majority of coffee-growing households in Vietnam. These households have long struggled with issues surrounding coffee production and exportation for global commodity markets. While exporting coffee can potentially provide farmers the opportunity to improve their livelihoods, households have to respond assertively to increasing competitions in the international environment in various aspects. However, as Vietnam's key export, the Vietnamese coffee industry has no globally known self brands such as the 100% Colombian Coffee or coffee chains, which has prevented it from accessing substantial premiums and reaping wider profit margins in the global market.

Keywords: Sustainability, Certification, Coffee, Vietnam, Organic Certification, Ecolabel, Fairtrade, Fair Trade

# Does environmental certification in coffee promote "business as usual"? A case study from the Western Ghats, India

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Ambio, Volume 45, Issue 8, December 2016, 946–955p.

ISSN: 0044-7447

Conservation initiatives are designed to address threats to forests and biodiversity, often through partnerships with natural-resource users who are incentivized to change their land-use and livelihood practices to avoid further biodiversity loss. In particular, direct incentives programmes that provide monetary benefits are commended for being effective in achieving conservation across short timescales. In biodiversity-rich areas, outside protected areas, such as coffee agroforestry systems, direct incentives, such as certification schemes, are used to motivate coffee producers to maintain native tree species, natural vegetation, restrict wildlife hunting, and conserve soil and water, in addition to encouraging welfare of workers. However, despite these claims, there is a lack of strong evidence of the on-ground impact of such schemes. To assess the conservation importance of certification, they describe a case study in the Western Ghats biodiversity hotspot of India, in which coffee growers are provided price incentives to adopt Rainforest Alliance certification standards. Authors analyse the conservation and social outcomes of this programme by studying peoples' experiences of participating in certification. Despite high compliance and effective implementation, Authors find a strong case for the endorsement of 'business as usual' with no changes in farm management as a result of certification. They find that such 'business as usual' participation in certification creates grounds for diminishing credibility and local support for conservation efforts. Working towards locally relevant conservation interventions, rather than implementing global blueprints, may lead to more meaningful biodiversity conservation and increased community support for conservation initiatives in coffee landscapes.

Keywords: Agroforestry, Asia, Certification, Incentives, Perceptions, Coffee, Ecolabel, Sustainability

## Is Eco-Certification a Win–Win for Developing Country Agriculture? Organic Coffee Certification in Colombia

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World Development, Elsevier, Volume 82, Issue C, 2016, 14-27p.

#### ISSN: 0305-750X

According to advocates, eco-certification is a win—win solution to the problem of environmental degradation caused by developing country agriculture, improving both the environmental and the economic performance of farmers. However, these notional benefits can be undercut by the tendency of relatively wealthy farmers already meeting eco-certification standards to disproportionately participate. Using original farm-level survey data along with matching and matched difference-in-differences models, Authors analyse the producer-level effects of organic coffee certification in southeastern Colombia. Authors find that certification is associated with changes in farm practices linked to improved environmental outcomes. It significantly reduces sewage disposal in the fields and increases the adoption of organic fertilizer. However, Authors are not able to discern economic benefits.

Keywords: Organic Certification, Coffee, Colombia, Difference-In-Differences Matching, Certification, Label

## Understanding Coffee Certification Dynamics: A Spatial Analysis of Voluntary Sustainability Standard Proliferation

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International Food and Agribusiness Management Review, Volume 19, Issue 3, 2016, 31-56 p.

#### ISSN: 1559-2448

Third-party Voluntary Sustainability Standards (VSS) have emerged as an increasingly popularstrategy to guarantee sustainability in the coffee value chain. Yet, knowledge of the populationcharacteristics of certified farmers, and of the influence of transnational and local supply chainactors on the uptake of VSS at the producer level is still scarce. Using expert interviews, acomprehensive database of certificate holders and spatial mapping analyses, this paper adds topresent knowledge concerning the effectiveness of VSS in the coffee sector in three ways. First, it showcases the structural, geographical and socio-economic tendencies toward VSS adoption in Guatemala, Colombia and Costa Rica, and allows first insights in the additionality and effectiveness of certification schemes derived from these indicators. Second, it contributes to anup-to-date understanding of the coffee supply chain, a sector of great economic importance bothto producing and consuming countries that is in constant flux and reorganization, and it explainshow current VSS interact with this type of global supply chain. Finally, through the construction of a comprehensive population of certified farmers, it enables better evaluation of existing casestudies, generalizability, possible biases and provides valuable information for the preparation offuture impact evaluation projects.

**Keywords:** Voluntary Sustainability Standards, Standard Take-Up, Coffee, Sustainable Value Chains, Certification, Ecolabel

## Measuring impacts of certification on biodiversity atmultiple scales: experience from the SAN/RainforestAlliance system and priorities for the future

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Policy Matters 2016: Certification and Biodiversity, 2016, 24p.

Voluntary certification standards (VCS) in agriculture and forestry typically include the protection of biodiversity among their objectives or requirements. This outcome is advanced through a rangeof mechanisms, from prohibitions on destroying certain types of natural ecosystems to requirements to conserve native species cooccurring in production systems to controls on negative externalities that can harm biodiversity, such as polluted runoff. Conservation results may be achieved at arange of scales—from smallholder farms to large landscapes—and as either direct or indirectconsequences of implementing VCS. These myriad considerations point to the need for nuancedevaluation frameworks to understand effects on biodiversity across large certification portfolios. While also evaluating the causality of VCS interventions on changes in biodiversity attribute. Here, Authors synthesize experience and perspectives from the VCS community to present a generalized assessment framework for understanding effects of VCS on biodiversity. Authors then use the example of the Sustainable Agriculture Network (SAN)/Rainforest Alliance certification system to illustrate the application of this framework to an agricultural standard covering about 3.5 million hectaresand 1.2 million producers across 42 countries. The framework integrates evidence from multipledata sources, including basic attributes of certified operations, data on the adoption of biodiversity friendly practices as revealed by annual audits, and research studies assessing biodiversity outcomesat farm and landscape level. Based on experience from evaluating biodiversity effects of the SAN/Rainforest Alliance system from 2011-2014, Authors reflect critically on challenges, opportunities, andfuture priorities for evaluating and improving the biodiversity conservation benefits of VCS morebroadly.

**Keywords:** Biodiversity, Certification, Evaluation, Impact Assessment, Sustainable Agriculture, Certification, Ecolabel, Tea, Coffee, Labelling

### Fair Trade or Fake Trade? Specialty Coffee Certifications and Development in Uganda

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Independent Study Project (ISP) Collection, 2172, Fall 2015, 75p.

This project examined the relationship between specialty coffee certifications and development. The focus was exploring the local and national implications Fairtrade coffee certifications have in Uganda. Coffee is a critical commodity, accounting for 15% of Uganda's foreign exchange and engaging over one million households in production. Currently, specialty certified coffees including Fairtrade, Rainforest Alliance, and 4C make up only four percent of total production. However, under Uganda's 2013 National Coffee Policy, there is a target to expand specialty production to 24 percent. It is therefore imperative to understand how these specialty certifications affect primary producers participating as well as the capacity certifications have to promote development locally and nationally. This study surveyed 100 farmers, 55 of which were selling to Fairtrade cooperatives. It concludes that the developmental benefits derived from Fairtrade are largely local in scope. A stronger relationship between Fairtrade and development promotion was found among Robusta farmers over Arabica growers. If expansion of specialty certified coffees are to be undertaken, stronger regulations mechanisms on behalf of the Ugandan government are necessary. While Fairtrade has significant benefits for many participating producers, it should not be viewed as a viable tool for national development. Rather, government action to rectify larger global trade inequalities and complete restructuring of support for the agricultural sector are needed in order to achieve this development.

Keywords: Fairtrade, Farm, Certification, Uganda, Coffee, Sustainability

## The effect of specialty coffee certification on household livelihood strategies and specialisation W. Vellema<sup>1</sup>, A. Buritica Casanova<sup>2</sup>, C. Gonzalez<sup>2</sup> and M. D'Haese<sup>1</sup>

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Food Policy, Elsevier, Volume 57(C), 2015, 13-25p.

ISSN: 0306-9192

Farm certification is rapidly becoming a sine qua non for access to specialty coffee markets. At the centre of these changes are smallholder coffee producers, responsible for 80% of global coffee production. Although rural households are known to depend on more than agricultural production alone, the literature on specialty coffee and certification has rather narrowly focused on coffee income and production. In this study, broader impacts are explicitly taken into account. Household income was decomposed into categories corresponding to specific incomegenerating activities and coffee income was broken down into price, yield and area effects. Results show that coffee certification encourages farmers to specialise in coffee production, increasing coffee income but not total household income, at least not in the short run. The time and effort required to attain the higher coffee income offered by certified production means farmers have to give up other activities. This substitution effect cancels out the income effect, such that there is no increase in total household income. The lack of an effect on total household income suggests the return to the additional labour effort required for certified coffee production is not higher than in other activities, questioning the benefits of certification for small-scale producers.

**Keywords:** Specialty Coffee, Farm, Certification, Smallholder Producers, Income Diversification, Livelihood, Strategies, Impact Pathways, Coffee, Sustainability

# The Impact of Sustainable Certifications on Coffee Farming Practices: A Case Study from Tarrazú Region, Costa Rica

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Master Thesis In partial fulfillment of an M.Sc.in Agricultural Development, 2015, 87p.

During the past decades, sustainable coffee certifications have become increasingly popular amongst the global consumer audience. These seals often evoke the impression that by buying certified coffee, environmental and socio-economic conditions in coffee production are improved. Many of the certifications rely on producer cooperatives to reach the individual farmer. However, studies investigating how theoretical certification standards are put into practice at farm-and cooperative level are scarce. This is especially the case for environmental standards. In consequence, it is not clear what constraints farmers and cooperative managers face in "greening" practices as aimed for by certifications.

This case study portrays how environmental certification guidelines are implemented in two adjacent coffee cooperatives in Tarrazú region, Costa Rica. The objective was to investigate the impact of certifications on farming practices and to identify the main farm-and cooperative-level constrains for a more sustainable coffee production. The certifications researched were Fairtrade and C.A.F.E. Practices, which are managed as group certifications by the cooperatives (all farmers are certified collectively) as well as Rainforest Alliance, which is managed as individual certification (only some of the farmers at one of the cooperatives are certified). A mixed-methods approach was used, combining both quantitative and qualitative data. Data were mainly derived from a questionnaire survey with farmers (n=47), discussions with cooperative administrators (n=5), and key person interviews (n=2). Review of internal documents as well as review of secondary data complemented the findings.

The study found that farmers being only certified Fairtrade and C.A.F.E. Practices are largely not aware of their participation in the programs. Thus, changes in farming practices due to group certifications could only to a very limited extent be identified. In the case of Rainforest Alliance, the main changes due to certifications as pointed out by certified farmers were an increased use of vegetation barriers as well as the banning of certain types of agrochemicals. For the sample as a whole, since the introduction of certifications it could be observed a "greening" of farming practices.

This applies to the use of herbicides as well as shade providing species in coffee fields, and to a limited extent regarding the use of compost/coffee pulp as soil amendments. Drawing from the questionnaire survey and various discussions with cooperative administrators, group certifications were found to have an impact on farming practices. They indirectly influence farming practices through the cooperatives. The effect of certifications on farming practices is relativized by the fact that the integration of certification standards into the cooperatives' services happened in an environment of an already ongoing discourse.

The study identified as major constraints for a sustainable coffee production as fostered by certifications on the farm-level: the occurrence of a new pest, a new generation of farmers using more inputs as well as the farmers' perceptions of organic fertilizers/soil amendments as being inefficient and impractical. On the cooperative level, the major constraints were the two-fold strategies of the cooperatives which have to balance productivity and environmental sustainability goals, as well as a lack of capacities to disseminate information. Findings suggest that strengthening of the cooperatives' capacities and/or technical assistance are key to mediating a "greening" impact of certifications on farming practices.

**Keywords:** Sustainability, Certification, Coffee Certification, Coffee, Southern Perspective, Fair Trade, Fairtrade, Costa Rica

## Farmer Preferences for Coffee Certification: A Conjoint Analysis of the Indonesian Small holders Muhammad Ibnu<sup>1</sup>, Pieter Glasbergen<sup>1</sup>, Astrid Offermans<sup>1</sup> and Bustanul Arifin<sup>1,2</sup>

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Journal of Agricultural Science, Volume 7, Number 6, 2015, 20-35p.

#### ISSN: 1916-9752 | 1916-9760

Most coffee certification schemes are developed by Northern-based businesses and NGOs to regulate theproduction of coffee in the South. It is questionable whether these Northern-driven standards correspond to thepreferences of coffee farmers in the South. Understanding farmer preferences and taking them into account whendeveloping or improving certification schemes is believed to lead to more internalized and therefore moreeffective standards. However, there is a lack of information on farmer's preferences, both in the academicliterature as well as with the certification programs themselves. Based on conjoint analysis and interviews, thispaper investigates the preferences of coffee smallholder farmers in Indonesia. The smallholders surveyed includefarmers registered with global certification schemes (i.e. Rainforest Alliance, UTZ certified, and 4C), a local certification scheme (In office) and uncertified farmers. Results indicate that farmers in the different groups do not differ much in terms of their preferences. Moreover, although farmers value environmental conservation, their preferences regarding certification are mainly economically driven. This leads us to conclude that sustainabilitycertification of coffee is only weakly institutionalized in the farmer's context.

**Keywords:** Sustainability Certification, Coffee Certification, Smallholder Preferences, Southern Perspective, Conjoint Analysis, Indonesia

#### In the Pursuit of Sustainability: Lessons from the Coffee Sector

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International Journal of Environmental Protection and Policy, Volume 3, Number 1, 2015, 14-19p.

#### ISSN: 2330-7528 | 2330-7536

Recent years have shown an impressive and growing concern about sustainable production of food, fiber and oilcrops. As more crops become incorporated into the sustainability realm, which often involves a certification of prescribed production methods/conditions, lessons can be learned from sectors with extant sustainability initiatives. For biofuels, a sector with rapidly expanding areas devoted to cropland worldwide and some debated benefits in both social and environmentalissues, lessons from the sustainable coffee sector's history and development can provide insights about possible paths towards ustainability. This paper presents some of the history and development of the sustainable coffee sector, emphasizing the role of science and inter-institutional relations in the emergence of several initiatives. A number of key issues and themes toconsider are explored, hopefully providing some direction to those in the biofuels sector with an interest in sustainability.

Keywords: Sustainability, Coffee, Biofuels, Certification, Eco-Labels, Ecolabels, Certification, Labels

# An eco-label effect in the built environment: Performance and comfort effects of labeling a light source environmentally friendly

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Journal of Environmental Psychology, Volume 42, June 2015, 123-127p.

#### ISSN: 0272-4944

People tend to idealize eco-labeled products, but can eco-labeling have consequences for performance? To address this question, 48 university students were asked to undertake a color discrimination task adjacent to a desktop lamp that was either labeled "environmentally friendly" or "conventional" (although they were identical). The light of the lamp labeled "environmentally friendly" was rated as more comfortable. Notably, task performance was also better when the lamp was labeled "environmentally friendly". Individual differences in environmental concern, but not pro-environmental consumer behavior and social desirability indexes, were related to the magnitude of the eco-label effect on performance. Whilst some previous studies have shown similar placebo-like effects of eco-labels on subjective ratings, this is the first study to show an eco-label effect for artifacts in the built environment on performance, and the first study to relate this effect to environmental concern. Psychological mechanisms that may underpin the eco-label effects are discussed. Authors considered coffee in their studies under ecolabelled products.

Keywords: Eco-label effect, Light Source, Comfort Performance, Built Environment, Coffee, Ecolabel, Label

# Eco-certification and coffee cultivation enhance tree cover and forest connectivity in the Colombian coffee landscapes

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Regional Environmental Change, Volume 15, 2015, 25–33p.

#### ISSN: 1436-378X | 1436-3798

Eco-certification of agricultural commodities offers an appealing option to promote more sustainable practices among smallholders, increase agricultural value, and lift farmers out of poverty through better market access. This study evaluates whether coffee cultivation is associated with changes in forest cover and forest fragmentation and whether the Rainforest Alliance eco-certification program has led to enhanced tree cover and greater landscape connectivity in the Colombian eastern Andes. Based on satellite imagery, geo-referenced coffee parcels and a pair—case comparison, Authorsshow that coffee-growing regions have larger areas in forest, larger forest patches, and better connectivity among patches than non-coffee areas. These differences, however, do not seem to be accentuated over time, except for dense forest cover in the coffee-growing region. The latter has increased since the introduction of a certification program that requires protection of forest remnants and riparian vegetation. Moreover, certified farms in the study area have increased the amount of tree cover on their plots significantly more than non-certified ones.

Our study design, therefore, detects additionality in the impact of certification on tree cover increase: in a region with overall increase in tree cover, certified farms contributed significantly more to that trend than non-certified farms. This study presents the first evaluation of the impacts of certification in cultivated landscapes at the ecosystem level, detectable by Earth observation satellites.

Keywords: Eco-certification, Impacts, Coffee, Colombia, Agroforestry, Remote sensing, Ecolabel, Certification

#### The 13 Best Eco Labels To Help You Shop Green

Diane MacEachern

Green Living, Purse Power, Apr 12, 2015

Green shopping can be confusing! Many products claim to be "natural," "eco-friendly," and "biodegradable." But what in the world does that mean? Unfortunately, because there's no standardized definition for any of these words, they're actually meaningless. In fact, many companies intentionally use vague words to market their products as if they're better for you and the environment than they actually are. This article narrates 13 of the best eco labels in the market. What makes them so good? They've been defined by independent institutions or nonprofit organizations that have set meaningful criteria those companies must prove they've met in order to use the ecolabel in question. When you shop, look for these "third party" certifications to back up the claims a company makes regarding the environmental and human health benefits of their products. It gives information on Coffee ecolabels like Green Seal and Fair Trade Certified.

**Keywords:** Eco-labels, Coffee, Ecolabelling, Certification, Labels, Fair Trade, Coffee labels, Ecolabels, Ecofirendly, Green Seal, Fair Trade Certified

# The Relationship between Adoption of Coffee Certification Standards and Productivity in Nyeri County in Kenya

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Asian Journal of Business and Management, Volume 03, Issue 06, December 2015, 430-439p.

ISSN: 2321-2802

Standards have been applied as strategic tools to help organizations increase productivity, and improve competitive advantage. They facilitate free and fair global trade, enhance customer satisfaction through improved quality, and open new global markets by preventing trade barriers and increase market share. The objective of this study was to investigate the relationship between adoption of coffee certification standards; Fairtrade, UTZ, and Rainforest Alliance on coffee productivity in Nyeri County. A cross-sectional study design was used to describe the current situation and establish any relationships between adoption of coffee certification standards and productivity. Researcher administered questionnaires were used to collect data from 270 coffee farmers. Stratified random sampling was used to sample the farmers in each agroecological zone. Productivity was defined as kilograms cherry produced per coffee tree. Data on coffee production and marketing activities for the 2013/2014 coffee year was collected and analyzed into descriptive and inferential statistics. Data was analyzed using non- parametric methods after subjecting it to normality test. . The productivity populations were significantly different (p=0.008) with ax value of 13.82. Fairtrade was the most prevalent standard at 70.7% adoption rate.

The mean coffee productivity resulting from adoption of Fairtrade, Rainforest Alliance and UTZ were 6.38, 4.11 and 5.21 kg cherry per tree respectively. The mean effect of certification to Fairtrade on productivity compared to Rainforest Alliance was significantly different (p=0.01). Agro-ecological zoning did not have a significant effect (p=0.67) on coffee productivity. The mean productivity rank for Fairtrade was significantly different (p=0.02) compared to that for non-Fairtrade with mean productivity of 6.21 and 4.39 kg cherry/tree respectively. Fairtrade combined with Rainforest Alliance had a synergistic effect resulting to increased productivity of 6.78kg per tree compared to the individual standards. The recommendations from the study are: promotion of coffee certification standards to coffee farmers as a way of improving productivity and further research on the effects of adoption of other sustainability standards on coffee productivity and on other crops.

**Keywords:** Productivity, Coffee, Certification, Standards, Strategy, Planned Change, Sustainability, Fairtrade, Fair Trade, Ecolabel, Label, UTZ, Rainforest Alliance

### A Market Study of Organic and Fair Trade Coffee in Bolivia

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Master Thesis, 2015, 110p.

This thesis analyzes the structure of the coffee market in Bolivia with particular reference to organic and Fair Trade coffee. It assess the institutional and market factors that impact the Organic and Fair Trade coffee production in Bolivia. The present study provides recommendations to address weaknesses within the Bolivian coffee market, so that IICA and industry stakeholders can address institutional issues, and petition the government for greater participation and support, as well as bring attention to the environmental cost of declining coffee production. A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in Environmental Studies.

**Keywords:** Coffee, Certification, Standards, Strategy, Planned Change, Sustainability, Fairtrade, Fair Trade, Ecolabel, Label, Organic Coffee, Bolivia

## Characterization of Organic Coffee Production, Certification and Marketing Systems: Ethiopia as a Main Indicator: A Review

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Asian Journal of Agricultural Research, Volume 8, Issue 4, 2014, 170-180p.

ISSN: 1819-1894

Coffee is the major traded commodity next to oil and thus plays a vital role in the economy of both developed and developing countries. Coffee guarantees a solid basis for promotion of economic development. Moreover, organic coffee is winning the interest of the premium market price across the world thereby increasing the economic return of coffee producers. Despite the market opportunities and better market price for organic coffee, there are several factors which drastically affect organic coffee production and profitability under small holder farmers. Therefore, the objective of this review study was to characterize the existing organic coffee systems; husbandry, post-harvest handling, certification and marketing systems followed by organic coffee producers focusing on Ethiopian case. The result of this review study revealed that a number of factors are constraining organic coffee systems. Demand for intensive and skill based management of organic coffee plantation, high cost of certification and market penetration related issues are the most challenging ones. These coupled with low economic development level with (capacity) of small-scale coffee producers aggravated the challenges the producer are facing. Based on the result of the current review study it can be concluded that, the organic coffee system can be improved through awareness creation training proper application of organic farming principles and practices forming and promoting cooperatives to minimize cost of certification and increase participation of small-scale organic coffee growers on the market decisions and market facilitation.

Keywords: Sustainability, Certification, Competitiveness, Coffee, Organic, Ecolabel, Label, Organic Coffee

## Eco-labelling brand strategy Independent certification versus self-declaration

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European Business Review, Volume 26, Number 4, June 2014, 304-329p.

#### ISSN: 0955-534X

The paper explores consumers' preference for responsible labels in the specific case of well-known brands. The research examines the propensity of consumers to consider self-declarations carried out by the company itself in comparison with independent certifications organised by an external third party. Design/methodology/approach-An empirical study involving 134 French consumers by means of conjoint analysis method was conducted. And the case of Nespresso coffee was tested. Findings- results show that the self-declaration (Nespresso AAA Sustainable Quality) influences positively consumer preference. Moreover, this positive effect is equivalent to that of independent certification (Fairtrade Max Havelaar). Research limitations/implications- contribution gives a better insight into the consumers' response to eco-labelling. It suggests the existence of interaction effect between the brand and the responsible label. But, a future research needs to be conducted in order to gain a better understanding of this interaction effect. Practical implications- findings suggest that a strategy of promoting a well-known branded product based on a self-declaration would be effective. They offer additional insights to managers on the eco-labels efficiency. Originality/value-Contrary to the literature which suggests the superiority of the effect of certifications organised by a third party, this research shows that this finding is not valuable in the case of a well-known brand. A self-declaration may be preferred by consumers in the same way that independent certification. This research is one of the rare researches to stress the need to consider brand when exploring eco-labelling issue.

Keywords: Sustainability, Certification, Competitiveness, Coffee, Fairtrade Label, Ecolabel, Label, Nespresso Coffee

The role of cooperative business models for the success of smallholder coffee certification in Nicaragua: A comparison of conventional, organic and Organic-Fairtrade certified cooperatives

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Renewable Agriculture and Food Systems, Volume 28, Issue 3, September 2013, 195-211p.

### ISSN: 1742-1705 | 1742-1713

Supported by policy-makers and non-governmental organizations (NGOs), coffee farmer organizations obtain organic and Fairtrade certifications to upgrade their coffee and, thus, increase returns to their members. Whether this and other upgrading strategies fit into the business model of the cooperative and lead to success are often not considered. This research aims to identify similarities and differences between conventional and certified cooperatives and the resultant impact on farmers' incomes. Author analyze the business models, upgrading strategies, and strengths, weaknesses, opportunities and threats (SWOT) of seven conventional, organic and Organic-Fairtrade certified coffee cooperatives and link these to members' coffee gross margins. They use data from over 100 in-depth qualitative interviews and a household survey of 327 cooperative members in northern Nicaragua. Results indicate that cooperatives often apply the same upgrading strategies despite very different business models and SWOT. There are also many commonalities of SWOT among cooperatives but no clear-cut differences between conventional, organic and Organic-Fairtrade certified cooperatives. The qualitative comparison of coffee gross margins among the cooperatives shows no clear income effect from participating in certified coffee production and certified cooperatives. It indicates, rather, dependence of gross margins on yield levels, the business model and upgrading strategies of the cooperatives. Upgrading through certification seems only successful with a suitable business model and other upgrading strategies. Policies should focus on (i) increasing as well as stabilizing coffee yields, and (ii) on the institutional framework of cooperatives by offering strategic support, credit access, external auditing of cooperatives and the establishment of a functional national coffee institute.

**Keywords:** Business Model, Certification, Coffee, Cooperative, Fairtrade, Gross Margin, Organic, SWOT Analysis, Upgrading Strategy, Ecolabel, Label, Fair Trade

# Responding to Globalization: Impacts of Certification on Colombian Small-Scale Coffee Growers Ximena Rueda <sup>1,2</sup> and Eric F. Lambin <sup>1,3,4</sup>

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Ecology and Society, Volume 18, Issue 3, Article 21, 2013

ISSN: 1708-3087

Eco-certification of food and other agricultural products has been promoted as a way of making markets work for sustainability. Certification programs offer a price premium to producers who

invest in more sustainable practices. The literature on the impacts of certification has focused primarily on the economic benefits farmers perceive from participating in these schemes. These benefits, however, are often subject to price variability, offering only a partial explanation of why farmers join and stay in certification programs. Authors evaluated the potential of the Rainforest Alliance certification program to foster more resilient social-ecological systems in the face of globalization. Using the case of Santander, Colombia, and a pair-based comparison of 86 households to effectively produce a robust counterfactual, Authors showed that certification provides important environmental benefits, while improving the well-being of farmers and their communities. Furthermore, the study showed that price premiums are only one of many elements defining the success of certification, particularly important for motivating farmers to join, but less so to explain retention and upgrading. The case of Colombian coffee growers illustrates how the connections between local social-ecological systems and larger global forces can produce more sustainable livelihoods and land uses.

Keywords: Coffee, Colombia, Eco-Certification, Globalization, Land Change, Certification, Ecolabel, Sustainability

### Choosing the Right Eco-Label for Your Product

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MIT Sloan Management Review, Magazine Summer, Volume 14, Number 4, June 18, 2013, 10-12p.

This article guides consumers how to choose eco-labels with simple and clear messages. The number of eco-label programs has grown from a mere dozen worldwide in the 1990s to more than 435 today in 197 countries and 25 industry sectors, according to the Ecolabel Index directory. But this growth has been accompanied by a high degree of consumer confusion and organizational skepticism. For example, consumers have admitted to difficulties recognizing the differences among the six-plus eco-labels for coffee. And in 2009, Ecover, a Belgium-based manufacturer of cleaning products, boycotted the European Union Eco-label, claiming lax standards allowed entry to subpar performers and harmed the company's superior environmental credentials. In early 2012, the British supermarket chain Tesco PLC dropped the United Kingdom's Carbon Trust label, citing prohibitively high costs and minimal consumer recognition. However, there is no denying that the value of eco-products — and the recognition of certain eco-labels — is growing. Eco-labels are widely used as a policy tool to provide consumers with information on a product's sustainability characteristics. From a managerial perspective, eco-labels can be used for strategic ends, such as differentiating a product, assuaging regulatory pressure or gaining access to green procurement policies. While some labels achieve widespread recognition, credibility and demand, others are associated with greenwashing, confusion and compromised quality. Choosing an eco-label thus courts risk. For this reason, authors hope that framework for helping managers evaluate eco-labels proves invaluable to companies facing decisions about such labels.

**Keywords:**Global Markets & Marketing, Supply Chain, Sustainability Performance, Eco-labels, Coffee, Ecolabelling, Certification, Labels, Fair Trade, Coffee labels

# Who Needs Cream and Sugar When There Is Eco-Labeling? Taste and Willingness to Pay for "Eco-Friendly" Coffee

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PLoS ONE, Volume 8, Issue 12, December 4, 2013

ISSN: 1932-6203

Participants tasted two cups of coffee, decided which they preferred, and then rated each coffee. They were told (in lure) that one of the cups contained "eco-friendly" coffee while the other did not, although the two cups contained identical coffee. In Experiments 1 and 3, but not in Experiment 2, the participants were also told which cup contained which type of coffee before they tasted. The participants preferred the taste of, and were willing to pay more for, the "eco-friendly" coffee, at least those who scored high on a questionnaire on attitudes toward sustainable consumer behavior (Experiment 1). High sustainability consumers were also willing to pay more for "eco-friendly" coffee, even when they were told, after their decision, that they preferred the non-labeled alternative (Experiment 2). Moreover, the eco-label effect does not appear to be a consequence of social desirability, as participants were just as biased when reporting the taste estimates and willingness to pay anonymously (Experiment 3). Eco labels not only promote a willingness to pay more for the product but also lead to a more favorable perceptual experience of it.

Keywords: Coffee, Ecolabel, Ecofriendly, Eco Label, Consumer, Sustainability, Environmental Labelling

## The Economic Sustainability of Certified Coffee: Recent Evidence from Mexico and Peru

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World Development, Volume 40, Issue 6, June 2012, 1269-1279p.

#### ISSN: 0305-750X

Consumers increasingly act on preferences for a more just and sustainable world by purchasing certified agricultural products. Using survey data from coffee growers in Mexico and Peru, we explore the economic sustainability of certified coffee, looking at conventional, Fair Trade/organic, and Rainforest Alliance certified growers. The analysis reveals that yields rather than price premiums are most important for increasing net cash returns for coffee growing households. Given the link between net returns and producer participation in certified coffee schemes, the findings suggest that certification norms that permit improving yields are essential for improving grower welfare and attracting and maintaining growers.

**Key words:** Latin American, Peru, Mexico, Certified Coffee, Fair Trade, Organic, Sustainability, Coffee, Certification, Fairtrade

### Effects of Fair Trade Certification on Social Capital: The Case of Rwandan Coffee Producers

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World Development, Volume 40, Number 11, November 2012, 2355–2367p.

#### ISSN: 0305-750X

Fair Trade certification may have important social effects on small-scale producers but empirical evidence is limited. Authors conducted logistic regressions using data from a 2009 survey of Rwandan coffee farmers to estimate the link between Fair Trade and social capital—measured as farmer trust and participation—while controlling for various other factors that could influence social capital, particularly membership in a cooperative organization. The results show a negative association between Fair Trade and farmer trust in cooperative leadership and a positive association with a perceived higher level of participation of women. Social capital is linked most significantly to farmers' interaction with their neighbors.

Key words: Fair Trade, Cooperatives, Social Capital, Coffee, Africa, Rwanda, Certification, Sustainability

### Is My Fair Trade Coffee Really Fair? Trends and Challenges in Fair Trade Certification

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CGD Policy Paper 017, Washington DC: Center for Global Development, December 2012, 30p.

Fair trade sales grew rapidly over the past decade but it is still a small and decidedly niche market and rifts over further growth are deepening. There is currently a fierce debate between advocates arguing that mainstreaming undermines core fair trade principles and the US fair trade initiative, which split from the international organization because its leaders believe that mainstreaming needs to go much further. Expanding the range of fair trade certified products beyond the simple food and beverage commodities that currently dominate the market is also a challenge. Perhaps most important, is the value of certification high enough that farmers will continue to pay its costs in an era of booming commodity prices? This paper surveys the current landscape of fair trade markets and examines recent trends. It then provides a brief description of how these markets operate, how they differ from traditional commodity trade, and what the key challenges facing fair trade are. This paper is as an introduction to these issues, while future papers will address in more detail the implications of the Fair Trade USA defection and what we know about the impact on producers.

**Keywords:** Coffee, Certification, Co-optation, Cooperative, Label, Ecolabel, Fairtrade, Sustainability, Cooperative, Fair Trade

# Analyzing Organic and Fairtrade Certification Schemes: Participation and Welfare Effects on Small-Scale Farmers in Coffee Value Chains

Tina Beuchelt Center for Development Research, University of Bonn, Germany

Germany: Cuvillier Verlag, Göttingen, January 2012, 10p.

### ISBN: 978-3-95404-119-0 | 978-3-73694-119-9

Organic and Fairtrade certified coffees have become very popular among socially, environmentally and health conscious consumers in recent years. As consumers pay higher prices for these certified coffees, it is commonly assumed that, compared to conventional coffee, better producer prices are paid and that higher shares of the added value in consuming countries trickle down to the producers. Coffee certifications are thus supposed to benefit the coffee producers. This research seeks to fill the identified knowledge and methodological gaps. Through a combination of qualitative and quantitative research, the production and marketing strategies of small-scale coffee producers in northern Nicaragua are compared based on producers that are organized in conventional, organic, and Organic-Fairtrade certified cooperatives. Trade, processing, and marketing efficiencies in the organic but especially in the Fairtrade value chains in consuming countries need to be improved in the alternative trade sector with its many small profit or non-profit enterprises and organizations. These actors could consolidate to exert economies of scale and reduce their transaction costs. Consolidation is certainly a new way of thinking in the alternative trade sector but could effectively contribute to improve farmers' shares of retail prices and raise farm-gate coffee prices.

**Keywords:** Organic, Coffee, Certification, Value Chain, Small scale Farmers, Label, Ecolabel, Fairtrade, Sustainability, Fair Trade

### Weak Coffee: Certification and Co-Optation in the Fair Trade Movement

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Social Problems, Volume 59, Number 1, February 2012, 94-116p.

ISSN: 1533-8533

The sociological literature on social movement organizations (SMOs) has come to recognize that under neoliberal globalization many SMOs have moved from an emphasis on the state as the locus of change toward a focus on corporations as targets. This shift has led some SMOs to turn to forms of market-based private regulatory action. The use of one such tactic—voluntary, third-party product certification—has grown substantially, as SMOs seek ways to hold stateless firms accountable. This article explores the case of the international fair trade movement, which aims to change the inequitable terms of global trade in commodities for small farmers, artisans, and waged laborers. Drawing from interviews with a range of fair trade participants, document analysis, and media coverage, the article describes fair trade's growing relationship with multinational coffee firms, particularly Starbucks and Nestlé. It explores intra-movement conflicts over the terms for and the effects of corporate participation in fair trade, and illuminates tensions between conceptualizations of fair trade as movement, market, and system. The article makes two arguments. First, while fair trade has succeeded partially in re-embedding market exchange within systems of social and moral relations, it has also proved susceptible to the power of corporate actors to disembed the alternative through a process of movement co-optation. Second, it argues that co-optation takes a unique form in the context of social movements whose principal tools to achieve social change are certification and labeling: it occurs primarily on the terrain of standards, in the form of weakening or dilution.

**Keywords:** Social Movements, Coffee, Certification, Co-optation, Cooperative, Label, Ecolabel, Fairtrade, Sustainability, Cooperative, Fair Trade

# The impact of coffee certification on small-scale producers' livelihoods: a case study from the Jimma Zone, Ethiopia

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Agricultural Economics, Volume 43, Number 4, 2012, 427-438p.

ISSN: 1574-0862

What is the impact of product certification on small-scale farmers' livelihoods? To what extent does the participation of Ethiopian small-scale coffee farmers in certified local cooperative structures improve their socioeconomic situation? To answer these questions, this article employs household data of 249 coffee farmers from six different cooperatives collected in the Jimma zone of Southwestern Ethiopia in 2009.

Findings show that the certification of coffee cooperatives has in total a low impact on small-scale coffee producers' livelihoods mainly due to (1) low productivity, (2) insignificant price premium, and (3) poor access to credit and information from the cooperative. Differences in production and organizational capacities between the local cooperatives are mirrored in the extent of the certification benefits for the smallholders. "Good" cooperatives have reaped the benefits of certification, whereas "bad" ones did not fare well. In this regard the "cooperative effect" overlies the "certification effect."

Keywords: Coffee, Certification, Cooperative, Poverty, Reduction, Ethiopia, Sustainability, Cooperative

## The Impact of Fair Trade Certification for Coffee Farmers in Peru

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World Development, Volume 40, Issue 3, March 2012, 570-582p.

#### ISSN: 0305-750X

Smallholder farmers producing for Fair Trade market outlets are usually considered to benefit from better prices and stable market outlets. However, many empirical studies verifying this impact suffer from strong selection bias. This study uses a balanced sample of Fair Trade farmers and likewise nonFair Trade producers of organic and conventional coffee from Peru to compare the net effects on production, income and expenditures, wealth and investments, and attitudes and perceptions. After careful matching, Authorsfind only modest direct income and production effects, but significant changes in organization, input use, wealth and assets, and risk attitudes. Moreover, important differences between farmers with early and more recent FT affiliation are registered.

Keywords: Fair Trade, Impact, Matching, Coffee, Peru, Certification, Fairtrade, Sustainability, Conventional Coffee

### Does eco-certification have environmental benefits? Organic coffee in Costa Rica

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Ecological Economics, Volume 83, November 2012, 58-66p.

#### ISSN: 0921-8009

Eco-certification of coffee, timber and other high-value agricultural commodities is increasingly widespread. In principle, it can improve commodity producers' environmental performance, even in countries where state regulation is weak. But eco-certification will have limited environmental benefits if, as one would expect, it disproportionately selects for producers already meeting certification standards.

Rigorous evaluations of the environmental effects of eco-certification in developing countries that control for selection bias are virtually nonexistent. To help fill this gap, Authorsuse detailed farm-level data to analyze the environmental impacts of organic coffee certification in central Costa Rica. Authorsuse propensity score matching to control for selection bias. Authorsfind that organic certification improves coffee growers' environmental performance. It significantly reduces chemical input use and increases adoption of some environmentally friendly management practices.

**Keywords:** Eco-Certification, Coffee, Central America, Costa Rica, Propensity Score Matching, Organic Coffee, Certification, Label

## World Cup: A Guide to Eco-Friendly Coffee Labels

Julie Ma

GOOD Worldwide Inc, Jan 18, 2012

This article is a guide to demystifying the many eco- coffee labels, from green frogs to flocks of birds. According to the International Trade Centre, 16% of all raw coffee imports in the United States are "certified." With names like "Rainforest Alliance" and "Bird-Friendly," these eco-certifications sound like they're making the world a shade greener. Of course, these high-end, small-scale certifications will only make coffee truly sustainable when everyone opts in. It gives information about different coffee ecolabels like Rainforest Alliance Certified, Fair Trade USA Certified, Bird-Friendly, USDA Certified Organic, UtZ Certified and Counter Culture Direct Trade Certified.

Keywords: Eco-labels, Coffee, Ecolabelling, Certification, Labels, Fair Trade, Coffee labels, Ecolabels

# Profits and poverty: Certification's troubled link for Nicaragua's organic and fair-trade Coffee producers

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Ecological Economics, Volume 70, Issue 7, 15 May 2011, 1316-1324p.

ISSN: 0921-8009

Governments, donors and NGOs have promoted environmental and social certification schemes for coffee producers as certified market channels are assumed to offer higher prices and better incomes. Additionally, it is presumed that these certifications contribute to poverty reduction of smallholders. Yet, gross margins, profits and poverty levels of certified smallholder coffee producers have not yet been quantitatively analyzed applying random sampling techniques. Our quantitative household survey of 327 randomly selected members of conventional, organic and organic-fairtrade certified cooperatives in Nicaragua is complemented by over a hundred qualitative indepth interviews. The results show that although farm-gate prices of certified coffees are higher than of conventional coffees, the profitability of certified coffee production and its subsequent effect on poverty levels is not clear-cut. Per capita net coffee incomes are insufficient to cover basic needs of all coffee producing households. Certified producers are more often found below the absolute poverty line than conventional producers. Over a period of ten years, our analysis shows that organic and organic-fairtrade farmers have become poorer relative to conventional producers. We conclude that coffee yield levels, profitability and efficiency need to be increased, because prices for certified coffee cannot compensate for low productivity, land or labor constraints

**Keywords:** Fairtrade, Certification, Gross Margin, Income, Organic Certification, Profitability, Poverty, Ecolabel, Label, Sustainability, Fair Trade

### Producer-level benefits of sustainability certification

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Conservation Biology, Volume 25, Number 6, 2011, 1176–1185p.

ISSN: 0888-8892 | 1523-1739

Initiatives certifying that producers of goods and services adhere to defined environmental and social-welfare production standards are increasingly popular. According to proponents, these initiatives create financial incentives for producers to improve their environmental, social, and economic performance. Authors reviewed the evidence on whether these initiatives have such benefits. Authors identified peer-reviewed, ex post, producer-level studies in economic sectors in which certification is particularly prevalent (bananas, coffee, fish products, forest products, and tourism operations), classified these studies on the basis of whether their design and methods likely generated credible results, summarized findings from the studies with credible results, and considered how these findings might guide future research. Authors found 46 relevant studies, most of which focused on coffee and forest products and examined fair-trade and Forest Stewardship Council certification. The methods used in 11 studies likely generated credible results. Of these 11 studies, nine examined the economic effects and two the environmental effects of certification. The results of four of the 11 studies, all of which

examined economic effects, showed that certification has producer-level benefits. Hence, the evidence to support the hypothesis that certification benefits the environment or producers is limited. More evidence could be generated by incorporating rigorous, independent evaluation into the design and implementation of projects promoting certification.

Keywords: Ecocertification, Ecolabel, Human-Dominated Landscape, Label, Certification, Sustainability, Coffee

### **Evaluating Certified Coffee Programs**

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Document No. WEC306, one of a series of the Department of Wildlife Ecology and Conservation, UF/IFAS Extension, February 2011

Coffee is one of the world's most important commodities. It is produced by nearly 50 tropical nations around the world. Coffee is a primary cash crop in several countries and critical for their economies. In recent years, there has been a growing interest among consumers to buy products that follow strict standards in their production process and that also are healthy and safe. In the case of coffee, people in the United States are not only interested in the quality and origin of coffee, but many are also concerned about the social, economic, and environmental aspects of coffee production. These interests and concerns have created a new market that offers products that have undergone various certifications. Although several products are currently certified, coffee is taking the lead in developing standards to address socio-economic and environmental concerns of consumers. These certifications are quite variable and consumers may not understand exactly what each one of them requires. The purpose of this article is to explain the certification process and describe the various certification programs and what they mean.

Keywords: Coffee, Certification, Sustainability, Standards, Ecolabel, Certification Programs, Certified Coffee

#### The Problem with Fair Trade Coffee

Colleen Haight Economics Department, San Jose State University 1 Washington Sq, San Jose, CA 95192, United States

Stanford Social Innovation Review, Summer 2011

Fair Trade-certified coffee is growing in consumer familiarity and sales, but strict certification requirements are resulting in uneven economic advantages for coffee growers and lower quality coffee for consumers. By failing to address these problems, industry confidence in Fair Trade coffee is slipping. Author has highlighted issues of coffee growers in this article. She details the origin of fair-trade. The idea of fair trade has been around since people first started exchanging goods with one another. The history of trade has shown, however, that exchange has not always been fair. She writes about ethical consumerism. She details the importance of coffee to the economies of the countries in which the crop is grown. She illustrate with examples. FLO and Fair Trade USA attempted to alleviate poverty and jump-start economic development among coffee growers. Author discuses the challenges of FLO and fair-trade.

Keywords: Coffee, Certification, Sustainability, fairtrade, FLO, Ecolabel

### **Sustainable Coffee Certifications**

Adam Kline CEO / Founder / Senior Coffee Trader at Coffee Unified, Inc. San Francisco, California

Specialty Coffee Association, USA, 2010, 8p.

The SCAA Sustainability Committee has presented the Sustainable Coffee Certification Comparison matrix, with information provided by the following organizations:

- 1. Organic
- 2. Fair Trade
- 3. Rainforest Alliance
- 4. Smithsonian Bird Friendly®
- 5. UTZ Certified
- 6. 4C

Every year committee releases updated matrix. For specific questions about these Sustainable Coffee Certifications, they recommend to contact the organization directly as listed at the end of the matrix.

Keywords: Coffee, Certification, Sustainability, Standards, Sustainable, Ecolabel

# Certification process in the coffee value chain: Achievements and limits to foster provision of environmental services

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From Theory to Practice: Tales of Success and Lessons Learned, Chapter 15, January 2011, 319-345p.

Various mechanisms have been promoted to foster the provision of ecosystem services. Product certification is one of the most promising and developed instruments to reward the socially and environmentally friendly practices of market producers. With more years of implementation, the coffee sector offers a wide perspective to analyse the achievements and limits of this strategy in fosteringenvironmental services. This chapter describes the development of the certifiedcoffee market and the characteristics of the different certification strategies within Central America. Authors then review their achievements and limitations inpromoting ecosystem services, particularly related to biodiversity conservation, and their reported socio-economic impacts. Finally, they propose areas of improvement to increase their potential as a tool to foster the provision of ecosystem services in the region.

Keywords: Sustainability, Certification, Coffee, Fairtrade Label, Ecolabel, Label, Environmentally Friendly

### EU Ecolabel for food and feed products – Feasibility Study

Helmut Sengstschmid, NielsSprong, Otto Schmid, Nina Stockebrand, Hanna Stolz, Achim Spiller Oakdene Hollins Research and Consulting Ltd, Buckinghamshire, UK

DG Environment, European Commission, October 2011, 173p.

The EU Ecolabel is a voluntary scheme that forms part of overall EU policy to encourage more sustainable consumption and production. To date, the EU Ecolabel scheme has developed criteria for products in the non-food sector. The Regulation that governs the scheme (66/2010) aims to extend the EU Ecolabel into new product categories including food. The study has been undertaken by a consortium of three organisations led by Oakdene Hollins together with the Research Institute of Organic Agriculture (FiBL) and the University of Göttingen.

Keywords: Eco-labels, Coffee, Ecolabelling, Certification, Food, Labels, Feed Products, EU Ecoabel

# The raise of eco-label coffee: a comparative study of their effects on Costa Rican and Kenyan cooperative coffee sector

Le Cog Jean-François<sup>1</sup>, Pinard Fabrice<sup>2</sup>, Gathoni E<sup>3</sup> and Soto Gabriela<sup>4</sup>

- 1. CIRAD-ES-UPR Policies and markets (CRI)
- 2. CIRAD-BIOS-UPR Perennial pests (KEN)
- 3. ICRAF (KEN)
- 4. CATIE (CRI

Proceedings of the 23rd International Scientific Symposium on Coffee, Bali, Indonesia, 2011.

#### ISBN 978-2-900212-22-6

Since the last coffee crisis of early 2000s, development of specialty coffee, and especially eco-friendly labelled coffee, has been raising rapidly. Although effect on producers and global relationship has been documented, the dynamic of certification adoption and its comprehensive effects on coffee sectors in producing countries are still poorly documented. The poster presents a comparative study of the dynamic of development of Eco-labels in two high quality Arabica coffee producing countries, Costa Rica and Kenya. Using available secondary data and original data's derives from stakeholders comprehensive interviews, Authors show that the different pace and magnitude of the adoption of the certification schemes between this two countries depended on pre-existing institutional environment, governance and balance of power in the commodity chain and that the development of certification schemes tended to modify both structure and functioning of the commodity chains and contribute to gradual evolution of balance of power.

Keywords: Eco-labels, Organic coffee, Arabica Coffee, Coffee, Ecolabelling, Certification

# Coffee, Conservation and Rainforest Alliance Certification: Opportunities for Indian coffee Joke Aerts<sup>1</sup>, Divya Mudappa<sup>2</sup> and T. R. Shankar Raman<sup>2</sup>

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Planters' Chronicle, December 2010, 15-26p.

#### ISSN: 0972-0081

In this article, authors highlighted how the changing scenario creates a unique opportunity for Indian coffee. They presented a non-technical summary of some key scientific studies that present the links between coffee and conservation. Authors then provided an introduction to the systems underlying Rainforest Alliance certification and the standards (good practices) that farms would need to adopt to become certified. They believe that the Indian coffee industry and farmers, workers and local communities, as well as forests and biodiversity stand to benefit from the adoption of good practices related to social and environmental sustainability, with concordant market benefits through certification. Authors concluded that Coffee plantations and the conservation movement in India clearly have much to contribute to each other. Indian coffee estates can build on traditional practices such as growing coffee under native shade trees and integrated with natural forests by adopting additional sustainable agricultural practices to enhance their value locally and in international markets. As Rainforest Alliance certification and the market for produce certified following the underlying SAN Standard grows rapidly, Indian coffee can utilise the opportunities on offer to contribute to greater social and environmental wellbeing, while also growing good, profitable and sustainable coffee.

Keywords: Coffee, Certification, Sustainability, Standards, Sustainable, Ecolabel, Rainforest Alliances, Indian Coffee

### **Sustainable Coffee Certifications**

Adam Kline CEO / Founder / Senior Coffee Trader at Coffee Unified, Inc. San Francisco, California

Specialty Coffee Association, USA, 2010, 8p.

The SCAA Sustainability Committee has presented the Sustainable Coffee Certification Comparison matrix, with information provided by the following organizations:

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Every year committee releases updated matrix. For specific questions about these Sustainable Coffee Certifications, they recommend to contact the organization directly as listed at the end of the matrix.

**Keywords:** Coffee, Certification, Sustainability, Standards, Sustainable, Ecolabel

## Sustainable Product Indexing: Navigating the Challenge of Ecolabeling

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Ecology and Society, Volume 15, Issue 3, Article 8, 2010

ISSN: 1708-3087

There is growing scientific evidence that improving the sustainability of consumer products can lead to significant gains in global sustainability. Historically, environmental policy has been managed by bureaucracies and institutions in a mechanistic manner; this had led to many early successes. However, Authors believe that if policy concerning product sustainability is also managed in this way, negative unintended consequences are likely to occur. Thus, Authors propose a social—ecological systems approach to policy making concerning product sustainability that will lead to more rapid and meaningful progress toward improving the environmental and social impacts of consumer products.

Key words: Consumer Products, Ecolabeling, Sustainable Indexing, Sustainability, Coffee, Ecolabel

### Certification of Socially Responsible Behavior: Eco-Labels and Fair-Trade Coffee

Charles F Mason University of Wyoming

Journal of Agricultural & Food Industrial Organization, Volume 7, Issue 2, Article 2, 2009, 22p.

ISSN: 1542-0485

An intriguing alternative to traditional methods for regulating externalities is the provision of information about firms' environmental attributes. An increasingly important example of this approach is "eco-labeling," where a third party certifies firms' products. This sort of approach can also be used in similar circumstances, for example providing consumers with information on the techniques used to produce the good in question (e.g., shade-grown coffee) or the nature of rent-sharing arrangements that govern the transaction (e.g., fair trade coffee). I present a model of this phenomenon. An important aspect of this scheme is that the product in question is typically a credence good (buyers cannot infer product quality from search or consumption), and hence must rely on a third-party for information about the product. But the very fact that consumers cannot infer quality from consumption implies they cannot infer accuracy about the signal; indeed, the certifying agency may not be able to perfectly determine quality at a reasonable cost. As such, the certification process is potentially noisy, albeit with green firms more likely to pass than brown firms. While it is likely to increase the fraction of green units in the market, the introduction of eco-labeling can either increase or decrease welfare. In addition, expected profits earned by green sellers are likely to be more variable in equilibrium with certification. The paper provides some casual empirical evidence from Latin American coffee markets as a backdrop to the theoretical results.

**Keywords:** Eco-Labeling, Asymmetric Information, Testing, Coffee Markets, Coffee, Ecolabel, Fair-Trade Coffee, Fairtrade

# Impacts of Fair Trade certification on coffee farmers, cooperatives, and laborers in Nicaragua Joni Valkila¹ and Anja Nygren²

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Agriculture and Human Values, Volume 27, Issue 3, 2009, 321-333p.

### ISSN: 1572-8366 | 0889-048X

This paper analyzes the possibilities and challenges of Fair Trade certification as a movement seeking to improve the well-being of small-scale coffee growers and coffee laborers in the global South. Six months of fieldwork was conducted in 2005-2006 to study the roles of a wide range of farmers, laborers, cooperative administrators, and export companies in Fair Trade coffee production and trade in Nicaragua. The results of our evaluation of the ability of Fair Trade to meet its objectives indicate that Fair Trade's opportunities to provide a significant price premium for participating farmers largely depend on world coffee prices in mainstream markets. While Fair Trade has promoted premiums for social development for participating producers and strengthened the institutional capacities of the cooperatives involved, its ability to enhance significantly the working conditions of hired coffee laborers remains limited.

**Keywords:** Certification, Coffee Cooperatives, Fair Trade, Labour Conditions, Nicaragua, Producers, Social Premium, Coffee, Ecolabel, Label, Sustainability, Fairtrade

## The market for organic and fair-trade coffee

Ellen Pay
Trade and Markets Division
Food and Agriculture Organization of the United Nations

FAO, September 2009, 19p.

The growing interest from large retailers in differentiated coffees, including single origin, organic and fair-trade certified coffees, as well as the rising number of coffee shops focused on this segment, is likely to stimulate the development of the European specialty coffee market. This Study is prepared in the framework of FAO project GCP/RAF/404/GER on the subject "Increasing incomes and food security of small farmers in West and Central Africa through exports of organic and fair-trade tropical products." It discusses the world market for coffee and the market for organic and fair-trade coffee. It details the market for organic and fair-trade coffee in detail.

**Keywords:** Certification, Coffee Cooperatives, Fair Trade, Producers, Coffee, Ecolabel, Label, Sustainability, Fairtrade, Organic, Organic Coffee, Fairtrade Coffee

# Are Sustainable Coffee Certifications Enough to Secure Farmer Livelihoods? The Millennium Development Goals and Nicaragua's Fair Trade Cooperatives

Christopher M. Bacon<sup>1</sup>, V. Ernesto Méndez<sup>2</sup>, María Eugenia Flores Gómez<sup>3</sup>, Douglas Stuart<sup>4</sup> and Sandro Raúl Díaz Flores<sup>5</sup>

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Globalizations, Volume 5, Issue 2: Trading Morsels, Part 3: Responses to Global Complexity—Ethical Trade, 2008, 259-274p.

### ISSN: 1474-7731 | 1474-774X

In December 2001, green coffee commodity prices hit a 30-year low. This deepened the livelihood crisis for millions of coffee farmers and rural communities. The specialty coffee industry responded by scaling up several sustainable coffee certification programs, including Fair Trade. This study uses household- and community-level research conducted in Nicaragua from 2000 to 2006 to assess the response to the post-1999 coffee crisis. A participatory action research team surveyed 177 households selling into conventional and Fair Trade markets in 2006. In an effort to dialogue with specialty coffee industry and mainstream development agencies, results are framed within the context of the United Nations Millennium Development Goals. Findings suggest that households connected to Fair Trade cooperatives experienced several positive impacts in education, infrastructure investment, and monetary savings. However, several important livelihoods insecurities, including low incomes, high emigration, and food insecurity, persisted among all small-scale producers.

**Keywords:** Sustainability, Certification, Competitiveness, Coffee, Fairtrade Label, Ecolabel, Label, Organic Coffee, Nicargua, Fair Trade

## Linking Consumers to Sustainability: Incorporating Science into Eco-friendly Certification

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Globalizations, Volume 5, Number 2, June 2008, 247-258p.

#### ISSN: 1474-7731 | 1474-774X

Efforts to counter ecological and socio-economic degradation have put coffee at the forefront of a new sustainability movement to reform negative globalization trends. This paper focuses on the possibilities of and challenges to sustainable certification efforts with particular focus on biodiversity conservation concerns. It presents the potential contributions from scientists in the certification processes, particularly to ensure that concern actually translates into measurable progress toward conservation goals. The benefits of unifying the three main certifications (organic, Fair Trade, and eco-friendly or shade grown), or triple-certified coffee, are explored. In general, benefits for biodiversity conservation and social justice from sustainable coffee certification can only be enhanced by greater cooperation among the current market-based efforts and scientists researching this unique response to globalization.

**Keywords:** Triple Certified, Sustainability, Certification, Competitiveness, Coffee, Fairtrade Label, Ecolabel, Label, Organic Coffee, Shade Grown Coffee, Fair Trade

## Fair-Trade Coffee and Commodity Fetishism: The Limits of Market-Driven Social Justice

**Gavin Fridell** 

Trent University, Ontario, Canada

Historical Materialism, Volume 15, 2007, 79–104p.

ISSN: 1569-206X

This paper explores the claims made by various authors that the fair-trade network provides aninitial basis for a challenge to the commodification of goods under global capitalism. Proponentsof fair trade generally advance two essential arguments in this regard. First, they claim that fairtrade reveals the social and environmental conditions under which goods are produced andbrings producers and consumers together through 'ethical consumerism', which challenges the commodification of goods into items with an independent life of their own. Second, they arguethat fair trade affirms non-economic values of co-operation and solidarity which challenge the capitalist imperatives of competition, accumulation, and profit-maximisation. Drawing from cases in the fair-trade coffee sector, these assertions are critically examined and it is argued that, while fair trade can provide a symbolic challenge to commodity fetishism, in the end this challenge is strictly limited by the power of global market imperatives and the network's market driven approach.

Keywords: Commodity Fetishism, Coffee, Fair Trade, Social Justice, Certification, Sustainability

### Fair Trade Coffee Enthusiasts Should Confront Reality

Jeremy Weber Agricultural and Applied Economics Department University of Wisconsin-Madison, USA

Cato Journal, Volume 27, Number 1, Winter 2007, 9p.

From university cafeterias to supermarkets in the developed world, people are buying Fair Trade (FT) coffee certified by the FLO-Cert, the certifying entity of Fairtrade Labelling Organizations International (FLO). The assumption is that such purchases will contribute to the welfare of marginalized producers in the developing world. While sales of FT coffee in Europe have stabilized, the North American and Japanese markets are growing rapidly. Total sales increased 40% from 2004 to 2005, to a total volume of 33,992 metric tons. Yet the system faces vexing issues such as disconnect between promotional materials and reality, excess supply, and the marginalization of economically disadvantaged producers and groups. Those involved in Fair Trade coffee debates and governance must address these issues if Fair Trade is to be an effective mechanism for rural development in coffee producing regions. If Fair Trade is dominated by those who see mainstream for-profit companies as intrinsically destructive, the movement will remain a fringe, niche market that supports a few privileged groups. Fair Trade enthusiasts must spend more time asking hard, practical questions about how Fair Trade functions and less time searching for enemies. Only with a strong dose of practicality and self-critique can the Fair Trade movement create an effective mechanism for promoting development in coffee-producing communities.

Keywords: Certification, Certified Coffee, Biodiversity, Fairtrade, Coffee, Certification, Label, Sustainability, Labeling

## Certified Coffee: Does the Premium Pay Off?

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Environ Health Perspectives, Volume 115, Number 9, September, 2007, 456–459p.

### ISSN: 0091-6765 | 1552-9924

Coffee bean prices plummeted during the coffee crisis of the late 1990s, the result of a glut in coffee production. Prices sank from around US\$1.50 per pound in 1997 to about a third that amount in 2001, according to the International Coffee Organization, the primary intergovernmental organization for coffee production. For millions of people dependent on coffee farming, the crisis brought social and economic devastation and forced many farmers to choose between immediate household needs and environmental destruction. That crisis raised alarms in Europe that contributed to the rise of Fair Trade certification for coffee, intended in part to give coffee farmers a buffer against market fluctuations. Fair Trade and other programs designed criteria for certifying the production of items ranging from organic foods and coffee to timber and pulp, with one aim being to reward better management of forests with a premium for proof of sustainable management. When farmers have a buffer against market fluctuations, they will be less likely to choose forest destruction when prices go down. Now researchers and journalists are asking whether certification is making a difference in the health of people and the forests where these products originate.

Keywords: Certified Coffee, Biodiversity, Fairtrade, Coffee, Certification, Label, Sustainability

# Ecolabelling –as a potentialmarketing tool forAfrican Products(An overview of opportunities and challenges)

United Nations Environment Programme and African Roundtable on Sustainable Consumption and Production

Nairobi, Kenya: United Nations Environment Programme, 2007, 36p.

The report underlined that the spread of environmental requirements, including ecolabelling and other types of standards, can be expected to continue to increase due to the actions of private market actors, particularly through supply chain contracts and big retail chains. It also underlines the need to contribute to the design of ecolabelling programmes and accompanying private and public policies that respond to SMEs and developing country needsand conditions, including 'phased approaches' to the introduction of standards, technical equivalence agreements and lower-cost conformity assessment and certification services. This brochure was produced on the basis of the outputs of the activities that were carried under the 'Development of an African Ecolabelling Scheme'. Eco-labels are intended to educate and increase consumer awareness of the environmental impacts of a product and bring about environmental protection by encouraging consumers to buy products with a lower environmental impact. This brochure covers the information on ecolabels of Coffee and Tea.

**Key words:** Ecolabeling, Coffee, Sustainability, Fairtrade Label, Ecolabel, Label, Consumer, African Ecolabelling, Africa



Healthcare without Harm 1901 North Moore Street, Suite 509 Arlington, VA 22209 USA

Health Care Without Harm, 27<sup>th</sup> July 2007, 4p.

Coffee and tea production have become increasingly industrialized since the 1970's relying on more chemical-intensive fertilization and pest control techniques and other practices that can have many negative social, economic, and human and environmental health impacts. This brochure has presented survey to know about "Suppliers." The survey can be used by purchasers to identify sustainably produced coffee and tea products as well as wholesalers and roasters who have a demonstrated commitment to fair trade values. As a significant amount of material is used to package and ship coffee and tea products, a few questions about packaging have also been included. Purchasers are encouraged to support these businesses and the small scale fair trade roaster/wholesalers who are members of Cooperative Coffees, a cooperative importer of green coffee. While buying products that have been Fair Trade Certified is a significant step towards supporting fair trade practices, the label only indicates that the product, in this case coffee or tea, was purchased from the producer under Fair Trade terms and does not certify that the company selling the product is committed to fair trade practices and principles.

Keywords: Eco-labels, Coffee, Ecolabelling, Certification, Tea, Labels, Fair Trade, Sustainability, Fairtrade



# The Economics of Fair Trade Coffee: For Whose Benefit? An Investigation into the Limits of Fair Trade as a Development Tool and the Risk of Clean-Washing

Kohler Pierre Graduate Institute of International Studies, Geneva HEI Working Paper No: 06/2007, October 2006, 65p.

This paper considers the system of fair trade coffee. It first gives a short description of the coffee market and some of its major trends. The origin of the fair trade movement is then explained. The structure of FLO is examined and its pricing scheme compared to those of other private labeling initiatives. Benefits generated for participants on the supply and the demand sides then come under scrutiny. To gauge its potential as a development tool, revenues to coffee producers are estimated on the basis of available information. Revenues to fair trade organizations in the Western world are also examined. Finally, two hypotheses are tested on data from 13 European countries to get a better picture of what is happening on the demand side. First, an OLS regression is tested to see if consumer awareness does "make a difference". Secondly, a treatment regression is used to correct for a sample self-selection bias and to check if there is some support for the claim that supermarkets that have started to sell fair trade coffee are clean-washing their reputation in the fair trade business.

Key words: Coffee, Fair Trade, Development, Clean-Washing, Treatment Regression, Sustainability, Certification

## Designing Ecolabels in Order to Mitigate Market Failures: An Application to Agrofood Products

Douadia Bougherara and Gilles Grolleau Agricultural Economics and Sociology Department, University of Burgundy, France

The Journal of Interdisciplinary Economics, Volume 16, 2005, 411–430p.

### ISSN: 0260-1079 | 2321-5305

For the market for ecofriendly characteristics of agrofood products to function effectively, means of mitigating asymmetric information, informational overload and public goods properties are necessary. Ecolabel success requires a design and an implementation capable of mitigating simultaneously these three sources of market failures. Authors' contribution differs from many to date by (1) introducing and analyzing the informational overload as a source of market failure and (2) considering the ecolabel, not only as a tool to reestablish information symmetry between the producer and consumer but also as a way to overcome informational overload and public goods problems. They analyze how these sources of market failures may be mitigated by providing information perceived as trustworthy, tying credence and public attributes to verifiable and private attributes and designing the ecolabel as a cognitive support for consumers. Authors provide an exploratory qualitative study of several French ecolabels to stress how they more or less succeed in attenuating the identified sources of market failures. Several implications for policymakers and managers are stressed. Authors conclude by suggesting several issues requiring further investigations. Authors considered coffee in their studies as ecolabelled product.

**Key words**: Ecolabeling, Market failures, Agrofood products, Coffee, Agriculture Products, Ecolabel, Label, Certification, Sustainability

### Do fair trade and eco-labels in coffee wake up the consumer conscience?

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Ecological Economics, Volume 53, Issue 1, 1 April 2005, 129-138p.

### ISSN: 0921-8009

In this study, a face-to-face survey was conducted in order to reveal consumer preferences for ethical and environmentally sound labeling programs in coffee. Valuation questions regarding the fair trade, shade grown, and organic coffee labels were asked using a payment card format, after consumers were previously informed about each of the labeling programs. Results suggest that consumers are very receptive toward both fair trade and shade grown coffee labels, and consequently are willing to pay higher premiums for these labeling programs than for the organic coffee.

**Keywords:** Eco-labels, Fair trade, Organic coffee, Shade grown coffee, Weibull survival regression, Coffee, Ecolabelling

## A taste of trade justice: marketing global social responsibility via Fair Trade coffee

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Globalizations, Volume 1, Issue 2, 2004, 223-246p.

### ISSN: 1474-7731 | 1474-774X

The movement to certify and promote fairly traded coffee is one of many efforts aimed at linking social responsibility and free market capitalism. In the wake of a worldwide crisis in which coffee prices have fallen to levels that do not support small-scale production, non-profit Fair Trade certifying and labeling organizations are working to develop a market situation that is sustainable for workers and the environment. The Fair Trade system promotes living wages for farmers, access to affordable credit, and the adoption and maintenance of environmentally sound practices. Fair Traders' marketing efforts seek to influence cultural and political values in such a way that consumers and corporations will have to respond to them by incorporating the welfare of Southern workers into their purchasing decisions. This article discusses and evaluates current strategies for creating and expanding the market for Fair Trade-certified coffee and their outcomes in the United States and Europe. Authors argue that, while Fair Traders have achieved some laudable goals, they must now address the limits to supply-driven marketing efforts.

Keywords: Fair Trade, Certified Coffee, Biodiversity, Fairtrade, Coffee, Certification, Label, Sustainability

# Environmental and Other Labelling of Coffee: The Role of Mutual Recognition, Supporting Cooperative Action

Commission for Environmental Cooperation and TerraChoice Environmental Services Inc.

Manitoba: International Institute for Sustainable Development, 2004, 52p.

This paper is a product of the Sustainable Commodity Initiative, a joint venture of the United Nations Conference on Trade and Sustainable Development and International Institute for Sustainable Development. The environmental and social consequences of modern coffee production have stimulated a desire, from roasters, retailers and consumers, to receive information and reward actions addressing these consequences. Hence, the labelling phenomenon can now be seen for coffee.

The various types of labels currently available for coffee include "shade-grown," "organic," "bird-friendly," "fair trade," and "sustainable." Given the variety of issues involved in coffee labelling and the concerns over "label-fatigue" caused by the presentation of too many labels, there is growing interest in examining different ways of supporting cooperation among different labelling schemes. Based on current market and industry conditions and dynamics, six initiatives are suggested in this paper for consideration with potential implementation objectives.

**Keywords:**Fairtrade,Coffee, Ecolabel, Ecofriendly, Eco Label, Consumer, Sustainability, Bird Friendly, Sustainable, Environmental Labelling, Shade-Grown Coffee

# Linking Shade Coffee Certification to Biodiversity Conservation: Butterflies and Birds in Chiapas, Mexico

Alexandre H. Mas and Thomas V. Dietsch School of Natural Resources and Environment, University of Michigan, Ann Arbor, Michigan 48109-1115 USA

Ecological Applications, Volume 14, Issue 3, June 2004, 642-654p.

ISSN: 1939-5582

Shade coffee certification programs have emerged over the past six years to verify that coffee marketed as "shade grown" is actually grown on farms that provide higher quality habitat for biodiversity. In spite of good intentions and an increasing market, little consensus exists on whether current criteria can successfully identify coffee farms of conservation significance. This paper provides the first ecological evaluation and comparison of shade-grown coffee criteria used by major certification programs. Using vegetative data, we evaluated criteria developed by the Rainforest Alliance, the Smithsonian Migratory Bird Center (SMBC), and the Specialty Coffee Association of America across a range of coffee agro-ecosystems in Chiapas, Mexico, to determine which management practices each program would certify. Fruit-feeding butterflies and forest bird species found in these coffee agro-ecosystems were compared with nearby forest reserves as indicators of biodiversity and conservation potential. These agroecosystems fall into three categories: rustic, commercial poly-culture, and shaded monoculture. The rustic system contained significantly higher fruit-feeding butterfly diversity and an avifauna more similar to that found in forest reserves than the other systems. This was also the only agro-ecosystem that met the criteria for all certification programs, while the shaded monoculture fell short of all sets of criteria. This suggests that certification programs are succeeding in discriminating between the extremes of shade coffee production. Certification programs differed, however, in their treatment of the intermediate, commercial poly-culture systems, reflecting different philosophies for conservation in managed ecosystems. Programs promoted by SMBC use high standards that would exclude all but the most diverse commercial poly-culture or rustic systems to certify only those systems that support high levels of biodiversity. The program supported by the Rainforest Alliance only excludes the shaded monoculture while engaging the others in the move toward greater sustainability. The merits of each approach should be put to rigorous debate, and their ability to contribute to biodiversity conservation should be reflected in product marketing. This study suggests that further research can provide a stronger scientific basis and independent verification for the certification of green products that claim to enhance biodiversity conservation in tropical agroecosystems.

Keywords: Biodiversity, Certification, Chiapas, Mexico Coffee, Agro-ecosystems, Forest Birds, Fruit-Feeding Butterflies, Intensity Gradient, Market-Based Conservation, Shade Coffee, Coffee, Label, Ecolabel

### Production, marketing, and future prospects of Nepali orthodox tea

Dharmendra Kalauni, Binod Joshi and Arati Joshi Agriculture and Forestry University, Rampur, Nepal

Cogent Food & Agriculture, 2020, 10p.

ISSN: 2331-1932

Orthodox tea is one of the high-value agriculture commodities having enormous potential of export to international market. Nepal offers suitable climate, soil, and topography for profitable production of the orthodox tea having exceptional flavor, aroma, and taste. The study was designed to analyze the production trend, annual growth rate, export and import, and prospects of the Nepali orthodox tea. Findings showed that production of tea is in increasing trend with an average annual growth rate of 9.55%. Despite possessing ample opportunity in domestic and international markets, yet country only produces little amount of orthodox tea. Further, 90% of the total produced orthodox tea was imported primarily to India which has been one of the factors for not being able to receive optimum premium as compared to other tea exporting countries like China and India. Thus to revitalize tea subsector, it is recommended to focus on improving tea productivity with proper mechanization, establishing tea processing industries, easy and reliable certification, price intervention, market recognition, and enhancing diplomatic relations for easy market accessibility and duty-free trade.

Keywords: Cultivation, High-Value, Orthodox Tea, Trade, Policy, Certification, Nepal, Sustainability, Tea

### Rainforest Alliance Certified Tea, Creating a Sustainable Tea Sector

Rainforest Alliance 1101 14th St. NW Suite 301, Washington, DC 20005

July 6, 2020

This article describes how Rainforest Alliance supports smallholder tea farmers across tea-producing countries. Its certification supports farmers in turning their farms into profitable, resilient businesses that respect workers and the land. Through training, they promote farming techniques designed to help farms adapt to climate change and protect the land for future generations—all while improving incomes for tea-farming families. They work with tea farmers all around the world, including those in major tea-producing countries like India, Kenya, and Sri Lanka. It promotes more sustainable and climate-smart farming methods that help tea farmers protect and improve their incomes. Many tea-plantation workers receive wages far below this level. For this reason, the Rainforest Alliance certification program includes mandatory requirements to identify the gap between current wages and a living wage benchmark. In order to prepare for and respond to climate challenges, the Rainforest Alliance trains farmers in climate-smart agriculture techniques. Climate-smart agriculture isn't distinct from sustainable agriculture; rather it's a way of combining various sustainable methods to tackle the specific climate challenges of a specific farming community. For tea farmers, examples of climate-smart techniques might include planting shade trees, using drought- and frost-resistant tea varieties, or harvesting rainwater. Applying such methods can help farmers improve their productivity and, as a result, their incomes—and give them hope for a brighter future.

**Key words,** Certification, Tea, Tea Producing Countries, Sustainability, Standards, Label, Eco Label, Rainforest Alliance

# Corporate Responsibility for Human Rights in Assam Tea Plantations: A Business and Human Rights Approach

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Sustainability, Volume 12, Number 18, 7409, 2020, 22p.

This paper explores how UK-based companies deal with their responsibility to respect the human rights of Assam (India) tea plantation workers. Through qualitative content analysis of publicly available corporate reports and other documents, it investigates how companies approach and communicate their potential human rights impacts. It highlights the gap between well-documented human rights issues on the ground and corporate reports on these issues. It aims to answer the following research question: in a context where the existence of human rights violations at the end of the supply chain is well-documented, how do companies reconcile their possible connection with those violations and the corporate responsibility to respect human rights under the United Nations Guiding Principles on Business and Human Rights. This paper reveals the weakness of the current corporate social responsibility (CSR) approach from the perspective of rights-holders. It supports a business and human rights approach, one that places the protection of human rights at its core.

**Keywords:** Tea Plantations, Assam, Business and Human Rights, Corporate Social Responsibility, UN Guiding Principles on Business and Human Rights, UK Modern Slavery Act, Certification, Sustainability, Tea, Ecolabelling, Label

### Risk aversion and certification: Evidence from the Nepalitea fields

Sarah Mohan Division of Market Development, International Trade Centre, Palais des Nations, 1211 Geneva 10, Switzerland

World Development, Elsevier, Volume 129, May 2020, 104903

#### ISSN: 0305-750X

By setting out rules for how food should be produced and processed to meet market requirements, agricultural standards can connect farmers to lucrative markets. Yet their adoption has been far from widespread. Demographic factors have been shown to affect farmers' decision to get certified to an agricultural standard. However, little is known about the relationship between risk and certification, despite evidence that risk aversion affects farmers' production decisions. This paper examines the role of individual risk attitudes in the decision to get certified to an agricultural standard. I conducted a survey and a field experiment to elicit the risk preferences of Nepali small-scale tea farmers who faced the decision of whether to get certified to the organic standard. The analysis uses an expected utility framework to investigate the relationship between risk preferences and certification decisions. Results indicate that farmers who are more risk averse have a higher propensity to get certified. These findings suggest that risk considerations should be incorporated into analysis of certification. They also provide concrete evidence against previous assumptions that only risk lovers get certified. Instead, they suggest that certification schemes may provide a benefit not yet considered in the literature: that of providing risk-reduction opportunities to risk averse farmers in developing countries.



Keywords: Risk Aversion, Standards, Small-Scale Farmers, Nepal, Certification, Tea, Sustainability

### Rainforest Alliance Certification gets a 2020 upgrade

Liz Kimbrough Journalist based in New Orleans, Los Angeles, USA

Mongabay, 15 July 2020

Rainforest Alliance has announced new, more robust criteria for certification. The rollout of the new program begins this September and companies will be audited against the new standards beginning in July 2021. The updated certification program provides new standards for farmers and companies in the areas of human rights, supply chains, livelihoods, deforestation and biodiversity and provides new data systems and tools for management. Currently, 44,000 products with the Rainforest Alliance Certified seal or UTZ label are available. The updated certification program provides new standards for farmers and companies in the areas of human rights, supply chains, livelihoods, deforestation and biodiversity, and provides new data systems and tools for management. The rollout of the new program begins this September and companies will be audited against the new standards beginning in July 2021.

Keywords: Standards, Certification, Rainforest Alliance, UTZ label, Ecolabel, Label, Tea, Sustainability

# Impacts of sustainability certification on farm income: Evidence from small-scale specialty green tea farmers in Vietnam

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Food Policy, Volume 83, February 2019, 70-82p.

#### ISSN: 0306-9192

Sustainability certification for small-scale farms has gained considerable momentum in developing countries. However, evidence on the economic benefits of certification schemes in the context of domestically consumed foods and beverages is scarce. This paper addresses this gap by evaluating the impacts of sustainability standards on the selling prices, sales, costs and net income of small-scale specialty green tea farming in Vietnam. Authors analyze original survey data on 401 smallholder green tea farmers and employ propensity score matching to mitigate self-selection bias. Estimates reveal that certified green tea producers are able to obtain a higher average selling price and sales value. In addition, although certification leads to a dramatic increase in the costs of hired labor, net farm income is still significantly improved.

Keywords: Fair Trade Certification, Tea Plantations, Certification, Label, Labelling, Tea, Sustainability

# Aggregate effects on ecosystem services from certification of tea farming in the Upper Tana River basin, Kenya

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Ecosystem Services, Volume 38, August 2019, Article 100962

#### ISSN: 2212-0416

Agriculture sustainability standards and certification are increasingly used by the private sector and civil society to incentivize and support environmental conservation and improved rural. However, evidence of impact is limited by methodological challenges that hamper the quantification of certification-induced changes, especially beyond farm level. This paper aims to explore the changes to soil and nutrient regulation ecosystem services from the adoption of Rainforest Alliance tea certification in the Kenyan Upper Tana River watershed. In this study authors: i) apply ecosystem service models to simulate the effect of farm-level practices for before and after-certification scenarios, and; ii) evaluate the model applications for their ability to guide future decision making. Our scenario results indicate that a widespread adoption of agricultural practices prescribed in the certification standard reduces sediment export into watercourses. However, an increase in fertilizer use by certified farmers is estimated to result in greater nitrogen and phosphorous loads.

scenario analyses are highly sensitive to input data and model choice, but show similar relative impacts of tea certification. Opportunities to improve spatial impact measurements to support decision making can be found in the systematic accounting of land management practices by certification organizations and increased remote sensing image accessibility.

**Keywords:** Impact Assessment, Voluntary Sustainability Standards, Certification, InVest, SWAT, Tea, Ecolabel, Label, sustainability

### Is New Trustea Certification a Game Changer for the Indian Tea Industry?

Aravinda Anantharaman Partner at Copac Media Bengaluru, India

worldteanews.com, April 15, 2019

This article describes how a domestic code like trustea can raise the bar for the Indian tea industry? The Indian media reported 608 million kilograms of tea (46% of the country's annual output) has been verified and certified by trustea, a sustainability code developed in India. Trustea was set up in 2013 as a domestically-developed code of standards for tea. It is backed by IDH, Hindustan Unilever Ltd. — who initiated the movement — Tata Global Beverages and Wagh Bakri, with Ethical Tea Partnership and Solidaridad as implementing partners. The certification process can take up to two months depending on the size of the estate, beginning with a Gap Audit by Ethical Tea Partnership (ETP). Once the gaps are covered, the trustea certificate is provided. Designed for a phased implementation over four years, complete compliance is expected by Year 4. The push for certifications comes from the buyers, especially in the export market. Trustea insists that it is a voluntary certification, and the choice is on the producer or factory to get certified. Cognizant of the cost factor, trustea bears some of the cost in certification.

Key words: Trustea, Certification, Tea, India, Sustainability, Standards, Label, Eco Label

### Factors Affecting the Adoption of Certification among the Orthodox Tea Growers in Nepal

Pabitra Mishra, Rishi Ram Kattel, Shiva Chandra Dhakal and Padam Lal Bhandari Agriculture and Forestry University, Nepal

International Journal of Environmental Sciences & Natural Resources, Volume 22, Issue 4, November 2019, 6p.

ISSN: 2572-1119

The study has attempted to identify the factor affecting the adoption of certified orthodox tea production in Eastern Himalayan corridor of Nepal. Total 160 households (80 certified and 80 non-certified tea growers) were selected using random sampling technique from Ilam, Suryodaya, Dewmai Municipalities and Phakphokthum Rural Municipality of Ilam district which were selected purposively in 2018. Data were collected from the pre-tested semi structural interview schedule, direct observation, focus group discussions, key Informant interviews and rapid market appraisal. The certified tea growers were small farmers with the total tea cultivation area 0.64 ha. The average productivity of non-certified tea was 7791.38kg/ha whereas it was 3483.41kg/ha for certified orthodox tea. Average return per kg of green tea leaves among the certified growers was NRs. 70.74 whereas it was only NRs. 41.87 for the non-certified growers, which was statistically significant. This study revealed that access to credit, total cultivated land, livestock holding, education, age, migration, and training received associated positively with the certification while gender of the

household head, tea share in income, economic active members and ethnicity were associated negatively with certification. Low production, shortage of labor, low bargaining power, low selling price, problem of local transportation, lack of national level norms and standard for certification scheme, poor extension activities to encourage growers to adopt certification are major reason behinds the reluctance of farmers to adopt the certification in production of orthodox tea. Technical and financial supports to growers to increase the productivity of certified orthodox tea, institutional coordination, effective extension service to encouragement of farmers and efficient development of marketing channel is necessary to promote the adoption of certification in production of orthodox tea.

Keywords: Orthodox tea, Certification, Adoption, Productivity, Labelling, Tea

# Impact of Fair-Trade Certification on Worker Compensation in Indian Tea Estates: Interactions with the Plantations Labour Act

Akash Malhotra Center for Economic Studies and Planning, Jawaharlal Nehru University, New Delhi, India

Advance, 2019, 23p.

The plight of workers in the tea industry of India is widely acknowledged by both the government and the civil society across the globe. While the government of developing countries had been trying to alleviate the abysmal conditions of these workers through enactment of various laws, civil society in developed countries came up with initiatives like Fair-Trade to ensure better livelihood for these workers. This article explores the interactions between The Plantations Labour Act 1951 (PLA) and Fair-Trade (FT) hired labour standards in the context of tea plantations in India. The interactions tend to distort the compensation and welfare mechanisms set up by the state and even undermine the authority of the state. It was observed that FT labour standards offer a weaker vision of social justice for plantation workers than PLA. Further, Fair-Trade might reinforce the existing 'patrimonial' clientelism on plantations which, in first place, was induced by the codification of certain colonial practices into PLA. Fair-Trade certifiers need to rethink their approach for plantations and incorporate the effects of local state laws such as PLA while framing their labour standards. The delegation of management of FT premium fund to an independent third-party, such as an NGO, might correct some of the potential distortions and inefficiencies created by PLA.

Keywords: Fair Trade, Compensation, Tea Estates, Plantations Labour Act, India, Tea, Certifiation

# A study on ecolabeling and Life Cycle Assessment for food products in Indonesia, Potential application to improve the competitiveness of the tea industry

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The increasing customer awareness and supporting regulation on environmentally-friendly products around the globe has fostered the need for revealing environmental performance information on their label, using an instrument called ecolabel. Ecolabeling system requires a life cycle consideration for the product, and Life Cycle Assessment (LCA) serves as a method to perform the assessment for the entire product's life cycle. In the field of food industry, specifically the tea industry, a 2014 report by International Institute for Sustainable Development showed a growing influence of ecolabel in the global market. Ecolabel and LCA become important tools for improving product competitiveness. Meanwhile, tea as one of Indonesia's main commodity has faced a challenging competition in the international market as indicated by decreasing export—despite increasing global demand—in recent year. This study reviews the ecolabeling system in Indonesia and LCA for food products. Furthermore, this study also investigates the potential application of ecolabel and LCA to improve the competitiveness of the tea industry. According to the study, the implementation of ecolabeling for tea still faces some challenging issues due to the supporting certification scheme and customer perspective. On the contrary, research on LCA for food products provides a promising application to improve tea product competitiveness. Therefore, this study recommended that, while educating people more toward ecolabeling, research on LCA should be continuously conducted to support the implementation of ecolabel in the long term.

**Keywords:** Ecolabeling, Life Cycle Assessment, Ecolabel, Tea, Ecolabel, Food Products, Consumer, Sustainability, Certification

### Potentials and Prospects of Organic Tea, An Approach towards Sustainability

Pradip Baruah and Gautam Handique Tocklai Tea Research Institute, Tea Research Association, Jorhat, 785008, Assam, India

International Journal of Agriculture Sciences, Volume 11, Issue 5, 2019, 8007-8009p.

#### ISSN: 0975-3710 | 0975-9107

Organic tea production has increased over the past decade because of the perceived higher quality of the tea as well as the benefits for environmental and human wellbeing. Moreover, organic tea will also help in better price realization and uplift the socio-economic condition of tea growers. The organic tea movement which started in Sri Lanka in 1980 has now become popular all over the world and many countries such as India, China, Japan, etc. have shifted to organic tea cultivation. At present, China is the world's largest producer of organic green tea followed by India and Sri Lanka while Japan, South Korea, Kenya and Turkey have emerged as minor exporters of organic tea. Among the different forms of organic tea available in the market, black organic tea occupies a dominant market position. The demand for organic tea has been increasing all over the world with increasing consumer awareness. However, the switch to organic tea farming will start some challenges such as lack of knowledge in the field of organic cultivation by farmers, waiting period for conversion which can be in years, financial hurdles for certification, competition from large tea corporate, etc. Nevertheless, the production of organic tea will require commitment to improve the cultivation and the physical ability to implement a farming system. With immense potentials, further support from respective governmental agencies and a guaranteed price on organic tea, it can be the future for the entire tea industry.

**Keywords:** Organic Tea, Global Market, Eco-Labeling, Fair Trade, Tea, Ecolabel, Voluntary Certification, Certification, Tropical Agriculture, Fairtrade, Sustainability

### Decent Work for Tea Plantation Workers in Assam: Constraints, Challenges and Prospects

Debdulal Saha, Chitrasen Bhue and Rajdeep Singha Tata Institute of Social Sciences (TISS), Guwahati Campus Guwahati, Assam

Tata Institute of Social Sciences, Guwahati Campus, October 2019, 116p.

The study examines work and employment conditions of tea plantation workers of Assam (India) in present times. Statistical inferences and narratives show that there is 'decent work deficit' among the tea plantation workers in Assam. Using the combination of quantitative and qualitative methods, the study depicts decent work conditions of 510 plantation workers across 50 tea estates from 9 major tea producing districts of Assam, emphasizing on employment opportunities, rights at work, social protection and social dialogue. Though the quantity of the country's total tea production including that of Assam has been increasing since 2011, the auction price per kilogram of tea is declining in the same period. This can be stated as a crisis situation. Tea is a labour-intensive commodity and labour is one of the main factors of production besides land and capital. The tea industry employs around 1.2 million permanent workers who usually reside within the plantation, making the industry the largest employer in the formal private sector. The Plantation Labour Act (1951) and other related Acts have made it mandatory for the plantation management to provide workers with housing, education, health and childcare facilities besides minimum wage, bonuses, rations, provident funds. The study highlights those workers in tea plantations suffer from work controls at multiple levels; wage cut mechanisms; deplorable housing and living conditions; calorie intake deficits; and work-related securities including economic, social, representative, and non-availability of basic facilities at the workplace.

**Keywords:** Tea, Global Market, Eco-Labeling, Fair Trade, Tea, Ecolabel, Certification, Certification, Agriculture, Fairtrade, Sustainability

# Technical Efficiency for Tea Smallholder Farmers under UTZ Certification System in Sri Lanka: A Stochastic Frontier Approach

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SEISENSE Journal of Management, Volume 1, Number 2, 2018, 1–19p.

ISSN: 2617-5770

The study aimed to identify the determinants of the technical efficiency of Smallholder Tea Farmers (STFs) under UTZ certification system in Sri Lanka by employing stochastic production frontier using a sample survey of 75 STFs supported by the UTZ programme conducted between January and March in 2016. The results showed that a small number of STFs (11.8 percent) were over 90 percent efficient and the level of efficiency was found to be negatively related to coefficients of UTZ certified STFs and positively related to number of years with the same plants. The results further showed the labor and fertilizer were the significant factors that determine the tea production of STFs.

**Keywords:** Smallholder Tea Farmers, Stochastic Production Frontier, Technical Efficiency, UTZ Certification, Ecolabel, Certification, Tea, Sustainability

# Looking good on paper: Review of recent research on the impact of sustainability certification on working conditions on large farms

Sanne van der Wal Senior Researcher Centre for Research on Multinational Corporations (SOMO) Amsterdam, Netherlands

The Netherlands: Stichting Onderzoek Multinationale Ondernemingen (SOMO), October 2018, 25p.

#### ISBN: 978-94-6207-138-4

For this research, SOMO reviewed published evidence about the effectiveness of sustainability certification initiatives on labour conditions at large-scale farms in low- and middle-income countries from 2014-2017. The evidence included field research by SOMO and researchers from SOMO compared this evidence with internationally agreed labour standards. The study reveals a pattern of recurring labour right violations on farms certified by almost all the well-known sustainability certification initiatives, such as Fairtrade and Rainforest Alliance. Only a handful of studies demonstrate some improvements in working conditions for farm workers as the result of sustainability certification schemes. SOMO concludes that changes and improvements are urgently needed for ambitious sustainability certification initiatives to help improve working conditions on farms across the developing world.

Keywords: Rainforest Alliance, Tea, Certification, Fairtrade, Certification, Sustainability, Coffee, SOMO

# Fostering Sustainability in Tea Production and Trade, Assessing the Impact of Certification Schemes on Farm Income, inclusive Rural Development and Market Access

Committee on Commodity Problems, Food and Agriculture Organization of the United Nations

Intergovernmental Group on Tea Twenty-Third Session, Hangzhou, the People's Republic of China, 17-20 May 2018, 8p.

This report aims to guide discussions on tea certification during the 23rd session of the Inter governmental Group on Tea (IGG-Tea) to be held in Hangzhou, China, from 17 to 20 May 2018.

The paper presents the impacts of sustainability certification in the tea sector, focusing on its effects on farm income, market access and rural development. It also highlights possible factors reducing the positive impact of certification and makes recommendations towards enhanced sustainability in the industry. The analysis builds on a literature review and a set of interviews1 with major stakeholders including four of the major tea certification schemes. In 2015, at least 538 000 hectares (or 14.2 percent of the global tea area) was certified by the four major certification schemes, namely, Fairtrade, Organic, Rainforest Alliance, and UTZ. Assuming that no multiple certification is occurring, 717 000 hectares (or 18.9 percent of the global tea area) were compliant with one of these schemes – average 628 000 hectares (16.5 percent). Kenya, India, and China accounted for the largest area of certified tea production in 2015.

Keywords: Certification, Tea, Ecolabel, Ecolabelling, Fairtrade, IFOAM, UTZ, Rainforest Alliance

### **Tea and Coffee Certification Schemes**

Josie Wexler

Ethical Consumer since 1989, 17th of December 2018

This article compares different certification schemes in the Coffee and Tea industries to see which ones consumers can trust. At a global level, about 17% of tea is certified Fairtrade, Organic, Rainforest Alliance, or UTZ. But, in Kenya, which supplies the biggest portion of the UK market, more than 80% of tea is certified by one of these schemes. It explains Fairtrade certification. To get certified, a producer must show that it is meeting certain social and environmental standards. It can then attempt to sell its produce at the Fairtrade price, if it can find a buyer. Certified tea producers on average only manage to sell around 7% of their tea on Fairtrade terms. The average across all products is about 40% for small farmer organisations, and 20% for estates. Rainforest Alliance and Utz are two more modern certification schemes, now much bigger than Fairtrade. They are merging into a single new program at the end of 2019, which will keep the Rainforest Alliance name. Fair for Life was launched in Switzerland in 2006. It has received praise for its social and environmental requirements, which are more comprehensive than the other certification schemes. Tea is conventionally grown on intensive monocultures, which has deleterious effects on biodiversity and also encourages pests. Indian tea thus tends to be grown with a lot of pesticides. All Kenyan tea is basically pesticide free, however, because the high altitude and the strains used inhibit pests naturally.

**Keywords:** Environment friendly, Certification, Tea, Ecolabel, Ecolabelling, Fairtrade, IFOAM, UTZ, Rainforest Alliance

# Where are commodity crops certified, and what does it mean for conservation and poverty alleviation?

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Biological Conservation, Volume 217, January 2018, 36-46p.

#### ISSN: 0006-3207

Voluntary sustainability standards have expanded dramatically over the last decade. In the agricultural sector, such standards aim to ensure environmentally and socially sustainable production of a variety of commodity crops. However, little is known about where agricultural certification operates and whether certified lands are best located for conserving the world's most important biodiversity and benefiting the most vulnerable producers. To examine these questions we developed the first global map of commodity crop certification, synthesizing data from over one million farms to reveal the distribution of certification in unprecedented detail. It highlights both geographical clusters of certification as well as spatial bias in the location of certification with respect to environmental, livelihood and physical variables. Excluding organic certification, for which spatial data were not available, most certification of commodity crops is in tropical regions. Certification appears to be concentrated in areas important for biodiversity conservation, but not in those areas most in need of poverty alleviation, although there were exceptions to each of these patterns. We argue that the impact of sustainability standards could be increased by identifying places where it would be most beneficial to strengthen, consolidate, and expand certification. To achieve this, standards organizations will need to undertake more rigorous collection of spatial data, and more detailed analysis of their existing reach and impacts, with attention to potential trade-offs between different objectives. Efforts to promote spatial prioritization will require new partnerships to align specific conservation aims with the interests and capabilities of farmers.

**Keywords**, Agricultural Certification, Voluntary Sustainability, Standards, Tropical Commodities, Eco-Labeling, Governance, Fair Trade, Coffee, Tea, Ecolabel

# Types of Indian Tea, Production and Marketing of Traditional and Handmade Teas of Assam, India

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Journal of Tea Science Research, Volume 7, Number 10, 2017, 52-57p.

ISSN: 1927-6494

Teas are classified in various ways depending manufacturing process, convention, technique and market available form. An exhaustive classification based on market available forms classifies Indian teas into eleven broad categories. Assam is a place of origin of tea, wild tea plants were discovered in Assam in 1823 and tea plantations started since 1837. Some of the indigenous tribal people of Assam had the habit of drinking tea prepared in their traditional form and the Singphos call such tea as phalap. Entrepreneurs of small tea growers who are a major force to reckon with in Assam tea at present are producing organic (called natural) handmade and traditional forms of teas which are gaining popularity world over. Organic certification, technical guidance in production and marketing are some of the problems faced by the producers of the handmade and traditional teas who are almost entirely small tea growers. Such teas are of special character with high quality. Demand for these teas is growing both internally and in global market and has huge market potential. Entrepreneurial handmade and traditional tea producers are putting their efforts to popularize and market such forms of tea in India and globally overcoming the challenges.

**Keywords:** Types of Indian Tea, Marketing, Indigenous Small Tea Growers, Traditional Tea, Handmade Tea, Tea, Certification, Organic

### Fairtrade labour certification: the contested incorporation of plantations and workers

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Third World Quarterly, Volume 38, Number 7, 2017, 1473-1492p.

ISSN: 0143-6597 | 1360-2241

Fair trade seeks to promote the well-being and empowerment of farmers and workers in the Global South. This article traces the contested growth and configuration of Fairtrade International labour certification, providing a multifaceted and dynamic view of private regulation. Author explains why Fairtrade International began certifying large enterprises and how its hired labour strategy has developed over time, illuminating fair trade's move from peasant to plantation sectors, stakeholder involvement in shaping the growth of Fairtrade labour certification, the internal and external balancing of farmer and worker concerns, and major innovations in Fairtrade's 'New Workers Rights Strategy'. Findings challenge the claim that recent market mainstreaming explains the rise of labour certification within fair trade and the more general argument that private regulatory programmes founded to foster empowerment evolve over time to prioritise logic of control. As author documents, Fairtrade International has recently moved to bolster producer power within its organisation and labour rights within its certification programme. Analysis reveals the dynamic

nature of private regulatory programmes and the potentially influential role of diverse stakeholders in shaping the priorities of Fairtrade and other labour-standards systems.

**Keywords:** Corporate social responsibility and fair trade, globalization, governance, human rights, Labour, livelihoods and sustainability, Certification, Tea, Fairtrade, Fair Trade

# Assessing the impact of eco-innovations through sustainability indicators: the case of the commercial tea plantation industry in Sri Lanka

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Asian Journal of Sustainability and Social Responsibility, Volume 2, 2017, 41–58p.

#### ISSN: 2365-6417

Innovative processes aimed at sustainable development or eco-innovations have received increasing attention during the past years despite the lack of theoretical and methodological approaches to analyzing their impact. This paper focuses on how sustainability indicators can be used to measure the effects of "non-technical" eco-innovations in the Sri Lankan tea plantation sector. After carrying out an experimental case study on a commercial tea plantation, we employed a combination of physical and monetary sustainability indicators to evaluate the initial results of the eco-innovation. It shows that innovations aimed at improving economic benefits often result in unintentional environmental and social benefits that support a lean-green relationship. It reveals the difficulty in having a standardized set of indicators to measure the impact of eco-innovations owing to the multidimensionality of sustainability. Hence, the case study suggests adopting broad sustainability indicators that represent the wholeness of the system while capturing the long-term impact.

Keywords: Eco-innovation, Tea Plantations, Sri Lanka, Label, Labelling, Tea, Sustainability

# Global Coverage of Agricultural Sustainability Standards, and Their Role in Conserving Biodiversity

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Conservation Letters, Volume 10, Number 5, September/October 2017, 610–618p.

#### ISSN: 1755263X

Voluntary sustainability standards have increased in uptake over the last decade, here; authors explore their potential contribution to biodiversity conservation and other aspects of agricultural sustainability. They reviewed the content of 12 major crop standards and quantified their global coverage. All standards included some provisions for the protection of biodiversity, but they only identified two with criteria that prohibited all deforestation. They found records of certified cropland in 133 countries, and estimated that certified crop area in-creased by 11% (range 8.8–13.5%) per year from 2000 to 2012, but still only covered 1.1% (range 1.0–1.2%) of global cropland. The crops with the highest levels of certification were heavily traded commodities, coffee, cocoa, tea, and palm oil each had 10% or more of their total global production area certified. Coverage was lower for other crops, including the world's most important staple foods (maize, rice, and wheat). Sustainability standards have considerable potential to contribute to conservation, but there is an ongoing need for better evaluation of how effectively they are implemented. Authors present examples of ways in which governments, companies, financial institutions, and civil society can work together to scale up and target certification to places where it can have the greatest positive impact.

**Keywords:** Agricultural Certification, Voluntary Sustainability Standards, Tropical Commodities, Eco-Labeling, Governance, Fair Trade, Coffee, Tea, Certification

# The India Story, Impact of Private Sustainability Standards on Market Access and Sustainable Development in India

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UNCTAD Research Paper UNCTAD/SER.RP/2017/9, September 2017, 111p.

With almost 500 private sustainability standards (PSS) in 199 countries and 25 industrial sectors, the PSS system, involving testing, inspection and certification procedures across all market sectors which apply to samples, products, services, management systems or personnel, has become the new market reality as a tool for sustainable supply-chain management, marketing and competitiveness. In India, PSS are seen to compete with the national regulatory institutions in defining the mandate for safety and quality.

However, PSS do take steps towards ensuring long term sustainability of value chains and prepares the national market for rising consumer awareness and demand for product and environmental safety, livelihood improvement of workers, together with improving competitiveness of industries, production practices of the fast-growing small holder segment, and mainstreaming smallholders into the sustainability fold.

This study attempts to fuel these efforts by understanding the PSS ecosystem in India through the following key questions, Why discuss that Private Sustainability Standards (PSS) may have significant impact upon India's trade success and sustainable development? Which product groups are the key priority groups for this study? What is the rationale for the selection?

This study identify three priority product groups (PPGs), provide justification for doing so in the Indian context, and then move to understanding the PSS implications in their market by understanding taking specific approached to the PPGs as best suit them. The PPGs chosen (and later substantiated) include agri-food (tea and grapes), forestry (handicrafts) and textile. The study aims to assess the role and contribution of PSS (with focus on the PPGs), if any, to India's trade, and analyse if PSS have an impact to achieve sustainable development. It further explores the role of accreditation and certification bodies for operationalisation of the PSS in the Indian context.

**Key words:** Fair Trade Certification, India, Tea, Coffee, Private Sustainability Standards, Sustainability, Standards, Value Chain, Label, Eco Label, Certification

### Environmental and nutritional requirements for tea cultivation

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Folia Horticulturae, Volume 29, Number 2, 2017, 199-220p.

### ISSN: 0867-1761 | 2083-5965

Tea (*Camellia sinensis*) is an important beverage crop cultivated in the tropics and subtropics under acid soil conditions. Increased awareness of the health-promoting properties of the tea beverage has led to an increase in its level of consumption over the last decades. Tea production contributes significantly to the economy of several teacultivating countries in Asia and Africa. Environmental constrains, particularly water deficiency due to inadequate and/or poorly distributed rainfall, seriously limit tea production in the majority of tea-producing countries. It is also predicted that global climate change will have a considerable adverse impact on tea production in the near future. Application of fertilizers for higher production and increased quality and quantity of tea is a common agricultural practice, but due to its environmental consequences, such as groundwater pollution, the rate of fertilizer application needs to be reconsidered. Cultivation of tea under humid conditions renders it highly susceptible to pathogens and pest attacks. Application of pesticides and fungicides adversely affects the quality of tea and increases health risks of the tea beverage. Organic cultivation as an agricultural practice without using synthetic fertilizers and other chemical additives such as pesticides and fungicides is a sustainable and eco-friendly approach to producing healthy tea. A growing number of tea-producing countries are joining organic tea cultivation programmes in order to improve the quality and to maintain the health benefits of the tea produced.

**Keywords:** Aluminium, Global Climate Change, Nitrogen Fertilizers, Organic Culture, Phosphorus Fertilizers, Soil pH, Water Deficiency, Certification, Organic, Tea

#### Fair Trade as Civic Innovation? The case of tea certification in India

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Working Paper Series Indialics Network for Economics of Learning, Innovation and Competence Building System, Working Paper No. 2017-02, 2017, 20p.

Workers on tea estates at the beginning of the tea value chain have historically been and continue to represent some the most marginalised agricultural workers. The tea sector in India is the country's largest formal sector in terms of employment. Yet, wages of tea workers are the lowest among the formal labour force and their living conditions are appalling. In this paper, author discussed whether fair trade certification, i.e. the certification of products whose production adheres to a set of social, environmental and governance standards as fair trade compliant, can contribute to a transformation of the tea chain, able to support moves towards more decent work. This discussion is based on a review of existing studies of the impact off air trade on tea cultivation in India. Author says such progressive societal change driven by civic actors as forms of 'civic innovation'. Given tea workers'

marginalisation, the analysis of fair trade tea cultivation offers a litmus test of the potential of fair trade certification to promote inclusive development in line with the 8th Sustainable Development Goal to "promote inclusive and sustainable economic growth, employment and decent work for all" (UN 2015).

**Key words:** Civic Innovation, Decent Work, Fair Trade Certification, India, Tea Plantations, Ecolabeling, Life Cycle Assessment, Ecolabel, Tea, Consumer, Sustainability

# Is voluntary certification of tropical agricultural commodities achieving sustainability goals for small-scale producers? A review of the evidence

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Environmental Research Letters, Volume 12, Number 3, 2017,

#### ISSN: 1748-9326

Over the last several decades, voluntary certification programs have become a key approach to promote sustainable supply chains for agricultural commodities. These programs provide premiums and other benefits to producers for adhering to environmental and labor practices established by the certifying entities. Following the principles of Cochrane Reviews used in health sciences, we assess evidence to evaluate whether voluntary certification of tropical agricultural commodities (bananas, cocoa, coffee, oil palm, and tea) has achieved environmental benefits and improved economic and social outcomes for small-scale producers at the level of the farm household. We reviewed over 2600 papers in the peer-review literature and identified 24 cases of unique combinations of study area, certification program, and commodity in 16 papers that rigorously analyzed differences between treatment (certified households) and control groups (uncertified households) for a wide range of response variables. Based on analysis of 347 response variables reported in these papers, we conclude that certification is associated on average with positive outcomes for 34% of response variables, no significant difference for 58% of variables, and negative outcomes for 8% of variables. No significant differences were observed for different categories of responses (environmental, economic and social) or for different commodities (banana, coffee and tea), except negative outcomes were significantly less for environmental than other outcome categories (p = 0.01). Most cases (20 out of 24) investigated coffee certification and response variables were inconsistent across cases, indicating the paucity of studies to conduct a conclusive meta-analysis. The somewhat positive results indicate that voluntary certification programs can sometimes play a role in meeting sustainable development goals and do not support the view that such programs are merely greenwashing. However, results also indicate that certification is not a panacea to improve social outcomes or overall incomes of smallholder farmers. Rigorous analysis, standardized criteria, and independent evaluation are needed to assess effectiveness of certification programs in the future.

**Keywords**, Greenwashing, Agricultural Certification, Voluntary Sustainability, Standards, Tropical Commodities, Eco-Labeling, Governance, Fair Trade, Coffee, Tea, Ecolabel, Voluntary Certification, Certification, Tropical Agriculture, Cacao, Fairtrade, Sustainability, Rainforest Alliance

### Organic Tea: Global Market and Forecast Sales

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Journal of Tea Science Research, 2017, Volume 7, Number 11, 58-68p.

### ISSN: 1927-6494

The increasing demand from the consumers of Germany, United Kingdom, Japan and USA for organic teas, few conventional tea gardens of India, Sri Lanka and China have converted to organic processes during 1980s and subsequently it has been spread to different tea producing countries. Still the organic tea sector is a very small part of the tea industry, accounting of less than 1.3% by volume but the number of organic tea producers and the volume of organic tea traded in the world market have recorded high growth over the last couple of years. The annual growth rate has since cooled to 6%. It has a niche market where the produce sells at a premium price. The global organic tea market can be segmented into North America, Europe, Asia Pacific and rest of the world. Asia-Pacific region has the major market share followed by Europe. The domestic market for organic tea does not yet exist in India and Sri Lanka. But there is strong domestic market for organic green tea in China. China is exporting organic tea to Japan, the Europe and the United States. India leads the world in organic black tea output. Based on the higher demand for healthy beverages, the import and export of organic tea in the developed countries is found to rise at a steady growth rate. Around 75-80% of organic teas were exported to the United States and Germany followed by France, Denmark, the United Kingdom, Japan and Holland. In the US, organic tea is the fastest growing section of the tea industry and North America was at the peak of a growth burst in 2015, reinforcing its importance as the largest global market in terms of region, with Western Europe and Asia Pacific lagged slightly behind. Different global market research firm have predicted that the organic tea will continue to dominate and expected to increase by a CAGR of 5-13% next five years in U.S. In the present paper, the development of organic tea, global market and trade are discussed.

Keywords: Organic Tea, Tea Market, Black Tea, Green Tea, Premium Price, Tea Sale, Organic, Tea, Sustainability

### A jumbo cup of Assam tea

Samrat Correspondent, The Hindu Chennai, Tamil Nadu, India

Environment Section, The Hindu, October 21, 2017

This article describes how a small tea garden in the Brahmaputra Valley became the first one in the world to secure an elephant-friendly certificate. At the edge of the Bodoland Territorial Area in Assam, where the Brahmaputra valley plains meet the hills of Bhutan, there are two tea farms owned by a farmer named Tenzing Bodosa. Earlier this year, these became the first in the world to receive a new certification launched by the University of Montana's Broader Impacts Group in the U.S., in partnership with Wildlife Friendly Enterprise Network (WFEN), which describes itself as "a global community dedicated to the development of products and tourism that contribute to the conservation of threatened wildlife." The tea from Bodosa's farms was certified as 'Elephant Friendly Tea'. It is till date the only Tea to have received this certification.

Keywords: Tea, Tea Market, Sustainability, Elephant Friendly, Certification, Assam Tea, Assam

# Assessing the social and economic benefits of organic and fair trade tea production for small-scale farmers in Asia: a comparative case study of China and Sri Lanka

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Renewable Agriculture and Food Systems, Volume 31, Issue 3, June 2016, 246-257p.

#### ISSN: 1742-1705 | 1742-1713

Organic agriculture has the potential to provide improved livelihood opportunities, increased income and social benefits for resource-poor small-scale farmers. It has thus become a popular strategy for economic development and poverty reduction in many areas of the global south. However, there has been limited empirical research regarding the actual benefits of certified organic production, particularly when organic is combined with fair trade certification, and for small-scale farmers who are not engaged in coffee or banana production. Further research is needed to demonstrate experiences of farmers under diverse socioeconomic conditions, organizational contexts and degrees of market access. To address these gaps, two surveys of certified organic and fair trade tea producers in China and Sri Lanka were undertaken to investigate the contributions of organic crops to the household economy. In both cases, organic production required lower investment in terms of external inputs but a higher input of farmers' labor. The price premium received by farmers for the organic tea compensated for the extra labor input and lower yield, resulting in a net profit. However, given the relatively small plots of tea gardens of each household, organic production could not fully provide for the households' livelihood. Non-farm income dominated the total income of the households across the study cases, despite the earnings from organic farming. In both sites, market-oriented organic tea projects have created more options for paid work locally, which benefits women of reproductive age. Social benefits of organic farming were also reported. Pursuing fair trade certification on top of organic production facilitated farmer organizing, training and community development. Organic agriculture and fair trade certification offer important prospects to improve the livelihoods of small-scale farmers in other, less favored areas of Asia. These forms of certified production could provide economic and social benefits in instances where farm income is the main source of household income.

**Keywords**: Tea Production, Organic Farming, Fair Trade, Livelihoods, Small-Scale Farmers, Asia, Tea, Organic, Certification, Organic Agriculture

# Certified Unilever Tea – A Cup Half Empty, Follow-up study on working conditions in Rainforest Alliance certified tea plantations in India

Glocal Research (Hyderabad) and India Committee of the Netherlands (Utrecht) Mariaplaats 4e 3511 LH Utrecht Nederland ICN Paper – August 2016, 40p.

This study is a follow-up research to the SOMO-ICN 2011 report titled Certified Unilever Tea — Small Cup, Big Difference?, a research on working conditions on eight large RA certified tea estates assessing the effectiveness of RA standards in the field. The SOMO-ICN 2011 report highlighted several issues of systemic non-compliance to the RA standards by all eight tea estates, in particular violations were found regarding casualization and unequal benefits for casual and permanent workers, freedom of association,

and the use of personal protection equipment. Therefore, this follow-up study focuses especially on these three identified issues in two Indian tea estates (of the seven that were covered by the 2009-10 SOMO-ICN study), Havukal and Kairbetta, in order to assess improvements in working conditions of the labourers.

It could be concluded from the study that, in the recent years, scarcity of labour and better employment opportunities for native tea estate workers has brought some changes in the working conditions of the workers at Havukal and Kairbetta tea estates. Some improvements have been made in terms of the payment of minimum wages, setting up procedures for safe handling of chemicals and the provision of basic medical care and educational facilities for all temporary and permanent workers. However, still many serious non-compliances were found related to unequal benefits for casual workers, overtime wages and working hours, advance payments, chemical handling practices and worker representation.

Key words: Unilever Tea, Certification, Tea, India, Sustainability, Standards, Label, Eco Label, Rainforest Alliance

### Impacts of private sustainability certification on practices of tea production in Tamilnadu, India Walter J.V. Vermeulen¹ and Just D. Dengerink²

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International Journal of Business and Globalisation, Volume 17, Number 1, January 2016, 45p.

#### ISSN:1753-3627

Private standards increasingly play a major role in creating sustainable practices in international trade relations. This paper presents the results of an impact study in tea produced for export in India and it compares a group of certified tea estates with non-certified farms. It aims to determine changes in time and differences between the two groups. The study reveals differences between certified and non-certified tea suppliers. These are partly rooted in a longer history of the certified farmers. The study shows that certified farms have a better economic performance and produce ecological and social benefits. Still their practices face some major challenges for the near future. The study also reveals that a part of the control group farms may be receptive for a move towards complying with standards set in the international market. It also discusses limitations of what private standards can achieve, especially in the area of socio-economic impact and living wages.

**Keywords:** Private Sustainability Certification, Tea Production, India, Value Chain, Sustainable Production, Private Standards, Voluntary Sustainability Standards, Tea Exporting, Sustainable Development, Certified Tea Estates, Non-Certified Farms, Socio-Economic Impact, Living Wage, fair-trade, Certification

### Environmental Sustainability Certification Initiatives in the Chinese Tea-Sector, The example of Zhejiang Province

LonnekeMichiels Wageningen University

Master Thesis, International Development Studies, 2016, 72p.

The main topic of this report is environmental sustainability issues in the production of tea in China. The tea sector's long-term sustainability is at stake. However, little research has focused on the issues for China specifically, despite that it is the world's largest tea producer. Thus, the focus of this

research lies on tea destined for export to Europe. This trade is motivating too high Maximum Residue Levels in tea, which are caused by overuse of pesticides.

Three research methods are used, a literature study, a standards analysis and semi structured interviews with key informants. These methods analyse three main aspects. First, environmental issues in the tea industry, Second, how the policies of the most important certification schemes UTZ, Rainforest Alliance, Fairtrade and IFOAM cover these issues. Finally, which obstacles farmers face in applying for certification schemes? This resulted in four main outcomes. First, agrochemical use is the most important environmental issue. Second, environmental issues in China differ from the issues in other countries, especially with regards to deforestation. Third, organic certification best addresses the most important environmental issue of pesticide use. Fourth, because of little incentive and the cultural value attributed to tea, many small-scale farmers are not reached for certification. This is due to acknowledge gap/level of organisations. In order to incorporate environmental sustainability schemes in the Chinese tea supply chain, especially more incentive should be created for it among farmers. IFOAM might be the best scheme to use but also the others deal with relevant aspects, such as soil quality and biodiversity conservation.

**Keywords:** Certification, Environmental Sustainability Schemes, China, Tea, Zhejiang Province, Ecolabel, Ecolabelling, Fairtrade, IFOAM, UTZ, Rainforest Alliance

### India, tea plantations with sustainable certifications violate labour rights

Joslyn Chittilapally Contributor Write on Sustainability, Veganism India

LIFEGATE, 23 September 2016

This article highlights the study by India-based an organization which finds gross violations of sustainability standards in Indian tea plantations, especially with respects to labour rights. Tea production in India, second only to China's in the world, provides employment to more than 3.5 million workers and accounts for more than 31% of the global market. Working conditions on tea plantations have historically been degrading and dangerous (as exemplified in the 2015 BBC documentary, The Real Cost of ACuppa). In response to these concerns companies are adhering to independent and stringent sustainability certifications such as Rainforest Alliance (RA). Unilever, one of the country's top producers and the largest tea company globally, plays a key role in driving the market for certification after having committed to sourcing all of its tea products from RA-certified farms by 2020. Yet a recent study highlights violations of national labour laws even on certified tea estates.

**Keywords:** Environment friendly, Certification, Tea, Ecolabel, Ecolabelling, Fairtrade, Sustainability, Rainforest Alliance

# Assessing the social and economic benefits of organic and fair trade tea production for small-scale farmers in Asia: a comparative case study of China and Sri Lanka

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Renewable Agriculture and Food Systems, Volume 31, Issue 3, June 2015, 246–257p.

### ISSN: 1742-1705 | 1742-1713

Organic agriculture has the potential to provide improved livelihood opportunities, increased income and social benefits for resource-poor small-scale farmers. It has thus become a popular strategy for economic development and poverty reduction in many areas of the global south. However, there has been limited empirical research regarding the actual benefits of certified organic production, particularly when organic is combined with fair trade certification, and for small-scale farmers who are not engaged in coffee or banana production. Further research is needed to demonstrate experiences of farmers under diverse socioeconomic conditions, organizational contexts and degrees of market access. To address these gaps, two surveys of certified organic and fair trade tea producers in China and Sri Lanka were undertaken to investigate the contributions of organic crops to the household economy. In both cases, organic production required lower investment in terms of external inputs but a higher input of farmers' labor. The price premium received by farmers for the organic tea compensated for the extra labor input and lower yield, resulting in a net profit. However, given the relatively small plots of tea gardens of each household, organic production could not fully provide for the households' livelihood. Non-farm income dominated the total income of the households across the study cases, despite the earnings from organic farming. In both sites, market-oriented organic tea projects have created more options for paid work locally, which benefits women of reproductive age. Social benefits of organic farming were also reported. Pursuing fair trade certification on top of organic production facilitated farmer organizing, training and community development. Organic agriculture and fair trade certification offer important prospects to improve the livelihoods of small-scale farmers in other, less favored areas of Asia. These forms of certified production could provide economic and social benefits in instances where farm income is the main source of household income.

**Keywords:** Tea Production, Organic Farming, Fair Trade, Livelihoods, Small-Scale Farmers, Asia, Certification, Tea, Organic Tea, Sustainability

### Sustaining an Enterprise, Enacting SustainabiliTea

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Science, Technology, & Human Values, Volume 39, Issue 6, 2014, 819-843p.

#### ISSN: 0162-2439 | 1552-8251

Standards that codify sustainability, such as Ethical Trade, Fairtrade, Organic and Rainforest Alliance, have become a common means for value chain actors in the Global North to make statements about the values of their products and the practices of producers in the Global South. This case study of Tanzanian tea value chains takes a closer look at how sustainability, in the form of SustainabiliTea, is done by actors who did not participate in defining and standardizing the form of sustainability with which they are meant to comply. Based on data collected during a multi sited ethnography, Author explores the performative nature of sustainability standards. The analysis reveals sustainable projects, sustainable markets, sustainable farm management, and sustainable qualities. These multiple SustainabiliTeas work together to construct a single vision of SustainabiliTea, which is a mean to sustain the enterprise. Author argues that the use of standards to guide performances makes some technical and political stakes visible while rendering others invisible. By paying attention to the residual categories, the tensions between knowledge and materiality, and listening to those voices at the margins, they see what is at stake in the maintenance of SustainabiliTea: survival in the tea market.

**Keywords:** Politics, Power, Governance, Markets/Economies, Development, Standards, Environmental Practices, Certification, Sustainability

## Improving practices, changing lives: an analysis of tea certification audit reports from Malawi, Rwanda and Tanzania

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Technical Report, Rainforest Alliance, January 2014, 14p.

The Rainforest Alliance undertook a preliminary assessment of how the certification process affects the implementation of best agricultural practices specified in the Sustainable Agriculture Network (SAN) standard—the standard farms must meet in order to earn Rainforest Alliance certification—which include farm management methods designed to protect the environment, increase productivity and improve farmer livelihoods

The analysis of this study demonstrated that tea producers in East Africa showed a consistent and high degree of action to correct the non-conformities identified at the time of their initial certification audit and thereby improved their implementation rate of beneficial practices. Three-quarters of all non-conformities identified at the first audit had been fully addressed by the most recent audit, which occurred, on average, 2.5 years later. Those principles with the highest rates of improvement (100 percent of nonconformities addressed by the most recent audit) were wildlife protection (Principle 3), community relations (Principle 7) and soil management and conservation (Principle 9); these were the principles with the least non-conformity at the initial audit.

The analysis presented in this report provides strong support for the contention that the Rainforest Alliance certification audit is a tool that promotes continuous improvement of farm management practices. It also identifies those areas where the Rainforest Alliance certification program has led to improvements in worker livelihoods and the natural environment on and around tea farms, and it identifies areas where more change is needed.

**Keywords:** Rainforest Alliance, Tea Plantations, Sustainable Agriculture Network, Label, Labelling, Tea, Sustainability, Rainforest Alliance Certification, Certification

### Rainforest Alliance Certification of Kenyan tea farms: a contribution to sustainability or tokenism?

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Journal of Cleaner Production, Volume 39, January 2013, 285-293p.

#### ISSN: 09596526

An Environmental Management System (EMS) refers to a set of guidelines that organisations can use to structure their management to prevent or minimise adverse environmental and social impacts. Rainforest Alliance Certification (RFC), one example of an EMS, was adopted by some Kenyan tea farms in 2007 to promote sustainable tea production. RFC addresses the three pillars of sustainable development (environmental, economic and social) and as such is suited to tea farming which has been characterised by environmental resource degradation, job insecurity, strenuous work conditions and child labour. To study the effect of certification, interviews with farm managers, and farm workers on certified and non-certified tea farms were carried out. Sets of agri-environmental and socio-economic indicators were then compared using these data. The results indicate that the RFC brings some important social and environmental benefits to certified tea farms. These benefits include improved work conditions and to a limited extent, natural resource conservation. However, there were no differences between certified and non-certified farms in a number of aspects, including access to health services and employee living conditions. Two main conclusions can be drawn. First, although there are important sustainability benefits from adopting the RFC, more efforts are still needed to achieve sustainability on certified farms. Secondly, there are sufficient benefits to indicate that all tea farms should be encouraged to become certified.

**Keywords:** Rainforest Alliance, Certification, Sustainable Development, Tea, Farming, Environmental and Social Sustainability, Evaluation, Kenya, Label, Ecolabelling, Ecolabel

### Fair Trade Certification: The Case of Tea Plantation Workers in India

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Development Policy Review, Volume 30, Issue 1, 2012, 87-107p.

### ISSN: 0950-6764 | 1467-7679

This article analyses the impact of Fair Trade certification by focusing on its interactions with the patron–client relations traditionally established between management and workers in tea plantations in India. It argues that the invisibility of Fair Trade among workers, which generally reinforces existing patron–client relations through Fair Trade premiums, inversely hides the patronage of the management, and that workers are empowered when a premium is invested in a community development project led by an independent third-party organisation.

**Keywords:** Fair Trade Certification, Tea Plantations, Patron–Client Relations, Label, Labelling, Workers' Perceptions, India, Intermediary Organisation, Tea, Sustainability

### Development and certification of green tea-containing standard reference materials

L. C. Sander<sup>1</sup>, M. Bedner, M. C. Tims, J. H. Yen, D. L. Duewer, B. Porter, S. J. Christopher, R. D. Day, S. E. Long, J. L. Molloy, K. E. Murphy, B. E. Lang, R. Lieberman, L. J. Wood, M. J. Payne, M. C. Roman, J. M. Betz, A. NguyenPho, K. E. Sharpless and S. A. Wise

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Analytical and Bioanalytical Chemistry, Volume 402, 2012, 473–487p.

### ISSN: 1618-2650 | 1618-2642

A suite of three green tea-containing Standard Reference Materials (SRMs) has been issued by the National Institute of Standards and Technology (NIST): SRM 3254 *Camellia sinensis* (Green Tea) Leaves, SRM 3255 *Camellia sinensis* (Green Tea) Extract, and SRM 3256 Green Tea-Containing Solid Oral Dosage Form. The materials are characterized for catechins, xanthine alkaloids, theanine, and toxic elements. As many as five methods were used in assigning certified and reference values to the constituents, with measurements carried out at NIST and at collaborating laboratories. The materials are intended for use in the development and validation of new analytical methods, and for use as control materials as a component in the support of claims of metrological traceability.

**Keywords:** Green tea, *Camellia sinensis*, Standard Reference Material, Catechins, Xanthines, Toxic elements, Theanine, Tea, Certification

### Development and certification of green tea-containing standard reference materials

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Analytical and Bioanalytical Chemistry, Volume 402, Number 1, 30 November 2011, 473-487p.

#### ISSN: 1618-2650 | 1618-2642

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Key words: Green Tea, Certification, Tea, Sustainability, Standards, Label, Eco Label

### Sustainably Performed: Reconciling Global ValueChain Governance and Performativity

Allison Loconto Michigan State University

Journal of Rural Social Sciences, Volume 25, Issue 3, 2010, 193–225p.

ISSN: 2151-4178

Merging theories of performativity with Global Value Chains (GVC) analysis, I explore how standards are used within GVCs to govern interactions among actors and to perform a multiplicity of 'sustainabilities.' Specifically, this paper presents four case studies of certified tea production in Tanzania (i.e., the Ethical TeaPartnership, Fairtrade, Organic, and Rainforest Alliance) to reveal how visions of sustainability are enacted by different actors in each certified value chain. This analysis reveals that, while the Rainforest Alliance and Ethical Tea Partnership 'sustainabilities' are 'generically' performed, the Fairtrade and Organic 'sustainabilities' are 'effective' in enacting multiple versions of sustainability that have facilitated changes to practices in the teavalue chain. This attention to the enactment of values in the practice of agrifood production allows for a morenuanced understanding of governance in value chains and suggests a way to shift discussions of GVCgovernance away from the primary focus on 'drivenness'.

Keywords: Rainforest Alliance, Tea, Certification, Fairtrade, Certification, Sustainability, Organic, Label

## Rainforest Alliance Certification of Kenyan Tea Farms: A Contribution to Sustainability or Tokenism?

Benard Omondi Ochieng Lincoln University Christchurch, NewZealand

Thesis for the Degree of Master of Applied Science, 2010, 200p.

An Environmental Management System (EMS) is an approach organisations can use to structure their management to prevent or minimise adverse environmental and social impacts. Rainforest Alliance Certification (RFC), one example of an EMS, was adopted by a number of Kenyan tea farms in 2007 to promote sustainable tea production. It addresses the three pillars of sustainable development (environmental, economic and social) and as such is suited to tea farming which is characterised by job insecurity, strenuous work conditions, child labour and environmental resource degradation. As numbers of EMSs and pressures on organisations to adopt them increase, it is imperative to evaluate their contribution to achieving sustainability. In this study, a mix of methods - qualitative interviews with farm managers and government officials, quantitative interviews with farm workers, biophysical observation and secondary data - were used to compare agri-environmental and socio-economic indicators between certified and non-certified tea farms. Analysis of the results indicates that the RFC brings some important social and environmental benefits, for example, improved work conditions and to a limited extent, natural resource conservation. Certified tea farms maintain riparian strips to protect natural resources and also monitor their water quality more frequently than non-certified tea farms. However, there were no significant differences in some aspects including employees'housing conditions and source of cooking energy. Although there are important benefits from adopting the RFC, there are obvious gaps between certification and sustainability which need to be addressed if full benefits are to be achieved. This is a thesis submitted in partial fulfillment of the requirements for the Degree of Master of Applied Science.

**Keywords:** Developing Countries, Rainforest Alliance Certification, Tea Farming, Comparative Evaluation, Kenya, Certification, Sustainability, Tea, Ecolabel, Label

### Unilever sustainable tea, Part I: Leapfrogging to mainstream: Case Study

Tania Braga Aileen Ionescu-Somers and Ralf Seifert, IMD's Center for Corporate Sustainability Management Amsterdam, The Netherland

The Netherland: Dutch Sustainable Trade Initiative, 2010, 17p.

Tea – production, processing and consumption – is one of the commodity value chains in question. This case, the first of IDH's Market Transformation case series, documents a groundbreaking initiative by Unilever, the Anglo-Dutch Food & Beverage Company, to make its own tea value chain sustainable. This initiative started with the popular Lipton and PG Tips brands in specific countries and is gradually rolling out in other regions of the world. The company, recognising that no single entity can solve the complex issues around conversion of the tea value chain on its own, entered into a partnership with the Rainforest Alliance. Through Rainforest Alliance certification of tea plantations, the partnership has accelerated a transformation to sustainable Unilever tea products. Concurrently, they have built an effective, groundbreaking approach to communicating this shift effectively to tea drinkers without undermining its consumer base. The lessons learned from building the partnership and the "win-win" outcomes for the players involved are carefully extracted and reported in the case. An innovative communications and marketing strategy that enabled the company to successfully link sustainability to mainstream brands (as opposed to the more usual "niche" approach) is also documented. This booklet is part of a series of IDH supported case studies that focus on the "know-how" of commodity market transformation. These studies are filled with practical insights, wisdom, and time-tested advice from those deep in the trenches of driving real change in global markets.

Keywords: Rainforest Alliance Certification, Tea Farming, Certification, Sustainability, Tea, Ecolabel, Label

# Sustainability Issues in the Tea Sector, A Comparative Analysis of Six Leading Producing Countries

Sanne van der Wal Centre for Research on Multinational Corporations (SOMO) Sarphatistraat 30 1018 GL, Amsterdam Nederland

Amsterdam: Centre for Research on Multinational Corporations, 2008, 111p.

ISBN: 978-90-71284-23-6

Tea is the second most popular drink in the world, after water. For a number of developing countries it is an important commodity in terms of jobs and export earnings. Tea production is labour intensive and the industry provides jobs in remote rural areas. Millions of livelihoods around the world depend on tea picking and processing. However, as with many other agricultural commodities, real primary producer prices have fallen dramatically over the last three decades. Low prices are affecting the sustainability of the tea sector, with working conditions and the livelihoods of plantation workers and smallscale farmers in tea producing countries under pressure. Meanwhile, tea trade and distribution is dominated by a few international companies that benefit from stable retail prices. In this report, SOMO is presenting for the first time ever a more detailed and comparative analysis on social, economic and ecological conditions in the tea sector in 6 of the most important tea-producing countries, India, Sri Lanka, Vietnam, Indonesia, Kenya and Malawi. The research is based on an extensive field study of civil society organisations in these countries, thus providing a unique perspective on this sector. The report also presents an overview of trade, production and stakeholders in international tea supply chains, and makes recommendations to various stakeholders for improving conditions, particularly for plantation workers and tea smallholders the most vulnerable in the tea industry. The study found that working conditions for pickers are often poor, with low wages, low job and income security, discrimination along ethnic and gender lines, lack of protective gear and inadequate basic facilities such as housing and sometimes even drinking water and food. At the same time there is no possibility for tea plantation workers to improve working conditions because trade unions are ineffective or absent and/or are not representing them because most of them are temporary workers. While tea production by smallholders is growing worldwide, their situation is often problematic because the prices they are paid for fresh tea leaves tend to be below the cost of production, among other factors. The sector's environmental footprint is considerable, with reduced biodiversity as the result of habitat conversion, high energy consumption (mainly using logged timber) and a high application of pesticides in some countries.

Key words: Tea, Certification, Tea, Sustainability, Standards, Label, Eco Label

#### **Indian Tea Research**

Saji M Kadavil Programme Manager, Solidaridad Asia Pvt. Ltd. Delhi, India

Indian Tea Research, 2007, 120p.

The purpose of the present research would be to integrate it with researches being conducted in other 5 tea producing countries by SOMO which has taken the initiative to coordinate, facilitate and conduct a global tea research programme together with research partners in a number of major tea-producing countries, such as Indonesia, India, Sri Lanka China, Vietnam, Kenya and Malawi. Research in Indonesia has already started while research in Kenya and Malawi will start the beginning of 2007. The findings would be used to inform a broad audience of tea companies, sector organisations, civil society organisations, trade unions, government bodies and the media in the Netherlands, Europe as well as in tea-producing countries with the aim of improving labour, social, environmental and economic conditions in the global tea industry and increasing the competitiveness of the tea industry as a whole. The study made an attempt to understand how these plantation segments achieve international standards of CSR by achieving high productivity, quality and maintain good workforce in the changing scenario of plantation model to participatory plantation management and to business model in the recent period in the Indian tea industry. The article also listed website on Tea Industry at the end.

**Keywords:** Types of Indian Tea, Marketing, Indigenous Small Tea Growers, Traditional Tea, Handmade Tea, Tea, Certification, Fairtrade, Certification

### Purchaser's Guide to Sourcing Sustainable Coffee and Tea

Healthcare without Harm 1901 North Moore Street, Suite 509 Arlington, VA 22209 USA

Health Care Without Harm, 27<sup>th</sup> July 2007, 4p.

Coffee and tea production have become increasingly industrialized since the 1970's relying on more chemical-intensive fertilization and pest control techniques and other practices that can have many negative social, economic, and human and environmental health impacts. This brochure has presented survey to know about "Suppliers." The survey can be used by purchasers to identify sustainably produced coffee and tea products as well as wholesalers and roasters who have a demonstrated commitment to fair trade values. As a significant amount of material is used to package and ship coffee and tea products, a few questions about packaging have also been included. Purchasers are encouraged to support these businesses and the small scale fair trade roaster/wholesalers who are members of Cooperative Coffees, a cooperative importer of green coffee. While buying products that have been Fair Trade Certified is a significant step towards supporting fair trade practices, the label only indicates that the product, in this case coffee or tea, was purchased from the producer under Fair Trade terms and does not certify that the company selling the product is committed to fair trade practices and principles.

Keywords: Eco-labels, Coffee, Ecolabelling, Certification, Tea, Labels, Fair Trade

# Ecolabelling –as a potential marketing tool for African Products (An overview of opportunities and challenges)

United Nations Environment Programme and African Roundtable on Sustainable Consumption and Production

Nairobi, Kenya, United Nations Environment Programme, 2007, 36p.

The report underlined that the spread of environmental requirements, including ecolabelling and other types of standards, can be expected to continue to increase due to the actions of private market actors, particularly through supply chain contracts and big retail chains. It also underlines the need to contribute to the design of ecolabelling programmes and accompanying private and public policies that respond to SMEs and developing country needs and conditions, including 'phased approaches' to the introduction of standards, technical equivalence agreements and lower-cost conformity assessment and certification services. This brochure was produced on the basis of the outputs of the activities that were carried under the 'Development of an African Ecolabelling Scheme'. Eco-labels are intended to educate and increase consumer awareness of the environmental impacts of a product and bring about environmental protection by encouraging consumers to buy products with a lower environmental impact. This brochure covers the information on ecolabels of Coffee and Tea.

**Key words:** Ecolabeling, Coffee, Sustainability, Fairtrade Label, Ecolabel, Label, Consumer, African Ecolabelling, Africa, Tea, Fair Trade



### Protecting the Geographical Indication for Darjeeling Tea

S. C. Srivastava Indian Law Institute, New Delhi

Managing the Challenges of WTO Participation (Managing the Challenges of WTO Participation: 45 Case Studies): Case Study 16, 2005

This case study relates to the geographical indication (GI) protection of Darjeeling tea. It tells the story of the unauthorized use and registration of 'Darjeeling and Darjeeling logo' by Japanese companies already registered in Japan by the Tea Board of India. The study also refers to the unauthorized use and attempted registration of the words 'Darjeeling and Darjeeling logo' by some other developed countries.

Even though the tea industry in India lies in the private sector, it has been statutorily regulated and controlled by the Ministry of Commerce since 1933 under various enactments culminating in the Tea Act, 1953. In order to ensure the supply of genuine Darjeeling tea, a compulsory system of certifying the authenticity of exported Darjeeling tea was incorporated into the 1953 Tea Act in February 2000. The system makes it compulsory for all the dealers in Darjeeling tea to enter into a license agreement with the Tea Board of India on payment of an annual license fee.

Keywords: Geographical Indication, Darjeeling Tea, Tea, WTO, Certification

**Consumer Education and Research Centre** 

Consumer Education and Research Centre (CERC), set up in 1978, is a non-political, non-profit and non-government organisation dedicated to the education and empowerment of consumers as well as promotion and protection of consumer interests through effective uses of education, research, the media and law. CERC has three major roles-to make consumer aware of their rights, to help them protect themselves and to make providers of goods & services accountable. Its activities include, besides comparative testing of products, complaints handling, legal advice and litigation, consumer education and awareness programmes, library and information service, publication, advocacy, investor and environment protection.

#### **CERC-ENVIS Resource Partner**

Ministry of Environment, Forest & Climate Change, Government of India has recognized Consumer Education and Research Centre (CERC) as ENVIS (Environmental Information System) centre in 2005. The focus is to provide environmental information to decision makers, policy planners, scientists and engineers, research workers, etc. across the country. ENVIS was conceived as a distributed information network with the subject-specific centres to carry out the mandates and to provide the relevant and timely information to all concerned.

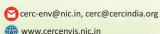
Subject assigned to the CERC-ENVIS Centre is 'Environment Literacy – Eco-Labelling & Eco-friendly products'. The centre launched the website <a href="http://cercenvis.nic.in/index.html">http://cercenvis.nic.in/index.html</a> on NIC (National Informatics Centre) platform with the theme of 'Environment Literacy – Eco-Labelling & Eco-friendly products'. The website furnishes the information on national and international scenario on this subject.

It publishes theme based quarterly newsletter named 'Green Insights'. It also circulates bimonthly e-bulletin 'Green Alert'. Since social media is very popular among youth and to sensitise them towards eco products, ENVIS Resource Partner has a page on Facebook, official account on Twitter and YouTube.



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