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P.G. Chengappa, Karl M. Rich, Arun Muniyappa, Yadava C.G.,
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NUPI Working Paper 830

Department of International Economics

Publisher: Norwegian Institute of International Affairs
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Sustainability Coffee Certification in India: Perceptions and Practices

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Abstract

Certification programs has been employed in many agricultural products as a means to encourage and communicate compliance with standards associated with various attributes, such as organic, fair-trade, GMO free, and eco-friendly, among others. Such programs further seek to provide added value, through a price premium, to producers and supply chain actors associated with the label. In this paper, we review a number of global labeling and certification programs that could add value for coffee farms in India through the promotion of conservation and environmental protection. We provide results from a survey conducted on a sample of coffee farms in Coorg district, India to assess their awareness and perceptions related towards certified coffee and environmental conservation in general. Survey results illustrate strong positive associations with the environment by coffee planters, particularly among certified and organic producers. However, price premiums for certified and organic coffee are relatively small. While the potential of conservation-oriented certification for coffee in Coorg could be relatively limited outside of a few individual-level niches, branding Coorg more generally as a conservation-oriented region could hold promise, leveraging and personalizing the uniqueness of the natural offerings from Coorg and tapping into burgeoning associations with place and region in India.

Published by Norwegian Institute of International Affairs

* Corresponding author. This research was funded by the Norwegian Research Council's NORGLOBAL program, project number #217203 as a joint collaboration between the Norwegian Institute of International Affairs (NUPI) and the Institute for Social and Economic Change (ISEC), Bangalore.

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Introduction

In many agricultural sectors, market pressures to expand production often come at the expense of valuable natural forests, with devastating impacts on local biodiversity. In the coffee sector, biodiversity has often come under threat due to falling coffee prices, which often reduce incentives to maintain natural shade cover in lieu of more remunerative economic activities (O'Brien and Kinnaird 2003; Olschewski et al. 2006). In the Western Ghats of India, Ninan and Sathyapalan (2005) noted high opportunity costs for coffee farmers to preserve local biodiversity, but also found strong willingness of farmers to engage in conservation efforts. Garcia et al. (2010) highlighted the need to integrate conservation programs with the livelihoods of farmers in the Western Ghats in ways that provide win-win solutions for stakeholders and the environment alike. The sustainable management of ecological resources thus requires conservation efforts that protect against habitat loss and link stakeholder incentives to the process itself.

Many incentive programs exist on the supply and demand side to improve compliance with conservation programs. Payments for environmental services (PES) are one type of incentive mechanism for producers to adopt more sustainable land use and production practices. PES programs are mechanisms in which payments are made to landowners by downstream users, government, and/or donors to encourage the use and conservation of land towards more sustainable practices (e.g., from traditional, extensive pastures to combined forest/pasture production) (Pagiola 2008). In this way, the environmental externalities associated with a variety of production activities are internalized by establishing property rights and a market for their commercialization (Bulte et al. 2008). At the same time, PES programs are overwhelmingly funded by government or donor organizations, with sustainable private-sector led funding mechanisms largely absent (Milder et al. 2010; Porraset al. 2012). There is also evidence that access to PES programs, particularly for the poor, are sometimes unequal (Engel, Pagiola, and Wunder 2008).

In this context, an important research gap is linking PES with financial and communication mechanisms that add value for producers, and shift the burden of payment from government to consumers who are willing to pay for such goods. In order to create a link between conservation and sustainable coffee production, there is a crucial role to communicate the efforts taken by the value chain towards the development of "greener" supply where PES programs have often been lacking. Certification through eco-labeling or other labeling/branding programs is one way in which this can be achieved,

with a long history of many labels (e.g., organic, Fairtrade, Rainforest Alliance, Forest Stewardship Council, etc.) in many products, including *inter alia* coffee, tea, cocoa, and wood products. The rationale of eco-labels is to communicate the environmental stewardship associated with a product and its production process, and provide added value, through a price premium, to producers and supply chain actors associated with the label. In India, where there is a burgeoning association between food and its origin, such labels could not only add value to local coffee but also provide an important input to environmental protection (Garcia et al., 2007). However, this requires an understanding of the perceptions and constraints of prospective stakeholders to contribute to more sustainable forms of production.

In this paper, we first provide a brief review of the constellation of global labeling and certification programs that could have applicability in adding value for coffee farms in India through the promotion of conservation and environmental protection. We then provide results from a survey conducted on a sample of coffee farms in Coorg district, India to assess their awareness and perceptions related towards certified coffee and environmental conservation in general. Survey results illustrate strong positive associations with the environment by coffee planters, particularly among certified and organic producers. However, price premiums for certified and organic coffee are relatively small. At the same time, when viewed with respect to the nature of coffee value chains in Coorg (see Chengappa et al. 2014), the potential of conservation-oriented certification for coffee in Coorg could be more limited outside of a few individual-level niches. However, branding Coorg more generally as a conservation-oriented region could hold promise, leveraging and personalizing the uniqueness of the natural offerings from Coorg and tapping into burgeoning associations with place and region in India.

An overview of certification and labeling programs – concepts and applications in the coffee sector

Food labels serve a multitude of purposes for consumers. One of the important roles of labels is to transmit knowledge about particular attributes to consumers prior to purchase. Darby and Karni (1973) differentiate between three types of qualities inherent in a purchase. Search qualities are those that the consumer has knowledge about prior to purchase. Experience qualities are those in which the consumer gains knowledge only after purchase. Credence qualities are qualities that the consumer may not have awareness of even after purchase, or only at significant cost to the consumer (Darby and Karni, 1973). It has been argued that labels can transform credence goods into search goods (Oliver and Constantos, 2011).

Not all labels are created equally, with important differences between brands and labels. A brand is more than a label, reflecting a promise by a manufacturer to provide a variety of attributes, quality, and experiences associated with a product (Kotler 2003). Brands thus convey a variety of information and experiences associated with a product, allowing consumers to assign responsibility to a particular manufacturer and to reduce search costs. A brand is the bond with consumer and is the promise to deliver specific set of features, benefits, and services (Pugh and Fletcher, 2002). Labels, by contrast, lack two important features of brands. First, brands are generally exclusive to the firm that uses it, while labels can be used by a variety of different users that comply with the rules of the label. Second, labels do not embody or promise the same set of attributes as a brand, often focusing on more specific attributes such as origin or production system (e.g., organic, Fairtrade).

Certification schemes focus on the process of compliance with a labeling program. At a basic level, certification programs specify the compliance with minimum allowable standards for various attributes, such as organic, fair-trade, GMO free, eco-friendly, shade grown, etc. An important distinction is that certification is a form of providing assurance of attributes by the producer to the buyer, while the label is a form of communication from producers or manufacturers to the end consumer or buyer. Certification is provided only after a thorough verification of the various compliance processes of the product's attributes and qualities. It is important to note that certification is suggestive of only a minimum level of standard, usually specified by

either professional bodies or international Non Governmental Organizations (NGOs). In many countries, governments welcome such programs, as these standards pertain to national priority areas such as environment, sustainability, social equity, etc. (Dankers, 2003).

The process of certification consists of a sequence of steps. First, an accreditation body, often a NGO, develops the standards and the accreditation process, and identifies third parties involved to audit and monitor compliance. Interested parties that wish to use the label would then make an application with the certification body. The certification process differs depending on whether an individual or group applies. Group certification is usually undertaken when there are a very large number of small producers so as to simplify the process and reduce the costs involved, although the processing time for group certification can be longer (Tovar et al., 2005). In the case of group certification, there will be both a collective (internal) monitoring mechanism to control for standards compliance and an external third party to inspect different groups by the other groups or a supervisory collective organization that undertakes the monitoring of each and every plot under the certification scheme (Tovar et al. 2005; Serrano 2003). Individual certification programs are mostly inspected for compliance by third party agencies and the process is relatively fast.

Based on the standards provided, some certification programmes mandate a self-assessment of applicants as a prerequisite to proceed further. With the acceptance of standard by the applicant, the certification body arranges for various inspection processes to ensure compliance at various stages and often mandates that applicants document their compliance procedures. Upon meeting the standards for a stipulated period (usually in number of years for organic certification), the applicant shall be issued with a certificate, which can be used to access (premium) markets with suitable tie-ups with marketing and export agencies in the field.

There are different categories of certification pertaining to organic, social, and environmental standards followed for coffee. Many certification programs are a combination of these standards, though each of these uniquely targets a particular market segment. The first formalized certification program was organic certification that was initiated during the 1960s, though the concept has been practiced since the 19th century. Organic certification involves following both a set of standards in production and a required transition period from conventional to organic production. Basic standards for organic are provided for by the International Federation of Organic Agriculture Movements (IFOAM), though different countries often have different standards for what constitutes as organic. Bird Friendly (BF) or Shade

Coffee (certified by the Smithsonian Migratory Bird Centre)¹ and bio-dynamic (Demeter)² certification are subsets of organic production that are among the most stringent certification programs. The most prominent social and environmental certification programs in coffee are Rainforest Alliance (RFA)³, UTZ, and Common Code for Coffee Community (4C). In addition, there are private programs such as CAFÉ certification of Starbucks and the AAA Nespresso⁴ quality standards of Nestle.

RFA certifies a wide range of agricultural, forestry, and service products, working with the Sustainable Agricultural Network (SAN) in the development of principles and utilizing SAN representatives in the process of certification of farmland (Ventura 2007). Certified farms are required to meet criteria in a variety of “principle groups” that cover aspects such as management, ecosystem preservation, workers rights, waste disposal, water and soil management, and community involvement (Ventura 2007).⁵ The thresholds for compliance – initially 50 percent in all principle groups and 80 percent overall – rise over time (Ventura 2007). Costs are proportionate to farm sizes, with farmers responsible for meeting certification costs – Ellis and Keane (2009) note small farms could pay US\$500 for certification, while larger farmers could face costs of several thousand dollars. However, in the case of small farmer groups, NGOs often offset some or all of the costs. The benefits of RFA or FSC certification comes from slightly higher price premiums associated with its products, though such premiums are not guaranteed; in some cases productivity improvements or cost-efficiencies are realized.⁶ The use of the RFA or FSC logo also alerts consumers that products are sourced from sustainable sources. However, Ellis and Keane (2009) remark that the Rainforest Alliance logo can be used provided that just a minimum of 30% of sourced products are certified.

During 2012, 375,000 metric tons of coffee, representing 4.5 percent of global production, was grown on RFA Certified farms, a 45

¹ In addition to practicing organic production, BF certification requires maintaining species diversity of trees on the farm. 40% vegetative cover is mandatory even after pruning. Furthermore, some dead limbs and trunks must be kept on coffee bushes to provide habitation for birds and insects. Additionally, soils must be covered and runoff controlled, apart from maintaining vegetative buffer zones near water streams to shelter animals (SMBC, 2002).

² It requires an altogether different set of practices to prepare and apply manure to maintain microbial load.

³ Formerly called Eco-OK

⁴ Nespresso supports the expansion of RFA by committing to procure 80% of its total certified produce, by 2013 (Pierrot, Giovannucci, and Kasterine, 2011).

⁵ See <http://sanstandards.org/sitio/subsections/display/7>

⁶ <http://www.rainforest-alliance.org/sites/default/files/publication/pdf/ag-cost-benefit-certification-en-hz-mar13.pdf>

percent increase over 2011. Over 118,000 coffee farms – most of which are small – covering almost 323,500 hectares are RFA certified.⁷ Most of RFA's certified coffee originated from Central and South America (70%), with a majority sold in European markets (55%). UTZ (Netherlands) certification started in 1997, and is managed by UTZ Kapeh, a private NGO. This certification program promotes better business practices as a key tool of sustainability. UTZ has adopted EurepGAP standards for coffee including social and environmental criteria. Though complete traceability is a must in most certification programs, UTZ further enables online monitoring. Another verification system is 4C, started as a public-private partnership by the coffee industry and German government in 2003. 4C compliant coffee was first sold in 2007-08⁸. 4C was exclusively designed for coffee and does not include other commodities as in the case of other certification programs (Pierrot and Giovannucci, 2010). Most of 4C's certified coffee originates from Latin America and Vietnam, with volumes reaching 1.73 million tonnes during 2012⁹.

All of the different social and environmental certification programs have similar objectives and principles of sustainable environmental practices, conservation, and social equity, though there are specific differences in their extent and magnitude. Mutual recognition of standards is largely not followed – adopting a new certification requires going through a new certification process. UTZ and 4C are reported to be the most intense in the sense that both programs comply with the most basic requirements of all certification programs. By contrast, Fairtrade is more purely a social certification program that focuses on the welfare of small and marginal farmers and the labor community as its purview. Fairtrade India was officially launched on 21 November 2012 in Bangalore, although Fairtrade started working with Indian producers almost 19 years ago, helping them to gain access to European markets on better terms of trade. The initial basket of Fairtrade products from India included tea, spices, coffee, cotton, and nuts. There are now 121,400 workers (India has the largest number of workers in Fairtrade hired labour organizations in the world) and farmers working with Fairtrade in India, with 72 Fairtrade certified producer organisations that export Fairtrade certified products around the world. In 2012, Indian farmers and workers received an additional 2.4 million Euros as a Fairtrade premium above what they would otherwise have received in the market.¹⁰ Fairtrade organizes producers in a “fair trade association” which provides marketing facilities and

⁷ <http://www.rainforest-alliance.org/newsroom/news/sustainable-coffee-grows>

⁸ <http://www.4c-coffeeassociation.org/become-a-member/membership-benefits/for-trade-and-industry.html>

⁹ www.4c-coffeeassociation.org

¹⁰ <http://www.fairtrade.net/single-view+M5316f2e262e.html>

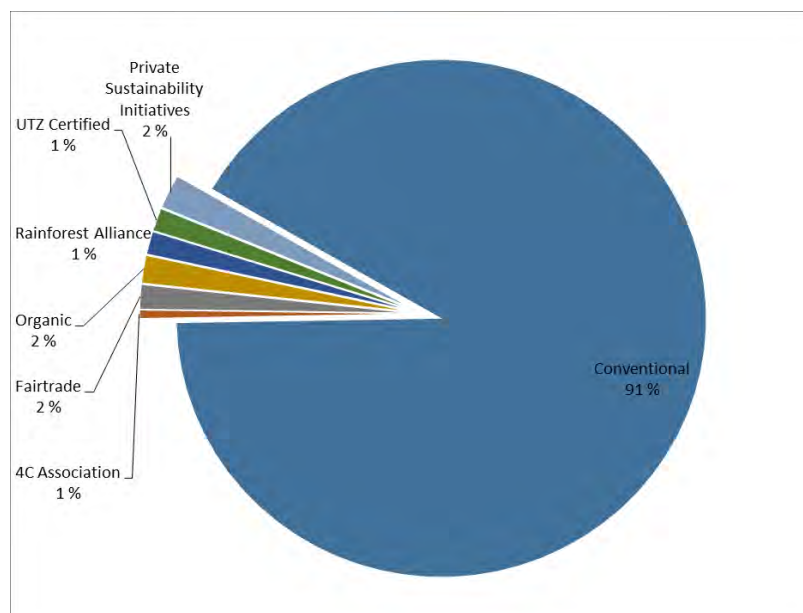
assures premium prices for producers. This is in marked contrast to RFA and 4C in which premiums are not explicitly assured.

The Amalgamated Coffee Bean Trading Company (ABCTC), a leading exporter of Indian coffee, was the first to initiate sustainability certification through UTZ Kapeh in India starting in 2003-04. In Coorg, multinational companies such as NED Commodities India Pvt Ltd., EcomGill, and Nestle India Ltd. are actively engaged in coffee certification. NED Commodities started certification with the support of Prakruthi (a Bangalore based NGO), while UTZ engaged the assistance of the Dutch NGO Solidaridad, and Ecom Gill is associated with the Nature Conservation Foundation, a NGO in Mysore for RFA certification starting in 2006-07. Nestle India started 4C certification in the year 2012. At present, all major companies are implementing certification on their own without the assistance of NGOs.

Market trends in global coffee certification

The share of sustainable coffee to total global coffee production was 17 percent during 2009 but only about half (8%) of it was sold as sustainable coffee (figure 1). Differences in quality, additional marketing and licensing costs, and timing of demand are the reasons indicated for this low share. In some cases, a coffee certification program may specify a period of time for which the certificate is valid and if the stock is unsold during that period, it has to be sold as conventional. Global sales of organic coffee have increased over the last decade (250 percent). While such sales have slowed down in the last few years, its growth is much higher than conventional coffee (about 2 percent per year). Sales figures for sustainable coffee indicate a startling 473 percent increase during the five-year period (2004-09), with each major program recording well above average conventional coffee sales growth (figure 2). Overall, the production of sustainable coffee reached 100,000 tons in 2009.¹¹

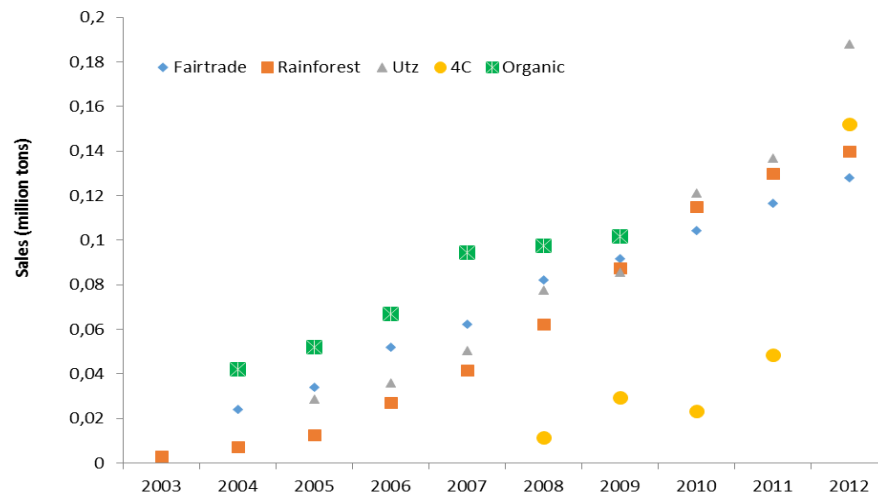
Figure 1. Composition of coffee global certification programs in 2009



Source: Potts *et al.*, 2010.

¹¹ http://seasofchange.net/file/downloads/2012/04/05.04-SoC-coffee-Fact-Sheet-final_cover1.pdf

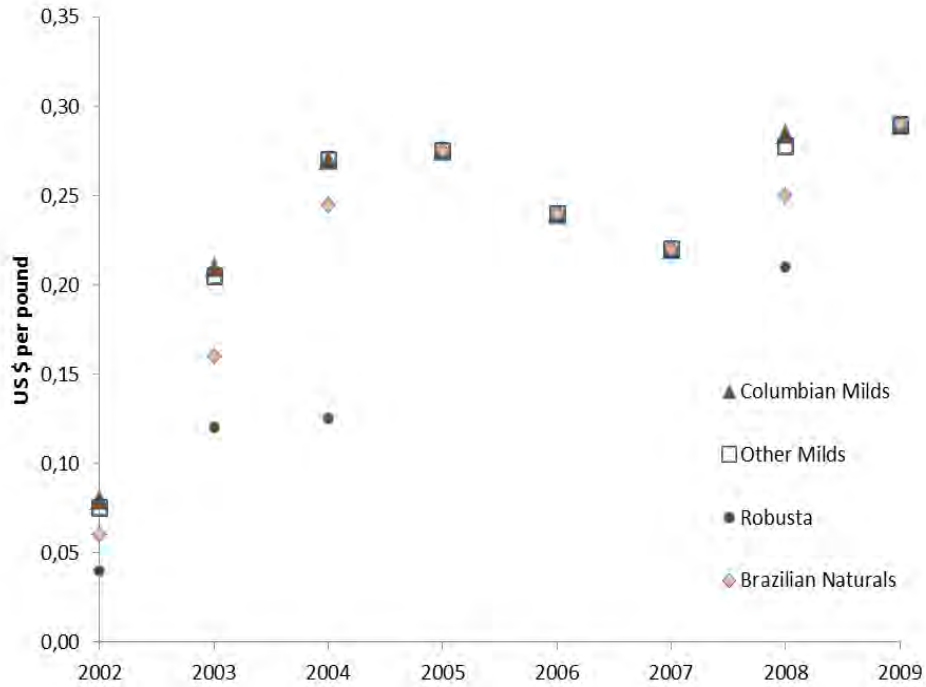
Figure 2. Trends in the sale of certified green coffee (metric tons)



Source: Potts *et al.*, 2010.

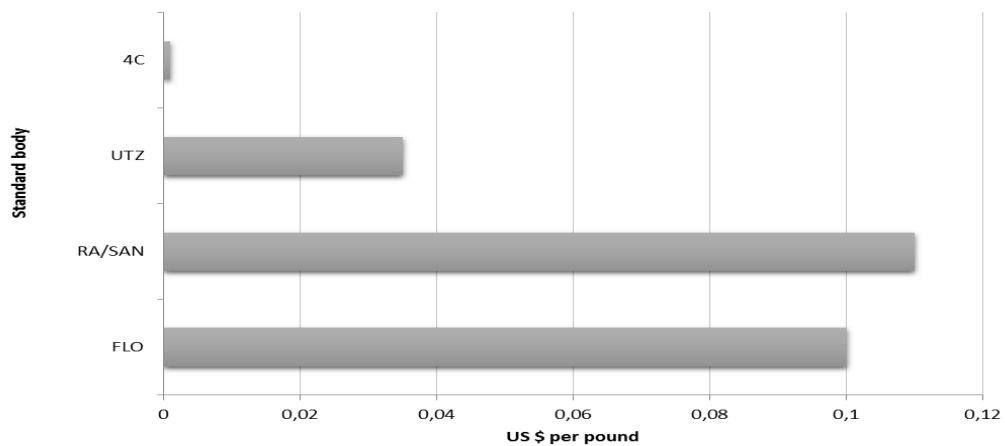
Fairtrade is the only certification system that specifies a minimum premium of US\$0.10/pound over market prices. It further assures an additional premium of US\$ 0.20/pound for organic certified coffee. UTZ is also reported to work with the same minimum premium used by FairTrade (Potts et al, 2010). It actively works with producers to obtain better prices. UTZ premiums range between US\$ 0.01-0.13/pound of green coffee. On the other hand, 4C verification does not use any specific premiums, but higher prices are often realized due to perceived higher quality and sustainability. Similarly, while both RFA and organic certification do not mandate any fixed price premiums, certified producers generally obtain higher prices. RFA reported a price premium ranging from \$0.04 to 0.14/pound (average \$0.11/pound) in 2009, while the price premium for organic coffee ranged between US\$0.05-0.30/pound during the 2002-10 period, with Colombian and other milds leading in the category (figure 3). Overall, premiums for sustainably sourced coffee for 2009 ranged from US\$0.025–0.405/pound, with most premiums falling in the US\$0.05–0.10/pound range (figure 4).

Figure 3. World average price premiums for organic certified coffee (US\$/pound).



Source: Potts *et al.*, 2010

Figure 4. World average price premiums for certified coffee (US\$/pound)



Source: Potts *et al.*, 2010

Certification has been applauded as a major driver for the growth of coffee sales in recent years which otherwise would have been stagnant, as seen from growth trends. The coffee sector has also been credited of being able to create the necessary institutions and manpower required for certification that could be applied in other agriculture sectors as well. From an economic point of view, certification has been able to develop new consumer segments and attract new customers for coffee.

However, one key point of concern is whether producers have been sufficiently remunerated for the additional costs incurred and revenues foregone (Pierrot et al. 2011). Other reviews of certification programs (see Ellis and Keane 2009) have pointed out that certification costs tend to be high, with the highest costs imposed on larger producers. At the same time, larger producers are more likely to undertake individual certification while smaller producers resort to group initiatives supported by non-profit organizations or producer collectives. This has benefits for smallholders, as NGOs can provide new and innovative technologies, educate planters on various sustainable activities, and assist in establishing marketing linkages (Serrano, 2003). Group certification further provides a platform for exchanging the views of different producers about their production and marketing plans, thus creating a community of practices in sustainability methods and improving efficiency (Tovar et al., 2005; Gonzalez and Nigh, 2005). At the same time, group certification requires strong institutional coordination over time, both among producers as well as with the NGO or champion in charge of organizing the group. These institutional challenges can be daunting, as continued (or indefinite) NGO support to subsidize certification costs might not be sustainable over time. Related to the issue of costs are considerations of equity and participation within labeling and branding programs. In many cases, there is a disconnect between the intended parties for certification (small holders) and those that have the capacity to comply with the rigid standards imposed by certifying parties and buyers. Group certification practices are again one way to remedy this, though significant capacity building is required that is not costless.

An assessment of perceptions and practices in the certification of coffee in Coorg, India

The application of sustainability certification programs in India is of recent origin and little has been written to assess the impact on livelihoods but also the implications certification has on sustainability practices and conservation more generally. In this context, we developed a survey tool to remedy this gap. We focus our empirical analysis on Coorg district, located in the Western Ghats region of southwestern India (figure 5). Coorg accounts for approximately 38 percent of India's coffee production.¹² In order to understand the process and development of certification programs in an Indian context, we conducted a structured survey during the months of February and March 2013, covering 52 planters, of which 15 were certified through some certification program, 6 were certified as organic, and 31 engaged in conventional programs. We followed a snowball sampling technique in our sampling frame. We also obtained data from structured and semi-structured means from traders (6), hullers (2), curers (2) and certification agencies (2) in order to understand their operational details and economics. We supplemented our survey with secondary data obtained from the publications of the India Coffee Board and various government agencies. Chengappa et al. (2014) provide additional details on the dynamics of the different coffee value chains.

¹² Calculated from http://www.indiacoffee.org/userfiles/DATABASEJuly13_1.pdf

Figure 5. Location map of study area - Coorg District, India.

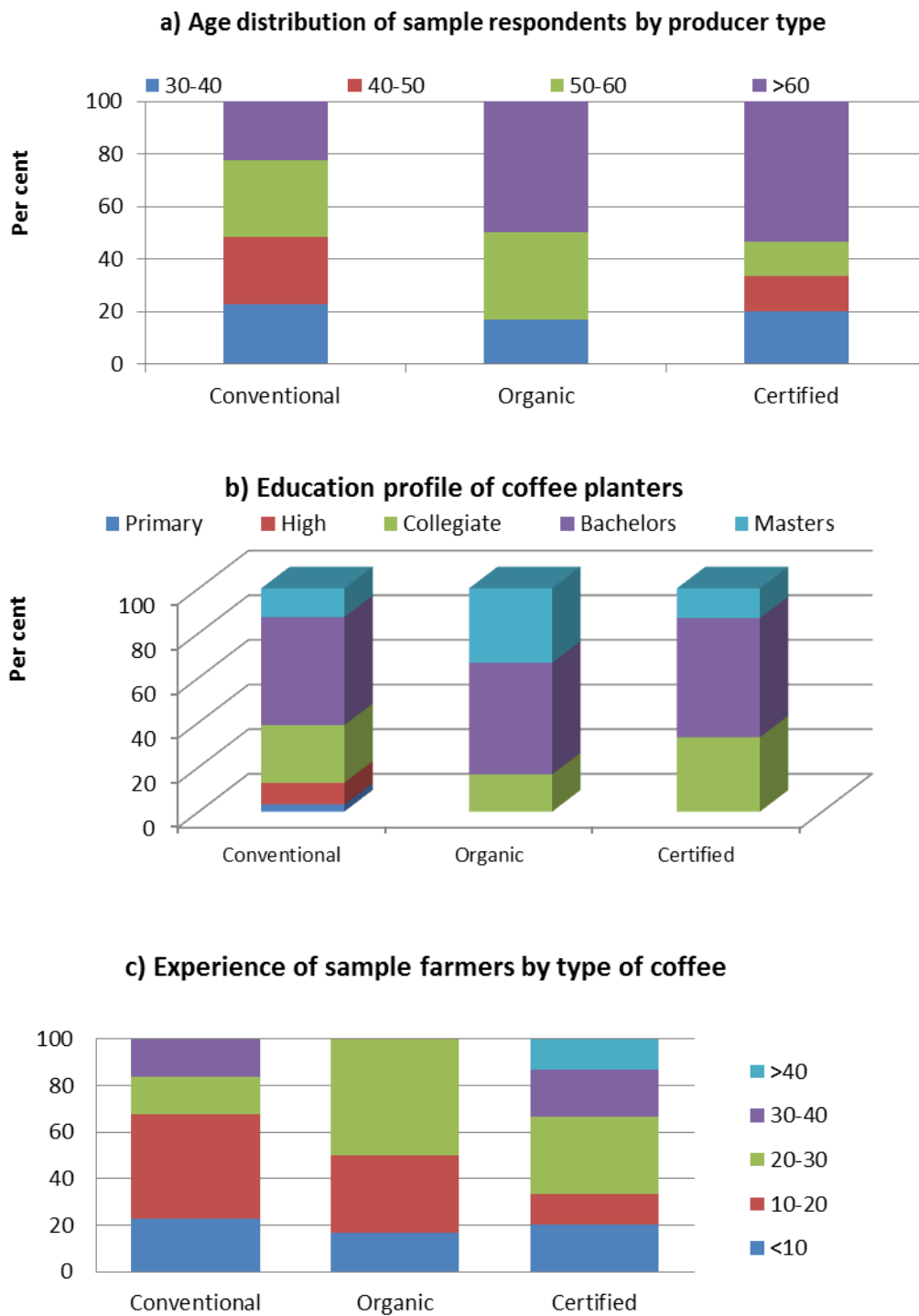


Source: www.maps of India.com

Socio-economic profile of sample coffee planters

The majority of coffee plantations are managed by those aged over 50 years. Interestingly, a greater proportion of those over 60 are engaged in organic and certified product (figure 6 (a)). Moreover, organic and certified planters had relatively higher educational backgrounds, on average indicating their greater exposure to emerging technology, trends, and markets (figure 6(b)). More than 80 percent of the sample had over 10 years of experience in coffee production, with organic and certified farmers having more experience on average than conventional farmers (figure 6(c)).

Figure 6. Age and educational profile of coffee planters

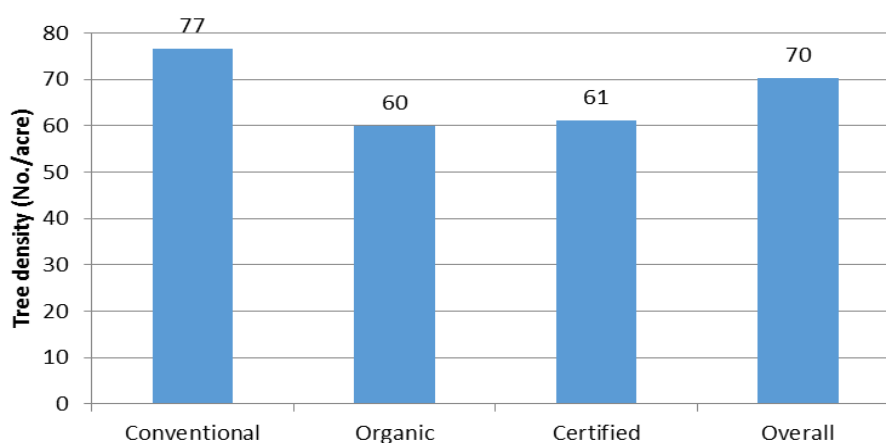


Source: Survey results

Coffee holding patterns and shade density

The land holdings of sample planters ranged from 4 to 143 acres in case of conventional planters, while the range was higher for certified producers (10 to 220 acres). The use of shade cover is a unique feature of Indian coffee cultivation, with the sample plantations showing high density of shade trees. The average tree density stood at 70 trees/acre (figure 7). Interestingly, the highest number of trees was found in conventional production (77 trees/acre), though the density needs to be compared with the type of trees and variety of coffee planted, as the extent of shade canopy also matters. As expected, arabica growers maintained higher shade cover compared to robusta growers. Many planters prefer silver oak, an exotic species, as tree cover which has advantages in pepper production and timber value, but limit bird species diversity. As expected, those planters with a greater concern for the environment maintained a higher ratio of traditional species over silver oaks.

Figure 7. Tree density by type of coffee plantation (number per acre)



Source: Survey results

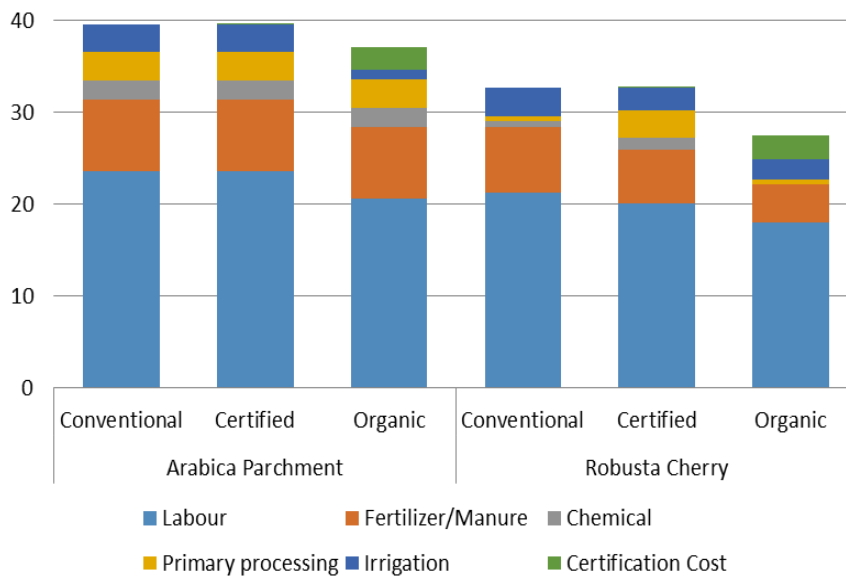
Economics of coffee farming

Coffee cultivation involves both establishment and variable costs. In working out the returns to coffee production in this study, we only considered variable costs. On average, labor accounted for about 60 percent of the total cost of cultivation, with the other major item being fertilizer (figure 8(a)). Organic production costs are lower on average than either conventional or certified production. We found that arabica planters had higher net returns than robusta planters, irrespective of the practice followed (figures 8(b) and (c)). Returns were highest for organic production (Rs.64,373/acre), followed by certified (Rs.61,762/acre) and conventional planters (Rs.59,255/acre) in

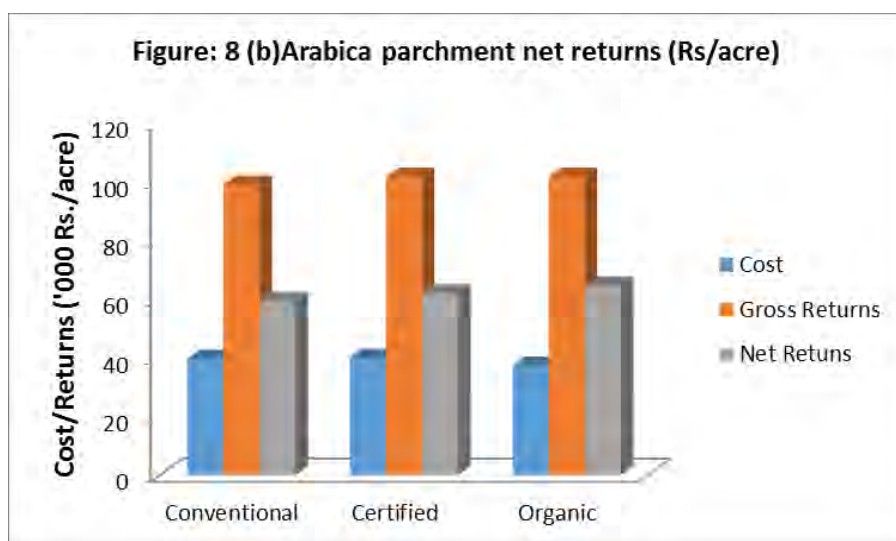
arabica. Similarly, in the case of robusta, organic growers had the highest net returns (Rs.56,317/acre) followed by certified (Rs.50,532/acre) and conventional (Rs.47,777/acre) producers. It is worth noting the higher net returns received by organic and certified producers is due to higher premium prices and reduced costs of cultivation in the case of organic production.

Figure 8. Economics of coffee production in Coorg

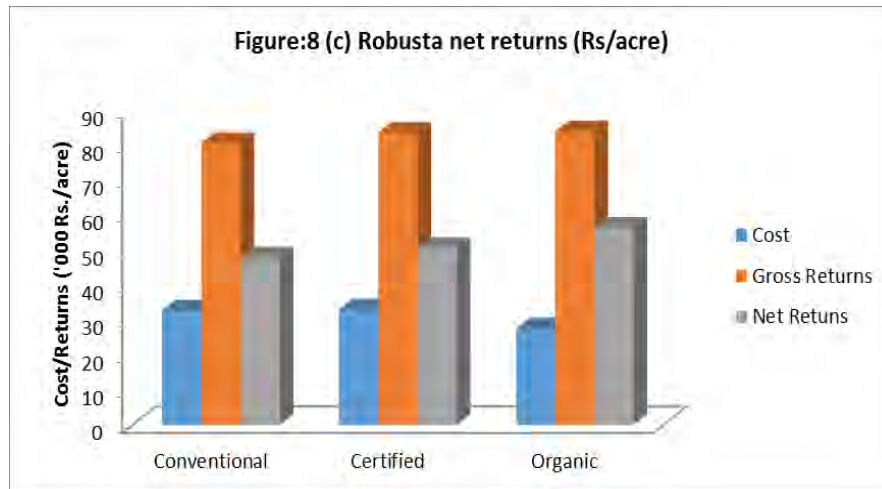
a) Cost of cultivation by coffee types 2011-12 (Rs./acre)



Source: Survey results



Source: Survey results



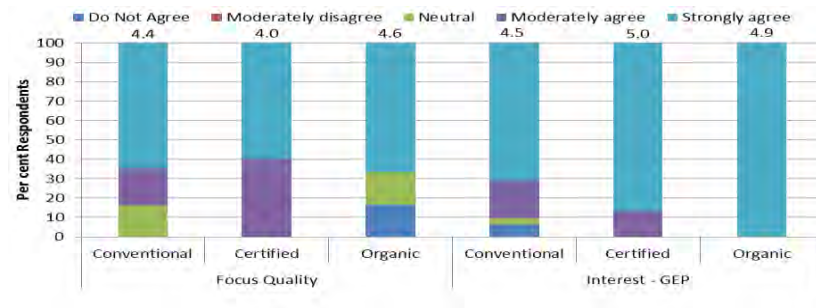
Source: Survey results

Quality and environment concerns

An important part of our survey was to gauge the awareness and attitude of producers towards sustainability practices. We used a series of perception questions based on five-point Likert scale (strongly disagreed received a ranking of 1, while strongly agreed received a ranking of 5). We summarize some key findings below.

Concerns related to quality and environmental considerations attracted positive responses from the planters, with very few taking a neutral stand (figure 9). In fact, this concern needs to be translated through proper promotional strategies in the global market to realize premiums. As expected, environmental concerns were highly rated by both certified and organic farmers. Looking at this subset of farmers more closely reveals that motivations for starting their respective type of certification program differed. Certified farmers were much more motivated by economic rationales (the promise of higher prices receiving an average score of 4.6, see figure 10(a)). All 15 certified planters interviewed indicated premium prices were the main factor driving them to undertake certification, though price premiums are only a small percentage of the final price. By contrast, organic farmers were heavily influenced by environmental considerations (indicated by an average score of 4.5) as a reason to switch to organic (figure 10(b)). More than 80 percent of them converted to organic practices mainly because of their concern for the environment. The superior quality of organic coffee was perceived by only 50 percent of organic coffee growers. Most organic producers encouraged their neighbors to undertake organic practices in view of environmental concerns and expanding demand in international markets.

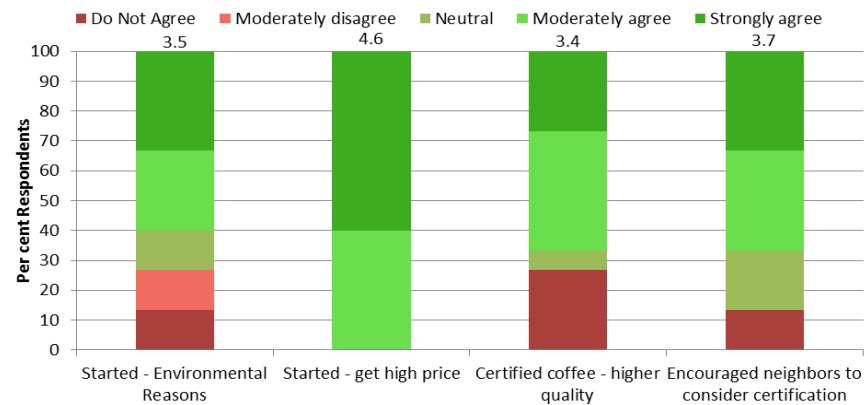
Figure 9. Opinion of coffee planters on quality and good environmental practices



Source: Survey results. Note: GEP – Good Environmental Practices; values on bar indicate average score (on a 1 to 5 point scale)

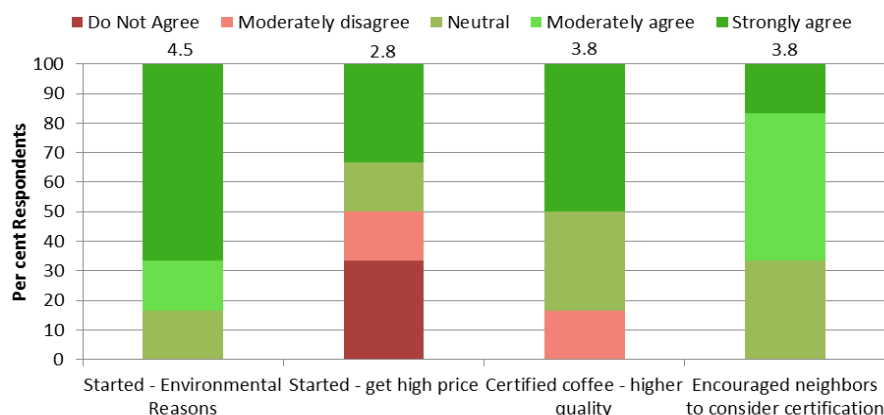
Figure 10: Opinions of certified and organic coffee planters on coffee certification motivations

(a): Opinions of certified coffee planters on coffee certification motivations



Note: Values above bar indicates average score (on 1 to 5 point scale). Source: Survey results

b): Opinions of organic coffee planters on coffee certification motivations

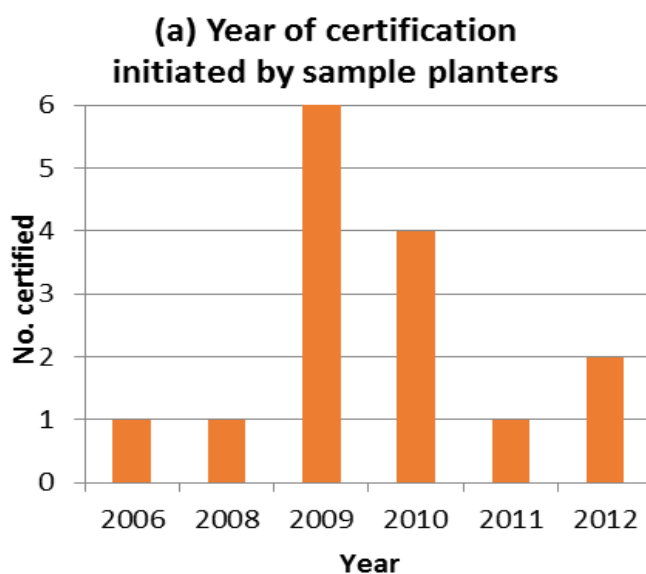


Source: Survey results; Note: Values above bar indicates average score (on 1 to 5 point scale)

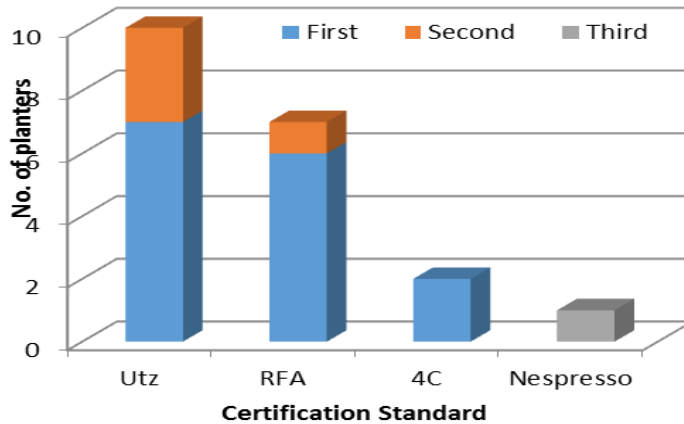
Dynamics of certification in India – certified and organic planters

Figure 11 highlights trends in certification among certified planters. 2009 recorded the highest number of new group certification entries (figure 11(a)). However, in recent years, fewer planters have had incentives to go into certified coffee, as high coffee prices make it difficult for companies to offer premiums for certified coffee. UTZ and RFA were the most common certification programs from our survey (figure 11(b)). Four of the ten planters that were certified by UTZ undertook a second type of certification (figure 11(b)). Most coffee certification initiatives by these companies mainly covered large and medium-sized planters.

Figure 11. Details of certification among certified planters



(b) Pattern of multiple certification followed by sample planters



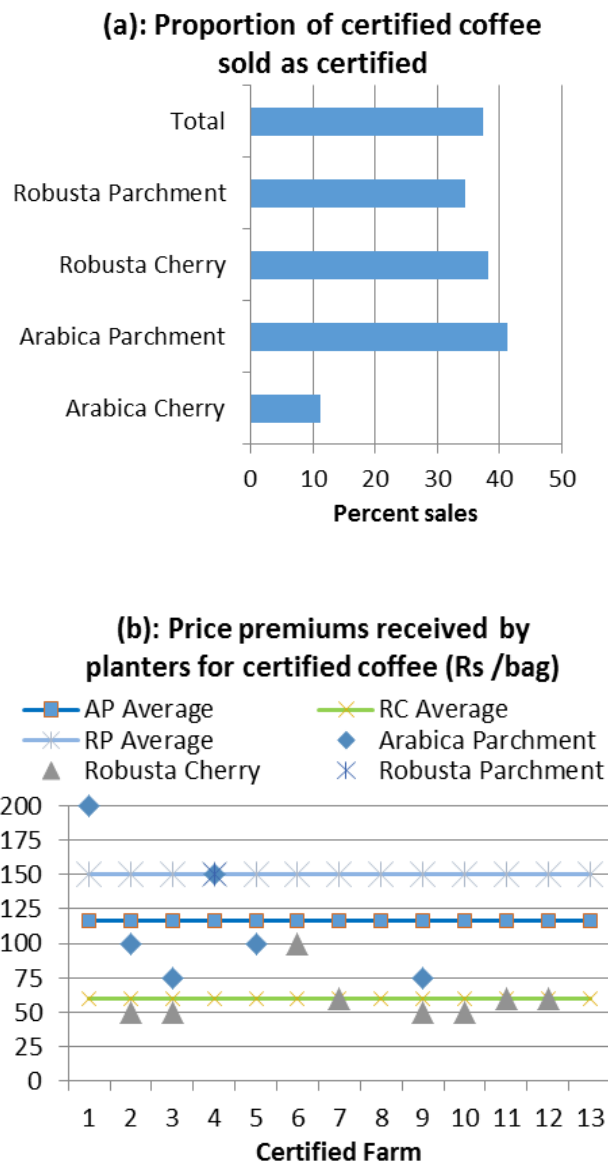
Source: Survey results

Group certification protocols are common, with the cost of certification borne by the company itself. Of the 15 certified planters interviewed, seven incurred a one-time investment cost to qualify for certification. These costs ranged from Rs. 4,000 to Rs. 40,000 per farm and related to expenditures on initial surveying, construction of warehouses, purchases of equipment and labor safety materials, construction of cement drying yards and fences, improvements to staff quarters, and capacity building of farm workers. Cemented/tiled drying yards are a mandatory condition to improve coffee quality. Safety equipment (helmets, gloves, masks, etc.) is also required, though it is often difficult to convince workers to use these as instructed. The social aspects of improved housing facilities for laborers have attracted considerable attention and the certification bodies seriously scrutinize the adherence of planters to mandated labor standards. Nestle India has started a training centre near Kushalanagar to conduct training on their 4C program to small and medium growers to adopt GAP and follow accepted standards to secure certification.

Certification normally covers the complete landholding portfolio of a planter, including both coffee and other intercrops. Planters are not bound to sell coffee to the certifying agency. However, in order to receive any price premium, planters need to sell the certified coffee to the particular company that has certified the plantation. Sponsoring companies are not always able to buy coffee at a premium prices, limiting the market for certified coffee. This was evident in the present study; only 37 percent of certified products were actually sold as such (figure 12(a)). A number of reasons explain this phenomenon. First, local buyers at the farm gate often do not offer premiums for certified coffee. In addition, because planters sell coffee in three to four

consignments, it can be difficult to transport coffee to the certifying company that is often located at a distance from the farmer, thus making it more convenient to sell coffee as conventional. Among the four grades of coffee at the estate level, our sample data indicated that Robusta parchment received the highest premium (Rs. 150/bag), followed by arabica parchment (Rs. 117/bag), which works out to an increase of 2.51 and 1.50 percent per bag, respectively. These average price premiums obtained match the premiums received by producers in other countries.

Figure 12. Marketing trends of certified planters



Source: Survey results

In contrast to certified production, only a few producers in Coorg follow organic coffee production that are driven by a combination of individual passion and corporate encouragement, the latter by the organic company Phalada. In our sample, we identified six producers: four planters doing it based on their own interest and the other two linked to Phalada. Those practicing organic coffee were found to undertake innovative processing and marketing practices, including the production of specialty coffees, single estate branded coffee, direct exports, and retail sales. Phalada organized a number of planters to undertake organic production, but the dropout rate was quite high as more than 50 percent switched back to conventional.

Three of the six interviewed organic producers certified all of their estates, while the rest certified a part of their estate (ranging from 42-80 percent). The planters did not incur much additional investment to comply with organic certification, as most of them already had installed facilities for pulping, drying, and storage. Those planters that underwent group certification incurred a cost of Rs.600/acre for certification each year. Those farmers that incurred certification cost on their own spent between Rs. 333 to 600 per acre per year depending on the agency chosen for certification. However, all farmers incurred recurrent expenditure ranging from Rs. 6000 to Rs. 30,000 per /annum on items such as inspection arrangements for the inspection team and their logistics, labor safety equipment, etc.

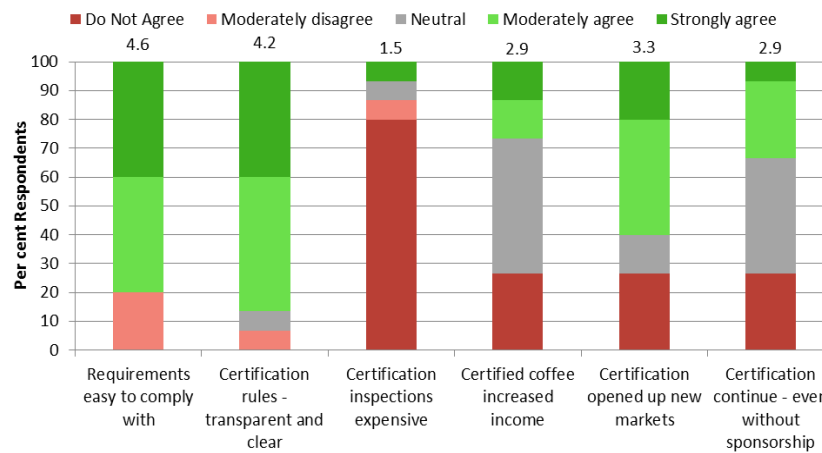
In the organic production of coffee, three major problems were identified at the producer level. First, organic production requires significant inputs of organic inputs. The interviewed planters found it very difficult to maintain sufficient stocks of cattle due to the shortage of land for grazing and labor for its maintenance. Moreover, purchasing organic inputs of sufficient quality and quantity is often difficult and/or expensive. Second, organic planters indicated an initial yield reduction ranging from 30 to 50 percent. This reduction was generally not compensated in terms of the price premium received. Price premiums were generally around Rs.200/bag, except among those farmers that exported to linked buyers overseas; not surprisingly, these farmers received the highest returns to organic production. Finally, the conversion period of three years for organic coffee considerably reduced the income of interviewed farmers due to the above two reasons.

In general, coffee planters in Coorg have great concern for the environment and follow environmental conservation practices. Since entering certification, most farmers considered their certified coffee as higher quality. However, opinions on participating in certification were mixed. A majority of interviewed planters indicated that it helped them practice more organized production, processing, and handling practices, as well as enhancing their record keeping. Nearly, 80 percent of certified planters indicated that certification requirements are easy to

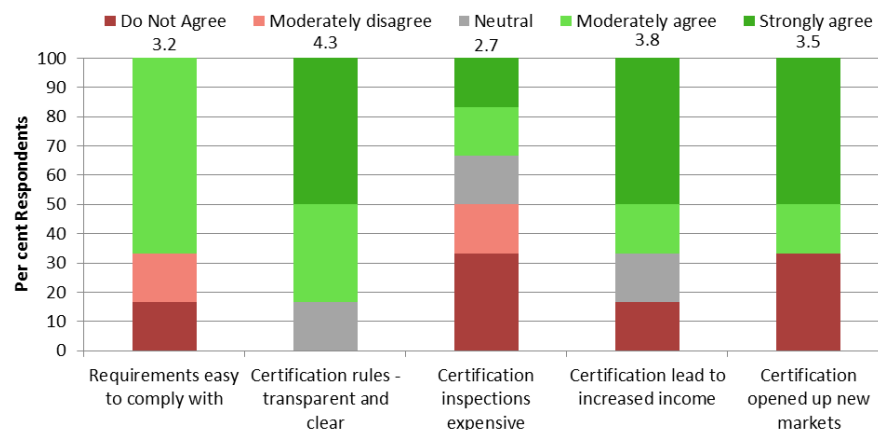
follow (figure 13(a)). However, many planters felt that the guidelines were imposed on them without considering the local context and realities (Upendranath and Subbaiah, 2012). It is interesting to note that only 22 percent of certified planters indicated increased incomes due to certification while a vast majority expressed that certification has not enhanced their incomes. This is directly attributable to not being able to sell all products as certified. A majority (60%) of interviewed planters see certification as an opportunity to expand to new markets.

Figure 13. Perceptions of certified and organic planters on compliance with certification rules, costs, and new markets

(a) Opinions of certified coffee planters



(b): Opinions of organic coffee producers



Source: Survey results. Note: Values above bar indicates average score (on 1 to 5 point scale).

All the interviewed organic coffee planters indicated that guidelines for certification were transparent, clear, and easily understood without any ambiguity (figure 13(b)). Four of the six indicated that the certification requirements are easy to comply. Three of the six organic producers are of the opinion that certification costs are expensive and adds to their cost. It is interesting to note that the majority of organic producers were aware that the market for organic coffee is expanding and it is an opportunity for them. In fact, these organic growers have attempted to move up the value chain by adopting different types of processing (e.g. double washing in robusta), curing, packing, and branding, thereby realizing higher prices. Overall, organic growers remarked that the premium realized was not adequate given the investments and expenditure incurred.

Discussion

The certification of coffee based on various attributes is a growing trend in response to consumer demands for quality and greater knowledge on the origin and production means behind their coffee. Producers that are not part of certification programs will likely find themselves increasingly shut out of international markets. At the same time, certification *per se* does not necessarily guarantee any large price premiums; indeed, results from our survey found that there was only a 2-3 percent price premium associated with certified coffee. Past analyses have noted the impact of increased public and private standards on producers, particularly small holders (Dolan and Humphrey 2000; Henson and Humphrey 2010). These demands will only increase over time. The questions, then, are defining the future entry points for producers and to what extent can producers engage in these.

The ability of producers to cope with trends in certification depends largely on the nature of the value chain itself. In our case study, based on research in a related companion paper (Chengappa et al. 2014), we found that the value chains for conventional and certified coffee are diffuse, with multiple actors that mediate information between producers and final retailers and limited chain-initiated opportunities for adding value. With limited coordination, the most successful farmers are those that have innovated on their own, whether through new products and/or functions in the value chain. Enhancing the scope of certified farmers based on present programs or developing brand new environmental sub-strands (e.g., a conservation-focused label or certification program) would likely have uptake from only a small subset of producers. Incorporating a larger group of farmers would thus require an alternative approach to certification, one that takes into account the positive association that most of our surveyed farmers had with the environment but is sensitive to the constraints associated with certification programs.

Consumers that buy certified products implicitly know that the product they purchase has some positive environmental or sustainability attribute, but the association between product and people is absent. As Getz and Shreck (2006: 499) point out, what is missing is “how certification intersects with local spaces, cultures and communities at the point of production,” or put differently, an understanding of who and what is actually behind the label itself. As geographical indicators such as Darjeeling tea show, there are consumer associations between product and origin that can be teased

out and market; in a similar fashion, an opportunity exists for environmentally conscious goods as well.

The future for certification might thus lie in trying to move away from generic certification measures (e.g., associated with labor or good production standards), which may indeed become the norm, towards measures that reinforce the local more generally. An open research question is whether value can be created and sustained by developing eco-label profiles that link production with community-level efforts towards conservation at global levels. Literature from geography and rural sociology highlights significant research over the past decade, particularly in Europe, on burgeoning consumer demands for local awareness of food products (Duffy, Fearn, and Healing 2006; Hingley, Boone, and Haley 2010; Ilbery and Maye 2005; Sims 2009; Kneafsey 2010; Morgan 2010). In such markets, the focus has been on the provision of quality through short supply chains for food (Renting, Marsden, and Banks 2003; Ilbery and Maye 2005) and the creation of strong artisanal networks for specialty food (Marsden and Smith 2005). Such networks can not only personalize production at a farm level, but also leverage other actors (such as chefs) in the supply chain as well as vehicles for communicating quality and localness (Duram and Cawley 2012).

In a conservation context where promoting biodiversity is the objective, we argue that “globalizing the local” is one means to link the environment with the people and places behind them. Unlike a label such as Rainforest Alliance, which despite its environmental credentials is “just a frog,” a more sustainable and meaningful label would be one that communicates specifically the actors and places behind the label and the efforts which individuals and communities make towards conservation. On the supply side, this necessitates creating a culture of conservation within producers that is combined with efforts that promote quality and the locality in which production takes place.

In this fashion, we advocate the approach of Ghazoul et al. (2009) by considering the role of certifying and branding the landscape more generally, couching this approach in a manner that emphasizes the local characteristics of the landscape itself and which can encompass more producers under its aegis. This would further give producers in Coorg more ownership of the brand by allowing local participants to define the conservation identity of Coorg. By branding Coorg more generally in which conservation is its value proposition, a range of activities and certification measures could be envisioned that have more wide-reaching impacts than certification alone, with positive spillovers that could reinforce the image of Coorg coffee and other products. For instance, Chengappa et al. (2014) provide details of integrating butterfly gardens in coffee plantations as a way of promoting conservation education and tourism, finding strong positive

returns for planters. Coorg coffee and Coorg itself thus could be marketed more generally as a hub for sustainability, based on a combination of its reputation for natural products (e.g., Coorg honey, Coorg oranges), its rich biodiversity, and production of coffee under shade, resulting in a product with low acidity and a fine aroma (Chethana et al, 2010). Marketing conservation and conservation practices more generally as a means of adding to one's value proposition could thus address some of the difficulties inherent in the certification processes and provide a meaningful means to ensure sustainability in the process.

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