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FAIR-TRADE CERTIFICATION IMPACTS ON SOCIAL RESPONSIBILITY AND ETHICS OF SMALLHOLDER COFFEE PRODUCERS IN ETHIOPIA

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Abstract:
In Ethiopia, more than one third of foreign exchange is attributed to coffee product and the production process engages almost one fourth of the working population of the country. Small-scale coffee farmers producing for fair-trade market outlets are frequently considered to benefit from better prices and stable market outlets. Yet, some empirical studies are veri-fying this notion adversely. Therefore, this study tried to assess the impact of fair-trade certi-fication on social responsibility and ethics of small-scale coffee farmers using both descrip-tive and econometrics techniques for the selected 383 respondents in Jimma zone of Ethio-pia. The study investigated that the introduction of fair-trade certification among small-scale coffee producers matters the inquiry of social responsibility and development signifi-cantly. Logistic regression result indicates that, the coefficient for the variable fair-trade membership status is 3.412. This result implies that for every one-unit increase in fair-trade membership status, we expect 3.412 increase in the log-odds of the dependent variable em-ployment creation. Also, the coefficient for the variable fair-trade membership status is 1.319. This shows that for every one-unit increase in fair trade membership, we expect a 1.319 increase in the log-odds of the dependent variable. Also, education level and family size affect child school enrollment significantly and positively. However, the coverage and development of fair-trade certification in the study area was very low. Therefore, extension of fair-trade certification should be well thought-out as one of sustainable development riding instruments among policy makers.

Keywords:
Fair-trade certification, Coffee, Social responsibility, Ethiopia

1. Introduction

Coffee (Coffee arabica) has continuously been Ethiopia's most significant cash crop. Cof-fee accounts the major share of the total export proceeds of the country. The potential of coffee production in Ethiopia is very high considering the country's suitable altitude, rainfall, temperatures and fertile soil (Bäckman, 2009). Opposing to other coffee producing coun-tries, though, in Ethiopia coffee production is dominated by small-scale subsistence producers, whereas plantation production plays a negligible part, and Ethiopia is the base of the global coffee arabica gene puddle.

In the context of globalization and trade liberalization, the certification of products and services seems inevitable. The budding concern about environmental deprivation, care of food outputs and taking advantage against employees and associated reasoned gave rise to the demand for certification. The desirability of certification or labeling arrangements is resulting from their market-established and intentional approach to realize environmental and socio-economic goals (Grote et al., 2007). Fair-trade targets at improving farmers' living and working circumstances through setting up least possible prices and pledging a set of social values/standards succeeding transnationally acknowledged agreements, thus it is reflected as an approach for poverty mitigation.

Members of fair-trade are economic organization, religious institutions, and consumer protection agencies, amongst many stakeholders. Fair-trade certification can only be allowed to a cluster of smallholder farmers prepared in peasant organizations (associations/cooperatives) "which are capable to contribute to the social and economic growth of their affiliates and their societies and are democratically well-ordered by their associates" (FLO, 2003).

Numerous studies have delivered contradicting findings about the effect of fair-trade certification for coffee producers. Fair-trade initiatives upgraded the welfare of small-scale coffee producers and strengthened local organizations, mainly due to improved returns to smallholder farmers (Bacon, 2005; Calo & Wise, 2005; Jaffee, 2007; Milford, 2004). Fair-trade producers were also found fruitful in escalating their production; practiced better approval with the prices acquired for their coffee, and reached enhancements in food consumption and livelihood situations (Becchetti &Costantino, 2008). However, according to studies conducted in Nicaragua (Valkila, 2009) and Mexico (Barham et al., 2011), fair-trade certification has achieved almost insignificant change in livelihood as compared to the non-certified producers. The rise in farm income evidenced to be modest, and numerous producers stayed in poverty even though being associated to fair-trade market outlets (Bacon et al., 2008).

Notwithstanding the rising number of recently proven value chains for certified coffees from Ethiopia with seemingly far-reaching and multidimensional influences on subsistence of thousands of smallholder coffee producing farmers, there is still a substantial absence of empirical homegrown studies that can corroborate the social responsibility impact of fair-trade certification on smallholder coffee farmers' means of living. Allowing the aforemen-tioned experiences, therefore, this study tried to assess the impact of fair-trade certification on social responsibility and ethics of small-scale coffee farmers using both descriptive and econometrics techniques. The objectives of this study was to analyze the impact of fair-trade certification on social responsibility and ethics of smallholder coffee producers in Jimma zone of south west Ethiopia employing child school enrollment and employment creation as proxy variables.

2. Literature Review

2.1. Sources of Data

This study was conducted based on both primary and secondary data. The primary data were collected by face to face interviews using structured questionnaire with the help of trained enumerators. Additionally, qualitative data were collected through semi-structured interviews and discussions were made with selected cooperative union at regional level and general managers of cooperative union, secondary sources were included unpublished and published materials.

2.2. Study Design and Period

A cross-sectional study design was employed to look for socio-economic impacts of fair-trade certification on small household coffee producers and cooperative unions. From each selected coffee cooperative union, the researchers randomly selected ten primary coffee producer cooperatives for this study, which means five of them are fair-trade certified and the others are none. The non-certified are sellected based on various comparability factors, including similarity on infrastructure availability, communication facilities and other socioeconomic characteristics, such as topography, accessibility and presence of other development programs. All farmers including respondents are residing in the selected cooprative village were consitituted as the study population. The study was conducted from September 2016 to end of July 2017.

2.3. Sample Size Determination and Sampling Techniques

Multi-stage sampling techniques were employed to determine sample size. The researchers applied lottery method to select certified and non-fair-trade certified from each selected cooperative unions from four selected coffee cooperative unions in Ethiopia. After researchers determined total sample of cooperatives from both certified and non-certified; the selection criteria of farmers was based on the membership registry book of each cooperative.

The sample size (383) was determined by the following formula (Noel, et al, 2012).

$$n \geq \frac{N}{1+(N-1)(\frac{2d}{z})^2} \quad \text{..... (1)}$$

Where, is the total population, is the required sample size, margin of error, is the confidence level. And n=383 for total population (N) =8934.
After determining the total sample size , a stratified sampling technique was used to select households from each cooperative union. Partition of the study sample to each cooperative was based on proportional allocation. Then, study population or households from each cooperative were identified using member registry book through systematic random sampling of every fifth row until the allocated sample size reached.

2.4. Data Analysis
Data was analysed using STATA software package version 13.0 for regression analysis. The empirical analysis of the study conducted using both descriptive statistics and logistic regression analysis. Various tables generated to describe characteristics of respondents.

2.5. Estimates of the Model
Assessing the impact of fair-trade on social life of farmer's at household level requires adjustments to control for differences between membership and non-membership. The impact of fair-trade on respondents was assessed based on the dependent variables indicated below. The variables used in regression are respondent age, total farmland size; membership status of fair-trade certification, amount of coffee land, household's headship status. The functional relationship between the probability of better of household social and explanatory variables is specified as follow:
Let Yij be the ith farmers response for component indicate better social status (a binary outcome, 1= alone, 0=otherwise) for small household farmers in the jth cooperative.

$$\log\frac{P_j}{1-P_j} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_k X_k \text{...(2)}$$

where is the population proportion of better social responsibility and ethics of smallholders coffee producer farmers in the jth cooperative, ith farmers response for the social responsibility and ethics impact components index of change on social life, individual level characteristics of study subjects or independent variables and are their associated regression coefficients or parameter to be studded.
Internationally fair-trade certification impact on small household farmers is evaluated in three main ways. Those are:

- Economic impact
- Social responsibility and ethics
- Environmental impacts

From these three indicators we used social responsibility and ethics impact to evaluate the fair-trade certification on small household farmers of cooperative union. For selected indicators of social responsibility and ethics, we selected employment (job opportunity) creation and child school enrolment as a proxy. The question of better social responsibility and ethics at household level is expressed in dichotomous form. Thus, "better social responsibility and ethics of smallholder coffee producer farmer" is assigned a value of 1, otherwise 0. Which means that, if social responsibility and ethics indicators employment (job opportunity) creation and child school enrolment is at better status (which is dichotomous variable) or if the response of smallholder coffee producer farmers is "yes" it takes 1 value and if the response is "No" it takes 0 value.

3. Result and Discussion

3.1. The Impact of Fair-Trade Certification on Employment Creation of Smallholder Coffee Producers
According to table 3.1, the coefficient (or parameter estimate) for the variable Educational Level is 2.536. This result implies that for every one-unit increase in education level, we expect a 2.535665 increase in the log-odds of the dependent variable employment creation (social responsibility and ethics), keeping all other independent variables constant. The coef-ficient (or parameter estimate) for the variable fair-trade membership status is 3.412. This result implies that for every one-unit increase in fair-trade membership status, we expect 3.412 increase in the log-odds of the dependent variable employment creation (social re-sponsibility and ethics), keeping all other independent variables constant. The coefficient (or parameter estimate) for the variable Household headship status is 0.135. This result implies that for every one-unit increase in household headship status, we expect 0.35 increase in the log-odds of the dependent variable employment creation (social responsibility and ethics), keeping all other independent

variables constant. Also household headship (being male) and education level determine employment creation positively and significantly. According to the finding of the study, fair trade certification empowers social responsibility and develop-ment. Although this is a difficult quality to measure, thrive regarding employment creation, and its associated capacity and knowledge building. There are social benefits of group membership, including support through tough times, networking, and idea sharing. Since fair-trade members are internally non-competitive, coffee farmers have no reasons to be hesi-tant about sharing their best practices and expertise. The entire community, particularly poor people are empowered when social responsibility and development is built up, their em-ployment participation increases, and their positive influence is magnified. Generally, with the stability that long-term employment contracts and minimum prices provide producers and employees feel as though they are in control of their future.

Table 3.1 Binary Logistic Regression Result (n=383)

Dependent variable (Employment creation)	Coefficient	Standard error (r)	Z	p>|z|
Age of household head (continuous)	0.009	0.017	0.50	0.618
Household educational level (continuous)	2.536	0.318	7.97	0.000
Dummy, fair-trade membership status(1=member)	3.412	0.486	7.02	0.000
Dummy, HH headship status (1=male)	0.135	0.441	2.98	0.003
Total farm size (continuous)	0.154	0.136	1.13	0.258
Total coffee land (continuous)	-0.332	0.220	-1.51	0.113
Cons	-5.741	0.972	-5.91	0.000

Source: Study Survey, 2017

3.2. Impact of Fair-Trade Certification on Child School Enrolment Status of Smallholder Coffee Farmers

Rendering to table 3.2, the coefficient (or parameter estimate) for the variable fair-trade certificate membership status is 1.319. This shows that for every one-unit increase in fair trade membership, we expect a 1.318028 increase in the log-odds of the dependent variable (Child School Enrollment), keeping all other independent variables constant. Also Education level and family size affect child school enrollment significantly and positively as the result of table 3.2 indicate. Education has been time and again identified as an essential building block for development. Fair- trade helps support education in a variety of different ways. Fair- trade members benefit from technical staffs, who instruct farmers how to develop coffee quality through organic production methods, cultivation techniques like shade grow-ing, and appropriate coffee handling. Fair-trade members learn to have access to a plenty of market information from their fair-trade contact personnel. Fair-trade members get tutor and advise to send their children to school.

Additionally, members of fair trade feel more secure on approaching non-fair trade mem-bers because of their enhanced capacity and understanding of how usual international cof-fee sales work. Since the introduction of fair-trade, relatively families of fair-trade members can afford to send their children to school because of their better standard of living than non-fair trade members. In Jimma zone, fair-trade membership has allowed families to pay of children's education and purchase required uniforms, shoes and books.

Table 3.2 Binary Logistic Regression Results (n=383)

Dependent variable	Coefficient	Standard error (r)	Z	p>|z|
Household educational level (continuous)	0.725	0.263	2.76	0.006

Dummy, fair-trade membership status(1=member)	1.319	0.280	4.71	0.000
Total farm size (continuous)	0.075	0.117	0.63	0.536
Total coffee land (continuous)	0.120	0.191	0.62	0.533
Family size (>5 member)	0.281	0.476	5.91	0.000
Cons	-2.595	0.467	-6.32	0.000

Source: Study Survey, 2017

In conclusion, our finding is in agreement with the study conducted by Kruger (2007), stated that based on a simple neoclassical model of household time allocation, the number of children engaged in farm work could decrease if household income rises due to fair trade certification. At the same time, however, child labor could be positively correlated with fair-trade certification due to an increase in the demand for family labor, as has been suggested by the investigator in her study of the child labor response to the temporary surge in coffee prices during the 1990s in Brazil.

4. Conclusion and Recommendation

4.1. Conclusion

The core of this study design was a cross-sectional based survey, with main objective to analyze the social responsibility and ethics impact of fair-trade certification on small-scale coffee farmers in Ethiopia. The assessment centered to issues of social responsibility and ethics with the indicators variables of child school enrollment and job opportunity at house-hold. To answer the objectives of the study, we adopted a combination of research tools, generally both quantitative and qualitative. This involved a long paper-based questionnaire applied to stratified random samples within the research sites and interviews with fair-trade members and non-fair trade members identified from the survey sample respondents in accordance with a set of analytical criteria, so as to allow for more detailed and different kinds of evidence. This study generated the following remarkable empirical findings.

According to the output of the study, fair-trade certification has a direct and significant impact on social responsibility and ethics of small household coffee farmers and also plays great role in the development of infrastructures in the study area. Fair-trade has improved the life of fair-trade certified cooperative member than non-certified members. Fair-trade certification influences social responsibility and ethics of smallholder coffee producers posi-tively. The entire community around fair-trade certified cooperative has been enjoying the social projects implemented by the fair-trade premium funds. With these benefits small scale farmers are enjoying job opportunities. This positive impact of fair-trade certification direct-ly leads them to send their children to school better than the conventional coffee coopera-tives and also encouraged certified farmers to enhance their coffee production as fair-trade benefits directly related to coffee volume traded. In addition, the finding suggested that those who are members of fair-trade group have developed the awareness of the necessity of sending their children to school with a full supportive materials and hiring legal labors for productions of coffee. As for the effectiveness and efficiency of the fair-trade approach in general, it has been shown that the awareness of fair-trade members about social responsi-bility and ethics has direct as well as indirect effects on sustainable development and growth at regional and national level. Finally, the motivation of the respective decision-makers and the general information and understanding of fair -trade certification impact among the respective farmers and workers are decisive success factors for the program as planned. However, beside this success story of fair-trade certification, inflexible governments rule and regulations, non-inclusive nature of fair-trade certification and complex bureaucracy were the main obstacles not to provide optimal outcome, which can be help for sustainable de-velopment and growth of the country.

4.2 Recommendation

Based on the finding of the research, the researchers forward the following recommenda-tions for optimal exploitation of fair-trade certification.

Fair-trade certification as a trade license has a promising result regarding social responsibility development advantages to small-scale coffee farmers directly and the society (nations) in general. This particular research study result also shows that fair-trade certification has a great impact on small-scale coffee farmer wellbeing in changing the livelihood of destitute coffee farmers and also improved the development infrastructures of community. Therefore, fair-trade certification should be considered as one of development riding forces and instruments among policy makers at regional, national and international level. Fair-trade plays a great role toward achieving social responsibility development which is reflected by employment creation opportunities and child school enrollment expansion due to the begin-ning of fair-trade certification. And the study assured this reality. Consequently, anyone who has a vision of unemployment reduction and illiteracy eradication should consider fair-trade certification while setting up socio-economic development strategies. Indeed, this research suggests that office-holders regarding fair-trade administration need to pay far more atten-tion to make working procedures of fair-trade certification more flexible, easy as well as should be inclusive to achieve the main objectives of fair-trade certification at all level.

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