

The effects of fair trade on livelihood diversification and food security: a study of Peruvian coffee farmers

SURG | Social Sciences, Journalism (SSJ) | *Tags: International Travel; Surveys; Interviews; Fieldwork; Qualitative Data Analysis*

*This cover page is meant to focus your reading of the sample proposal, summarizing important aspects of proposal writing that the author did well or could have improved. **Review the following sections before reading the sample.** The proposal is also annotated throughout to highlight key elements of the proposal's structure and content.*



| Proposal Strengths | Areas for Improvement |
|---|---|
| The researcher explicitly identifies gaps in knowledge and makes claims for why it is important to fill these gaps using evidence from past research to support their assertions. | The proposal utilizes rhetorical questions throughout. Instead we suggest creating direct statements about your project and the questions you are trying to answer. |
| The methods of data collection (surveys, interviews), sample size, recruitment strategies, and methods of analysis are all justified and described in terms of how they help to answer the research question. | No proof of contact is included. As an international project working with an organization, it is crucial to reference the appendix where you have a proof of contact (email screenshot, whatsapp screenshot, formal letter, etc.) to make it clear that you have the collaboration you claim to have. |
| The researcher justifies the location of the project in a way that builds on the justification for the project as a whole. | |



| Other Key Features to Take Note Of |
|--|
| Projects that require international travel are eligible to receive additional funding of up to ½ the price of the round-trip plane ticket (as long as that travel is not to a researcher's country of permanent residence). |
| SURG proposals do not require IRB submission at time of application. However, the students must include CITI Training Certificate in Social and Behavioral Research in the appendix of their grant application; this appendix was removed from the sample grant for anonymity. Please see the Human Subjects Research section of our website for additional details. |
| Any project with survey or interview methods should include the survey and interview questions as an appendix. |

Fair trade certification has grown tremendously in the last few decades as a mechanism for improving the lives of small-scale producers in developing countries. Consumers of fair trade commodities like coffee agree to pay a higher price for the product with the knowledge that fair trade certified producers are held to certain environmental and working condition standards and that the extra profits earned will be used to give producers access to credit and higher wages. This, in theory, guarantees greater income and stability of well-being for producers and their households. But are improved, more stable livelihoods, rather than just incomes, a sure thing for producers who become fair trade certified? In particular, how do changing patterns of agricultural production resulting from certification affect the food security of farmers?

We recommend framing your project focus as a statement instead of rhetorical questions

The focus of the project is clear within the first paragraph

Stability related to economic mechanisms specific to fair trade is well-studied, and researchers have determined that fair trade certified producers are receiving higher prices than non-certified producers. However, as Dragusanu et al note, “It is not a foregone conclusion that the price floor fully insulates farmers from the impacts of significant price declines” (2014). Therefore, empirical evidence on the intersection between fair trade, risk mitigation, and income stability and their effects on livelihood would be particularly valuable. Ellis defines livelihood diversification as “the process by which rural families construct a diverse portfolio of activities and social support capabilities in order to survive and improve their standards of living” (1998). To date, little empirical work has been done examining livelihood diversification and the income risk associated to switching to fair trade activities. While Smith has argued that fair trade can improve diversification, he does so by reviewing the current literature and offering a theoretical basis rather than by performing empirical tests and examining individual experiences (2009). He recognizes that the body of evidence on this topic is small (Becchetti and Costantino 2008; Le Mare 2007). These ideas thus remain under-tested, particularly in the Latin American context. Are producers actually better off in terms of livelihood diversification and income streams than they would have been without fair trade certification?

Identifies gap in knowledge

Justifies why gap should be filled

Within this broader question, I am particularly interested in investigating well-being as it relates to food security among fair trade certified producers. Current views on this matter in the literature are conflicting. Jaffee finds that among Mexican coffee producers, fair trade certified ones were less likely to experience food shortages (2009). Meanwhile, another study found that although certified households earned higher gross coffee revenue, this did not translate to greater food security (Mendez et al 2010). Mendez suggests possible channels for this phenomenon, including higher production costs associated with certified production, the infrequency of payments during the hunger period, and the incentive to specialize in production of the fair trade commodity, rather than diversifying agricultural and other sources of income. What these studies did not consider is a more thorough and locally contextualized assessment of food security. By including relevant questions in my survey, I will address this question of fair trade’s impact on food security more in depth than other studies have been able to achieve in the past, and thus be able to weigh in on this controversy.

Identifies gap in knowledge

Identifies gap in knowledge

Justifies why gap should be filled

I have connected with the CEO of a fair trade coffee company that makes arrangements between farming communities and students planning to do research on the impacts of fair trade. He has agreed to help make arrangements between me and the Pangoa Cooperative, located in San Martin de Pangoa, Peru, with whom he has developed a relationship since 2003. Given the length and strength of his relationship with this community, I will have a basis on which to build trust with the farmers in order to obtain truthful responses. Peru is an interesting place to study given recent outbreaks of a “coffee rust” disease that unfortunately have damaged significant portions of crops since 2012. In addition, this region has utilized coffee as an alternative crop to

Justifies location

Background leads to specific goals of 8-week project

Addresses access to survey participants

Should reference proof of contact in appendix

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coca—an Andes-native plant traditionally used for medicinal and religious purposes in addition to being the raw material for cocaine. With these contexts in mind, this setting is particularly suitable for evaluating how farmers deal with the risk of their fair trade coffee crop and how farmers have managed to sustain their livelihoods in light of significant changes to their fields.

I will administer a survey of structured questions along with open-ended interview questions to members of the coffee cooperative. The cooperative is made up of approximately 200 smallholder farmers, while my intended sample size is around 50 producers. The survey and interview will include basic demographic questions, certification history, questions about land and agricultural production, income sources and time allocated to each, income flow throughout the year, and food security measures. To get at how fair trade certification has affected their livelihoods, I will ask retroactive questions about land use, food security, and income sources before certification. Most of my structured questions, including measures of food security, will be adopted from other household surveys validated in developing country contexts. I will be utilizing three different measures of food security recognized by the International Food Policy Research Institute and the World Food Programme: a food consumption expenditure score, a household dietary diversity score, and a household coping strategy index. I will also gather supplementary qualitative information on these topics, which best incorporate the perceptions of food insecurity by those most affected and are well-suited for developing country contexts (Kennedy).

After data collection, I will return to the U.S. to enter, compile, and analyze the data. This includes categorizing and coding qualitative responses, as well as creating composite measures: statistically combining responses to questions that fall within the same category. For instance, I will calculate the existing food security indices. I will compute averages for the outcome variables reported before and after certification—considered to be the counterfactual and treatment states—and test whether any differences are statistically significant. These tests will help reveal the effects of fair trade, if any. In order to illuminate relationships in the data, I will create scatter plots relating different variables among each other using STATA—a statistical program. I will also run regressions using STATA of the outcomes of interest on fair trade certification and other household and individual characteristics. Testing statistical significance on coefficients from these regressions will illuminate findings on the effect of fair trade certification, including differential effects across characteristics like gender.

The skills I have acquired through coursework, in my six quarters as research assistant in a mixed-methods lab, and from experiences abroad make me qualified to complete this project. In econometrics courses, I have acquired the mathematical modeling skills necessary to put together and interpret models, and to test these models using data and regressions. This quarter, I completed an applied econometrics course where I wrote a paper utilizing econometric methods to analyze an existing dataset. As a research assistant, I have helped put together surveys, translated them into Spanish and administered one to approximately 50 Spanish-speaking individuals in Evanston. I have also analyzed survey results using STATA, so I know how to manipulate datasets and code for summary measures. My experience travelling to Bolivia through the Global Engagement Studies Institute (GESI) program and working with a non-governmental organization exclusively in Spanish for two months also gives me the confidence to communicate and administer surveys in Spanish to complete my data collection. As a part of my degree in the Mathematical Methods in the Social Sciences program, I am required to complete a senior thesis next year. By completing research over the summer, I hope to begin to develop my thesis project.

Proof of contact and proof of survey missing, should be in appendix

Methods are defined and justified explicitly in terms of how each step helps to answer the research questions

Good job connecting specific skills and experiences to specific aspects of the proposed project

Justifies Location

Justifies Sample Size

Specific description of the analysis process

Appendix: Proposed Survey and Interview Questions

Note: This is a rough outline of what I would like to ask, which I will continue to refine into an appropriate survey and interview format. I will also alter existing survey measures to fit the local context of Peru, including changing currencies, food lists, and translating into Spanish.

Survey questions

1. Demographic questions
 - a. Age
 - b. Gender
 - c. Number of household members
 - d. Ages and genders of household members
 - e. Education
 - f. Employment (all forms)
 - i. Type
 - ii. Length of employment
2. Fair trade certification
 - a. Date of certification
 - b. Other certifications (organic, etc.)
 - c. Length of time in the cooperative
3. Household income sources and time allocated to each

3. LIVELIHOODS, INCOME & WAGES

| | Currently | A year ago |
|--|-----------------------|---------------|
| How many household <u>members</u> earn an income? | 3.1. | 3.2. |
| How many <u>different sources of income</u> do you have to sustain your household (family)? (All income sources of the household) Please refer to the codes below | 3.3. | 3.4. |
| How much does your household earn per month? (Average monthly income of the household) | 3.5. Taka | 3.6. Taka |
| What is your household's most important source of livelihoods? What comes second? Please refer to the codes below | Most important source | Second source |
| 1= Own Farming, 2= Lease farming, 3= Share cropping, 4= Livestock/dairy/Poultry farming/rearing, 5= Fishing, 6= Fisheries, 7= Agricultural wage labour (employed for farm work), 8= Non-agricultural wage labour (ex: store work, restaurant waiters, domestic worker, construction worker, transport worker, rickshaw puller etc.) 9= Self-employed (taxi, carpenter, rickshaw/van/boat owner etc) 10= Low salaried employee (clerk, peon, primary school teacher, non commissioned services in government etc) 11= NGO or Government employee salaried (BCS/commissioned/officer) 12= Professional/technical 13= Industrial worker (garments & other industries) 14= Petty trade (small scale) 15= Business (large scale) 16= Pension 17 = irregular daily labour, casual worker 18 = Remittances (in country) 19 = Remittances (foreign) 20 = Other (specify) _____ | 3.7. | 3.8. |

| | | | |
|---|--------------------------|-------|--|
| 99 = No 2 nd source of income | | | |
| Is the first source of income temporary/casual, seasonal or stable? 1= Temporary/casual 2= Seasonal 3= Stable | 3.9. | | |
| Is the second source of income temporary/casual, seasonal or stable? 1= Temporary/casual 2= Seasonal 3= Stable | | 3.10. | |
| 3.11. Has the income of your household changed in the past 12 months? 1= No change / 2= Decreased / 3= Increased | If No change, go to 3.13 | | |
| 3.12. By how much has it changed (either decreased or increased) per month? | Taka | | |
| 3.13. Have you received any support in the past 12 months, in cash or food or both? | 0= No 1= Yes | | |
| 3.14. Yourself, are you supporting relatives with food or cash or both, at the moment? | 0= No 1= Yes | | |

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Source: Survey on Food Security and Nutrition Assessment of the Impacts of High Food Price in Bangladesh. (2008). World Food Programme and UNICEF.

If seasonal, also ask how income changes throughout the year

4. AGRICULTURE AND FOOD SELF-SUFFICIENCY

| | | | | |
|--------------------------|-------------------|--------------|------|---|
| Do you usually cultivate | A home garden? | 0= No 1= Yes | 4.1. | _ |
| | Other land/field? | 0= No 1= Yes | 4.2. | _ |

If NO for both 4.1 and 4.2, go to Section 5

| Co de # | Each product below is the main produced on the area | How much acreage of these crops did you cultivate this year/season (2007/2008)? -A- | What proportion of the crop (harvest or area) has been damaged or lost? (%) Leave blank (do NOT write 0) if the crop is not planted -B- | How much of these products did you SELL during this year/season (2007/2008)? Leave blank (do NOT write 0) if the crop is not planted -C- | | | How much of these products did you BUY for your family consumption during this year/season (2007/2008)? Leave blank (do NOT write 0) if the crop is not planted -D- | | |
|---------------|--|--|--|--|----------------------|--------------|--|----------------------|--------------|
| | | | | Quantity | Price/unit (Taka) | Value (Taka) | Quantity | Price/unit (Taka) | Value (Taka) |
| 01 | Boro Paddy | 4.3. _ _ dm2 | 4.27. _ _ % | 4.51. _ _ kg | _ _ | _ _ | 4.75. _ _ kg | _ _ | _ _ |
| 02 | Boro Rice | 4.4. _ _ dm2 | 4.28. _ _ % | 4.52. _ _ kg | _ _ | _ _ | 4.76. _ _ kg | _ _ | _ _ |
| 03 | Aman Paddy | 4.5. _ _ dm2 | 4.29. _ _ % | 4.53. _ _ kg | _ _ | _ _ | 4.77. _ _ kg | _ _ | _ _ |
| 04 | Aman Rice | 4.6. _ _ dm2 | 4.30. _ _ % | 4.54. _ _ kg | _ _ | _ _ | 4.78. _ _ kg | _ _ | _ _ |
| 05 | Aus Paddy | 4.7. _ _ dm2 | 4.31. _ _ % | 4.55. _ _ kg | _ _ | _ _ | 4.79. _ _ kg | _ _ | _ _ |
| 06 | Aus Rice | 4.8. _ _ dm2 | 4.32. _ _ % | 4.56. _ _ kg | _ _ | _ _ | 4.80. _ _ kg | _ _ | _ _ |
| 07 | Wheat | 4.9. _ _ dm2 | 4.33. _ _ % | 4.57. _ _ kg | _ _ | _ _ | 4.81. _ _ kg | _ _ | _ _ |
| 08 | Ala | 4.10. _ _ dm2 | 4.34. _ _ % | 4.58. _ _ kg | _ _ | _ _ | 4.82. _ _ kg | _ _ | _ _ |
| 09 | Mustard/oil seeds | 4.11. _ _ dm2 | 4.35. _ _ % | 4.59. _ _ kg | _ _ | _ _ | 4.83. _ _ kg | _ _ | _ _ |
| 10 | Potato | 4.12. _ _ dm2 | 4.36. _ _ % | 4.60. _ _ kg | _ _ | _ _ | 4.84. _ _ kg | _ _ | _ _ |
| 11 | Veg (specify)..... | 4.13. _ _ dm2 | 4.37. _ _ % | 4.61. _ _ kg | _ _ | _ _ | 4.85. _ _ kg | _ _ | _ _ |
| 12 | Veg (specify)..... | 4.14. _ _ dm2 | 4.38. _ _ % | 4.62. _ _ kg | _ _ | _ _ | 4.86. _ _ kg | _ _ | _ _ |
| 13 | Veg (specify)..... | 4.15. _ _ dm2 | 4.39. _ _ % | 4.63. _ _ kg | _ _ | _ _ | 4.87. _ _ kg | _ _ | _ _ |
| 14 | Veg (specify)..... | 4.16. _ _ dm2 | 4.40. _ _ % | 4.64. _ _ kg | _ _ | _ _ | 4.88. _ _ kg | _ _ | _ _ |

Source: Survey on Food Security and Nutrition Assessment of the Impacts of High Food Price in Bangladesh. (2008). World Food Programme and UNICEF

a. List of ways the household earns livelihood (current)

i. Agricultural

1. Total land
2. Types of crops
3. Use of each crop
 - a. Food (consumption)
 - b. Food—sold locally
 - c. Food—sold for export
 - d. Feed
 - e. Other
4. Land allotted to each crop
5. Time allotted to each crop/toward production
6. When/how often do you receive payment for each?
7. For coffee: proportion of product sold on fair trade market
8. Giving a confidence interval of how confident they will be able to sell the good, for each thing that they sell.

ii. Other sources

1. List other types of income/livelihood sources
2. Time allotted to each
3. When/how often do you receive payment for each?

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4. Giving a confidence interval of how confident they will be able to sell the good, for each thing that they sell.
5. If work as a temporary hired laborer, how confident they will be able to find work

b. Repeat these questions for before certification (past)

4. Food security

The question should be phrased like the following¹⁰:

*I would like to ask you about all the different foods that your household members have eaten in the last 7 days. Could you please tell me **how many days** in the past week your household has eaten the following foods?*

(for each food, ask what the primary source of each food item eaten that week was, as well as the second main source of food, if any)

| Food item | DAYS eaten in past week (0-7 days) | Sources of food (see codes below) | |
|--|------------------------------------|-----------------------------------|-----------|
| | | primary | secondary |
| #.1 – Maize | | | |
| #.2 – Rice | | | |
| #.3 – Bread/wheat | | | |
| #.4 – Tubers | | | |
| #.5 – Groundnuts & Pulses | | | |
| #.6 – Fish (eaten as a main food) | | | |
| #.7 – Fish powder (used for flavor only) | | | |
| #.8 – Red meat (sheep/goat/beef) | | | |
| #.9 – White meat (poultry) | | | |
| #.10 – Vegetable oil, fats | | | |
| #.11 – Eggs | | | |
| #.12 – Milk and dairy products (main food) | | | |
| #.13 – Milk in tea in small amounts | | | |
| #.14 – Vegetables (including leaves) | | | |
| #.15 – Fruits | | | |
| #.16 – Sweets, sugar | | | |

Food source codes:

| | | |
|--------------------|---------------------|----------------------------------|
| Purchase =1 | Own production =2 | Traded goods/services, barter =3 |
| Borrowed = 4 | Received as gift= 5 | Food aid =6 |
| Other (specify) =7 | | |

Source: Food Consumption Analysis: Technical Guidance Sheet. (2008) World Food Programme, Vulnerability Analysis and Mapping Branch.

- a. Also include
 - i. expenditure on each food group
 - ii. expenditure on food as a proportion of total income
- b. How many meals does your family usually eat per day?
- c. Likert items (adopted from (Webb, Coates and Houser Bangladesh survey and US Food Security Measures)
 - i. I worried whether our food would run out before we got money to buy more.
 - ii. In the last 12 months, there was a time when I feared that I would not have enough food for my family for the next month
 - iii. The food that we bought just didn't last, and we didn't have money to get more.
 - iv. In the last 12 months, our family could not afford to eat what we normally eat.
 - v. We needed to borrow food from relatives or neighbors.
 - vi. We have taken food on credit from a neighbor or local store.
 - vii. I have worried frequently about where the next meal would come from.
 - viii. I have skipped a meal in the last 30 days because our family did not have enough food.

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- ix. I have gone a day without eating in the last 30 days because our family did not have enough food.
- x. I have eaten less than I felt you should because there wasn't enough money for food.
- xi. In the last 12 months, I have been hungry because there hasn't been enough food.
- xii. In the last 12 months, I have been lost weight because there hasn't been enough food.
- xiii. Repeat viii – xii about other members of the household

Figure 2. Consumption Coping Strategy Responses (CSI)

| Behaviors: In the past 7 days, if there have been times when you did not have enough food or money to buy food, how many days has your household had to: | Frequency: Number of days out of the past seven: (Use numbers 0 – 7 to answer number of days; Use NA for not applicable) |
|---|--|
| a. Rely on less preferred and less expensive foods? | |
| b. Borrow food, or rely on help from a friend or relative? | |
| c. Purchase food on credit? | |
| d. Gather wild food, hunt, or harvest immature crops? | |
| e. Consume seed stock held for next season? | |
| f. Send household members to eat elsewhere? | |
| g. Send household members to beg? | |
| h. Limit portion size at mealtimes? | |
| i. Restrict consumption by adults in order for small children to eat? | |
| j. Feed working members of HH at the expense of non-working members? | |
| k. Reduce number of meals eaten in a day? | |
| l. Skip entire days without eating? | |

xiv.

Source: Maxwell, D. and Caldwell, R. Coping Strategies Index: Field Methods Manual. (2008). Second Edition.

(Adopted from Yemen Comprehensive Food Security Survey 2009):

- xv. When you feared that you would not have enough food for the family, what did you do and on what did you rely mostly to get the food you needed?
 - 1. Additional work to get money
 - 2. Borrowed money
 - 3. Borrowed food
 - 4. Accepting help from friends and relatives
 - 5. Selling some assets or personal household goods
 - 6. Accepting Charities
 - 7. Could not do anything
- xvi. Did you get all the food you needed or only part of it?
 - 1. All
 - 2. Part
- xvii. Which of these statements best describes the food eaten in your household
 - 1. Enough of the kinds of food we want to eat
 - 2. Enough but not always the kinds of food we want to eat
 - 3. Sometimes not enough to eat
 - 4. Often not enough to eat

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Interview questions

- a. Seasonality: adopted from PRA Tool Box: FAO Corporate Document Repository
 - xviii. What are the busiest months of the year?
 - xix. How does income vary over the year?
 - xx. How does expenditure vary over the year?
 - xxi. At what time of the year is food scarce?
 - xxii. How does credit availability vary over the year?
- b. Changes since fair trade
 - xxiii. What changes did your family have to make when becoming certified?
 - 1. Costs
 - 2. Changes in production style
 - 3. Increasing wages
 - 4. Labor standards
 - xxiv. Have you made changes to land use or the crops you grow since becoming fair trade certified?
 - xxv. Have you made any large purchases that would help your production process? (agricultural assets)
 - xxvi. Overall, has fair trade certification improved your life? If so, in what ways?
 - 1. Stability of income?
 - 2. Food security?
 - 3. Community/support?
 - 4. Credit?
- c. Food security: adopted from PRA Tool Box: FAO Corporate Document Repository
 - xxvii. What are the foods commonly eaten in the community during this season?
 - xxviii. Can you rank these foods according to their frequency of consumption?
 - xxix. How does the diet change during the other season and why?
 - xxx. What do you consider to be a good quality diet?
 - xxxi. During the last year, what have been the problems in the household to obtain such an adequate diet (to be food secure)?
 - xxxii. In your view, what were the reasons for these problems? What did the household and community do to resolve these problems?
 - xxxiii. How are decisions being made within the household to addressing food security? How are resources allocated to achieving food security? How are resources reallocated in case of food insecurity?
 - xxxiv. What measures are taken by the household to prevent food security problems from reoccurring?
 - xxxv. What resources are needed by the household and community to become more successful at preventing food security problems from occurring?