

# From Tropical Plantations to K-cups

A socio-environmental analysis of the global journey of coffee

## **ASSESSMENT**



Authors: Madhusudan Katti, Andrew Rhys Jones, Mara Brady, and Beth Weinman, California State University, Fresno



This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view a copy of this license, visit <a href="http://creativecommons.org/licenses/by-nc-nd/4.0/">http://creativecommons.org/licenses/by-nc-nd/4.0/</a> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.

#### Assessment

This is a case study of the social, environmental, and economic impacts of coffee production and consumption worldwide. Coffee, as a globally traded commodity, has a large and growing ecological footprint, from land and water resources dedicated to growing it in developing countries, often displacing biodiverse forest ecosystems, through its transport to markets worldwide, the energy and materials used to package it for the market, to the landfills where the waste eventually ends up, especially from new technologies of consumption such as Keurig cups. Coffee consumption also has significant social and cultural dimensions, adding to the economic value of the trade. There is also growing concern about the sustainability of coffee due to the threats of global warming, which is shifting the optimal growing regions, and prevalent monoculture of a narrow genetic pool which leaves coffee crops vulnerable to disease and other stressors. The global coffee system therefore exemplifies a "wicked problem" in sustainability: a complex Socio-Environmental System (SES) with many stakeholders dispersed across socioeconomically disparate and culturally diverse nation-states, with significant ecological impacts and an uncertain future. The case study is motivated by conflicting reports about the sustainability of Keurig coffee cups, and builds on students' own experiences with coffee consumption to engage them in a conceptual analysis of the the global coffee SES. Students will work in small groups (3-4) to synthesize information about different aspects of the coffee SES, discuss impacts from different stakeholder perspectives, collaborate to develop a conceptual model to analyze the coffee SES and find sustainable solutions. Summative activities engage students to construct tools that show the interconnections between all parts of the SES, leading to a final signature assignment where students make recommendations for the most socially responsible and environmentally sustainable ways to consume coffee on campus.

### Semester-long/multi-week approach

The following forms of assessment are predicated on a semester-long/multi-week approach for the case study:

#### Written Reflections and Essay:

Students will be required to write several short reflections (200 – 300 words each) and one long essay (~500 words). Detailed instructions, requirements, and scoring rubrics will be announced and available on Blackboard [instructions, requirements, and scoring will be contingent on what stakeholder position each individual student has assumed]. Students will have an opportunity to get peer feedback on their long essay. The final version of student reports will be peer reviewed.

#### **Attendance and In-Class Engagement:**

This course will be using a student-driven workshop format. This active learning format has been shown to provide significantly improved student learning over conventional reading and lecture formats. Student success in this class requires attendance and meaningful participation in group work and discussions. To earn full marks in this portion of the course students will need to attend each session, come prepared having read any required material and completed homework and preparation questions, share ideas and opinions with the group, constructively comment and evaluate other ideas presented by the group, and take part in group work in preparing reports and presentations. Each student is expected to be involved in each part of the group work. It is not acceptable to simply split up the work and have each student do one thing without discussion and feedback from the team.

#### **Out of Class - Reading & Writing:**

A preparative reading, research to find and evaluate references, and writing summaries of class work will be given as homework assignments. This outside-of-class work will allow class time to focus on application of concepts from the course reading to real-world data and problems. Meaningful participation in the workshop format will require that students complete homework assignments in a timely manner.

#### **Group Project:**

The group project will be conducted in teams of 4-5 in several parts throughout the semester. Group project guidelines and instructions will be passed out early.

#### **Professional Engagement:**

This course also requires students to show professional engagement and provide the evidence of that engagement on e-Portfolio. Examples of professional engagements are (but not limited to):

- tweeting with learning community
- attending ARC workshops
- attending Career Development Center workshops
- service learning and community volunteer experiences
- presenting and/or attending research seminars

#### **Study Expectations:**

Success in all college courses will require significant reading and study time outside of class hours. This course is no different. In general you should expect to spend 3-4 hours of outside

of class work between each meeting (9-12 hours per week for this course). If you cannot allocate this time you are unlikely to be successful. Part of this course will focus on strategies for using this time effectively. You may also find help in study skills through workshops offered by the Learning Center and Support Net.

## Single 3-4 hour class session approach

The following forms of assessment are predicated on a single 3-4 hour class session approach for the case study:

#### Written Reflections and Essay:

Students will be required to write a short reflection of the Dukale's Dream, John Sylvan interview and Kill the K-Cup videos (200 – 300 words) and one long essay (~500 words). Detailed instructions, requirements, and scoring rubrics will be announced and available on Blackboard [instructions, requirements, and scoring will be contingent on what stakeholder position each individual student has assumed]. Students will have an opportunity to get peer feedback on their long essay. The final version of student reports will be peer reviewed.

#### **Out of Class – Reading & Writing:**

A preparative reading, research to find and evaluate references, and writing summaries of class work will be given as homework assignments. This outside-of-class work will allow class time to focus on application of concepts from the course reading to real-world data and problems. Meaningful participation in the workshop format will require that students complete homework assignments (specified above) in a timely manner.

#### **Professional Engagement:**

This course also requires students to show professional engagement and provide the evidence of that engagement on e-Portfolio. Examples of professional engagements are (but not limited to):

- tweeting with learning community
- nttending ARC workshops
- attending Career Development Center workshops
- service learning and community volunteer experiences

[If one is teaching an upper division research methods course or graduate course, the following is an example of a fieldwork assignment incorporated into the case study that may be used to help inform stakeholders who are focused on issues surrounding the consumption of coffee.]

# SOC 176 Coffee Project

This project entails doing a systematic field study of coffee consumption activity (e.g., observing people consuming coffee in *Starbucks* or other coffee shops, interviewing people about their coffee habits, doing a content analysis of media portrayals of coffee). This project will connect you with students taking CSM 10 The Scientific Method. In this course, students will do a case study on the production and consumption of coffee. Your data and analysis will inform them of some of the social aspects of coffee consumption derived through qualitative methods, and as part of this assignment, you will be required to present your findings and analysis to the CSM 10 class (the class meets T TH 2-3:15 in IT 290 – specific date TBA). Up to 25 extra points (depending on quality of presentation) will be awarded for presenting to the CSM 10 class.

#### **Advance preparation:**

- Before you begin this assignment, read "The Sociological Imagination" (BB URL); "Sociology of Coffee" (BB URL); "Dispatches: The thing itself, or the Sociology of Coffee" (BB URL). These documents are located in the "Coffee Readings" folder in course documents in BlackBoard.
- Read the relevant sections from your texts:

  Maxwell, Joseph. 2013. Qualitative Research Design: An Interactive Approach.

  Creswell, John. 2013. Qualitative Inquiry & Research Design: Choosing Among Five Approaches.
- You may pair up with another classmate for the data collection and the written analysis. Particularly during travel time to and from the observation site, conversations with another researcher can help you make strategic decisions and reflect on your observations. It can also be useful to observe interactions from two different vantage points. While your observations may be a combination of your efforts, your written analysis must be your own. For the coffee project, you should incorporate at least two of the following three data collection techniques: Observation, interviewing, content analysis. Each is detailed below.

#### Data collection: Participant/non-participant observation

In order to systematically observe the phenomena of concern, field researchers immerse themselves in a natural social setting to make non-participant observations. To deepen their knowledge, observers often also participate in the activities being investigated. This method requires empathetic understanding and a critical perspective.

For observations, a minimum of two-hours of data collection is required. These observations may include either participant and nonparticipant observations or a combination of both.

Bring a notebook to record your observations. Using the following abbreviations to organize the different types of notes you will be taking: Methodological Notes (**MN**), Observational Notes (**ON**), and Inferential Notes (**IN**).

There will be a great deal of activity around you, so you will need to think about where to focus your gaze. Pick a section of the site or an exhibit that interests you.

- Go to your observation site. Spend at least ten minutes studying and taking notes on the site itself (focus on the environment, not the actors). Describe in detail the research location. What does it look/sound/smell like? How is it organized? Is there any logic to this organization? Draw a spatial map (a rough sketch of the area).
- ♠ Determine where you (and your research partner) will situate yourselves to record the observations.
- How will you determine whether particular behaviors are involved in coffee consumption? What operational definition will you use?
- Observe and take notes on specific behaviors/interactions, but be discreet. Remember at this point you are collecting data; you are not doing the analysis part just yet. Jot down what you see, smell, and hear, not how you interpret what you see, smell, and hear.
- After you have acclimated to the setting, begin to narrow your focus.
  - Study the socialization messages: what values and behaviors are associated with coffee consumption?
  - What are your observations about the pace of interaction and consumption: Do people seem rushed or leisurely?
  - What are people doing in addition to drinking coffee?
  - Do you observe any variations by race/ethnicity, gender or social class at your site for observations?
  - Focus on the coffee consumers, not the individuals serving the coffee, e.g. baristas.

Toward the end of your data collection you can start making IN – this is where you develop your emerging ideas about the patterns you are seeing in the data.

#### **Data Collection: Informal Interviews**

You should approach at least two visitors at your observation site that you feel would be good informants. Ask them if they are willing to volunteer a few moments of their time to answer some questions. They may be more willing to help if you tell them you are a student at Fresno State and if you approach them at an opportune moment. If you are unable to attain informal interviews from informants at your observation site, begin with interviewing members of your family and engage in snowball sampling, asking your relatives for contacts to conduct additional interviews. You do not need to attain saturation with interview data, but plan on conducting at least three interviews if you are unable to attain interviews from informants at your observation site.

Using the observations provided in the preparatory readings, develop interview questions revolving around potential habits and rituals involving coffee consumption. Example questions: How does drinking coffee make you feel? Do you like to drink coffee alone? Do you make its consumption a social occasion? Do you like to make your own coffee? Describe how you make coffee. Do you "meet for coffee" with friends and family? If you have ever gone out on a first date, did you "meet for coffee"?

Before beginning the interviews, please read the following informed consent statement aloud: "I am seeking your voluntary cooperation with my class project for Qualitative Research Methods. This interview is being conducted in an attempt to gain a better understanding of coffee consumption. All responses are completely confidential. Transcripts of the interview will be discussed in class with other researchers but not with any individuals outside the research class. If you have any questions concerning the procedures or about the project, please feel free to ask me at any time. Also, you may refuse to answer any specific questions. If at any time throughout the interview you decide to withdraw, you may do so. If you decide to participate, the interview will last approximately 5 to 10 minutes. Your help is very much appreciated."

#### **Data Collection: Content Analysis**

Prior to conducting a content analysis of coffee, read "Content analysis and narrative analysis" by Charles P. Smith (BB). For the content analysis, you may choose any medium for examination, e.g., television commercials, advertisements in print media, scenes from TV shows or movies, songs about coffee (if there are such things). You should collect enough data that you are able to code for the emergence of at least two themes.

As you code the media on coffee, think of the different categories that could develop, e.g., political messages, social commentary, environmental advocacy, humorous observations, and create codes accordingly.

As a stage model for doing qualitative content analysis, the following is a guideline to follow for your research:

- 1. Identify a research question relevant to the subject matter and of interest to you. Examples: Is coffee portrayed as fuel for the body in a work-obsessed world? Are brands trying to portray themselves as environmentally friendly? You may use these questions or develop your own.
- 2. Determine analytic categories (sociological constructs).
- 3. Read through data and establish grounded categories (open and axial coding).
- 4. Determine systematic (objective) criteria of selection for sorting data chunks into the analytic and grounded categories.
- 5. Begin sorting the data into the various categories (revise categories or selection criteria, if necessary, after several cases have been completed).
- 6. As you analyze the data:
  - a. Count the number of entries in each category for descriptive statistics and to allow for the demonstration of magnitude,
  - b. Review textual materials as sorted into various categories seeking patterns,
  - c. Look for themes that emerge from specific patterns,
  - d. Remember, no apparent pattern potentially could be a pattern.
- 7. As you make inferences:
  - a. Consider the patterns in light of relevant literature and/or theory (show possible links to theory or other research),
  - b. Offer an explanation (analysis) for your findings,
  - c. Relate your analysis to the extant literature of the subject.

After writing up your approach to the methodology and data collection, and your findings, critique content analysis as a method. What are the strengths and limitations of unobtrusive research of this form? Refer to the chapters in Creswell and Maxwell to assist you in doing data analysis and writing up your research as a qualitative paper.

#### Paper:

The research report should be 8-10 pages (not including the appendix), double-spaced, 1-inch margins, and 12-point font. Use subheadings to signal transitions in your paper. If you do pair up with a classmate, be sure to mention your co-author as you do your write up.

- Begin with a brief (one paragraph) auto ethnography (two if you have a co-author) a
  personal reflection on your own involvement with consuming coffee (or lack thereof).
  This short biographical account should provide thick description of not only past
  behaviors but also your beliefs, understandings, values, attitudes and feelings about
  coffee.
- 2. Describe your procedures for data collection in detail and the logic behind the decisions you made. Describe the setting and where you were positioned. Why did you choose this vantage point? How did you choose the people you interviewed? Field research requires the ability to think on your feet and adapt to unforeseen circumstances. If you began with one plan and then changed it, explain why this was necessary.
- 3. Discuss your findings and interpretations. This should be the main section of your paper.
- 4. Reflect on the feasibility of consuming coffee at the site you observed. Is this an activity that is available to everyone? Who has time and who doesn't have time to do this? Does it constitute "leisure" activity? Why do people drink coffee?
- 5. Reflect on the function of any rituals of coffee consumption you observe.
- 6. Attach the spatial map as an appendix. Your field notes will be turned in separately.

#### **Grading:**

In "A" quality papers...

- 1. The operational definition of coffee consumption is thoughtfully considered.
- 2. The methods section demonstrates planning, insight, and attention to detail.
- 3. Original connections are made to other readings and concepts from the course.
- 4. The researchers make astute sociological observations.
- 5. The analysis displays depth and sophistication.
- 6. Findings are organized thematically (example: Invisible labor, socialization messages, etc.)
- 7. The themes are supported by rich, descriptive details.
- 8. The writing is engaging and eloquent (clear, descriptive, smooth transitions between the sections, concise).