INTERNATIONAL COFFEE ORGANIZATION

Research Assessment Guidelines

COSA
Committee On Sustainability Assessment

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Introduction

The International Coffee Organization (ICO) works alongside nations to strengthen the global coffee sector and promote sustainable growth within a market-driven framework. In 2019, the ICO launched the Coffee Public-Private Taskforce (CPPTF) to foster consensus between public and private stakeholders on key priorities and actions. The initiative's core goal is to ensure sustainability and fairness within the global coffee sector, from local communities to the international market. The Committee on Sustainability Assessment (COSA), through the CPPTF's Technical Work Stream on Market Transparency (TWS II), led the development of methodologies and tools specifically designed to collect data on critical areas such as coffee production costs, farmers' actual income, and supply chain efficiency.

With support from the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), COSA partnered with the National Agriculture Export Board (NAEB) and its designated research institution, The Highlands Centre for Leadership and Development (HLC-L4D) in Rwanda, as well as the Secretariat of Agriculture and Rural Development (SADER) and its research institution, the National Institute of Forestry Research (INIFAP) in Mexico, to pilot the initiative. Since February 2023, these organizations have collaborated to refine and adapt methodologies and tools to suit local contexts, conducting fieldwork to gather robust and reliable data on coffee production costs and farmers' actual income.

This Research Assessment Guidelines document outlines the approach used in Rwanda and Mexico, highlighting key learnings and providing organizations with detailed steps and best practices for conducting household-level assessments. It is primarily designed for implementers and researchers managing programs or interventions, though all project partners will benefit from understanding the step-by-step guidance provided.

The guidelines are also based on COSA's extensive experience conducting livelihood measurement projects worldwide. The COSA manual offers flexibility, allowing processes to be tailored to meet the specific needs of users while also standardizing key procedures where possible. This approach ensures consistency and quality, enabling comparability across projects and regions. Ultimately, it supports continuous improvement, helping to identify and scale best practices for maximum impact.

Before beginning your work

When conducting research work for governmental institutions, some key issues should be considered:

Defining clear objectives for data collection and ensure all government stakeholders support the initiative.

In alignment with the ICO Coffee Public Private Taskforce's mission to support the livelihoods of coffee farmers, it is crucial for governmental institutions implementing rigorous household studies to have clear objectives for the use of the collected data. Given that data collection efforts are typically time-consuming and costly, it is critical to focus on relevant topics and questions covering all necessary details, such that data is useful to shape policies, develop sector roadmaps, and provide valuable information to commercial partners, farmers, and other stakeholders for their decision-making processes. Additionally, there should be a commitment to periodically collecting relevant data through rigorous field surveys every few years and by identifying agile methods for updating critical data in between.

It is also important to identify and involve the necessary supporting entities that have direct relationship with the objectives of the data collection process, would use the data for policy-making or other purposes, as well as those that may have a budget to support the work initially or in subsequent years. These entities may be key partners in the process and help drive it forward.

Contracting and receiving funds

Governmental entities and institutions often have complex regulations and internal processes for contracting that can take longer than estimated. Some are also not set up to receive funds from external partners (due to anti-corruption measures) or may lack the capability to capture or direct those funds. To avoid delays in project initiation, it is crucial to ensure that the primary contact is well-informed about the bureaucratic procedures, enabling better planning. Ideally, there should be a link to the Ministry of Agriculture or related agencies to confirm the necessary steps for obtaining approval to begin the research work and secure a signed contract. It is advisable to allocate a c.a. 6 months for this process.

If resources for the study will be provided by development agencies, also factor in the time needed for contracting with the agency, which can take up to 6 months. Only after this step can you contract with the government for the work, meaning the total contracting period could last up to one year.

Budgeting

For the research institution to stipulate a budget for field work, establishing a sampling

framework is essential. Vital information, such as farmer characteristics, main production areas, important regions that differ in key determinants of costs (e.g., agro-ecological zones, altitude rainfall, infrastructure, organizations, etc.) is necessary to determine the sample and associated costs. However, access to this data often depends on having a signed contract, making budgeting very challenging. Identifying a minimum sample size (based on available budget) and predetermining a sampling protocol before signing the contract could be a way forward. This approach, however, requires the willingness and legal capacity of the partners to commence technical work before the contract is signed.

Contracting Challenges for Field Data Collection

Some governments do not have their own research institutions with available staff and expertise to conduct field data collection. For most governments, contracting non-government research entities for field work is administratively complex, as it requires going through a public tender, which can be lengthy. It is important to consider this, as a public tender process could significantly delay the development of the work. Identifying existing governmental institutions with research capacity or drafting pre-requirements to identify research partners with legal data authority and technical capacity (experience), while also considering the timeline for public tendering, is crucial for adequate project planning.

In many cases, even if a research institution exists in the country, they often need to hire external surveyors to perform the work. Basing potential candidates solely on the review of CVs does not guarantee capable or committed surveyors. Conducting face-to-face interviews, assessing prior work, and obtaining recommendations are essential steps to ensure the selection of surveyors who will collect data with the required rigor for analysis. A larger number of surveyors than expected should be selected for the training process to be able to have adequate screening of their capabilities.

After the training process, a comprehensive assessment should be conducted, and candidates should do a mock interview with actual farmers. Surveyors who pass the assessment should be part of the roaster for data collection, and selection should be done considering assessment grades. This will ensure a minimum number of surveyors for the overall data collection process, and several adequate replacements in case of need.

Some governments might experience fiscal constraints during the turn of the year or other critical fiscal periods. This can delay the capacity to pay contractors on time, potentially causing surveyors to halt the data collection process or abandon the work entirely. It is crucial to be aware of these constraints beforehand to avoid any disruptions in the progress of data collection.

Ensuring farmer trust

Farmers might be hesitant to provide accurate data to governmental entities due to fear of being held accountable for the information they share, which could affect data quality. Enlisting an independent institution to collect sensitive data can mitigate this issue. Whether the data is collected by an independent trusted organization or a governmental institution, it is crucial to preserve farmer anonymity and clearly inform farmers about how their data will be used. Data shared with the public should be aggregated, and robust data security protocols must be in place

to ensure it is not misused. Additionally, independent research institutions must respect the data privacy laws of the countries in which they operate.

Securing successful training of surveyors

Research partners often underestimate the intricacies of surveys not originally produced by them. Providing sample training on key aspects of the survey as part of the materials is crucial for helping partners understand the survey's depth and the necessity of robust in-person training for both the institution and surveyors.

Online training is less effective when extensive training is required, often leading to more costly delays and data problems later. Typically, online training will be less deep as trainees are less likely to be actively participating for more than a few hours. If online training is unavoidable, surveyors should be required to secure good internet connectivity, keep their cameras on, be punctual, and stay for the full duration of the training.

Training must cover both content and survey process. For full-scale surveys (60-90 minutes), training should last at least four days and include mock surveys and field visits before actual data collection begins. Testing should be applied to assess their understanding, and they should not be hired until they can prove they have adequately comprehended the training.

Data bias

Data collection requires ensuring farmers have no collective incentives to bias their responses. Having neutral enumerators, and an adequate questionnaire (both in the question itself, and in the question ordering), minimize potential biases.

Furthermore, context specific situations may have potential impacts on farmers, creating incentives to bias responses. For example, government policies such as subsidies create perverse incentives for farmers to underestimate the amount received, as they may perceive the interviewee can have potential leverage to make farmers receive more. Another example, may be rules to compulsory sell coffee to specific entities, may produce underestimation on sales as farmers may skip information on sales to unauthorized entities.

Including specific questions can reveal farmer perspectives, or when that is not viable, insights from local experts can be sought. We can adjust and annotate final data averages based on previous findings in a Context Worksheet or during a final data validation workshop, without putting farmers on the spot.

Validating and publishing results

Validating the research results with key stakeholders in the coffee sector of a specific country is essential. These stakeholders should represent various supply chain players, such as government institutions, processors, traders, and farmers. During the validation

process, study results are presented, allowing participants to understand how the study was conducted, ensuring transparency in processes and methodology. Participants can also voice their opinions and reflect on the accuracy of the data, providing valuable input to the analysis. This process is crucial for ensuring that the study results will be well accepted, particularly when government policies will be shaped based on the findings.

Some countries might be hesitant to publish the full results of the research, especially when sensitive data on the cost of production and actual income of coffee farmers is collected. If one of the objectives is to make the results available to the general public, clear agreements on data sharing should be established before project inception. Also consider the time needed for countries to approve study publication which could be c.a. 3 months, especially when approvals are needed to be issued by different ministries.

Key takeaways:

1. Governmental institutions must have clear objectives for data collection to shape policies and develop roadmaps, commit to continuous data collection through various methods, and identify supporting entities for policy-making, commercial purposes, and financial support.
2. Determine the entity in each country that can regularly collect data and statistics for the national sector. This entity may differ from the one that leads the sector politically.
3. If there are no governmental institutions with research capacity, draft pre-requirements for research partners with the necessary expertise and consider the timeline for public tendering. Additionally, conduct thorough hiring processes for external surveyors and be aware of potential fiscal constraints that could delay payments and disrupt data collection.
4. Ensure the primary contact is well-informed about bureaucratic procedures and establish a link to the Ministry of Agriculture to confirm steps for obtaining approval and securing a signed contract, allocating approximately 6 months for this process.
5. Identify a minimum sample size based on the available budget and predetermine a sampling protocol before signing the contract (especially if the contracting process is lengthy), ensuring that partners have the willingness and legal capacity to commence technical work in advance.
6. Provide robust in-person training on both survey content and process, lasting at least four days and including mock surveys and field visits, and ensure online training includes good connectivity, cameras on, punctuality, and comprehension testing.
7. Selection should be based on an assessment of capacity after the training is complete, making sure there is a larger number of enumerators than needed in the training as they may be potential substitutes for the data collection process.
8. Preserve farmer anonymity, clearly inform farmers about data use, and ensure robust data security protocols while respecting local data privacy laws.
9. Be mindful of specific country legislation and policies that could introduce data bias.
10. Establish clear agreements on data sharing before project inception, involve key stakeholders in the validation process to ensure transparency and acceptance, and consider the time needed for publication approval, allowing approximately 3 months for multi-ministry approvals

Assessment Characteristics

Given the intrinsic complexity of any assessment, a key challenge is establishing practical ways to measure its component parts. Indeed, progress depends on identifying actionable measurements that can steer efforts or investments to where they have the greatest impact.

Overview

The process has four major phases, each with its own associated milestones and tasks (See Table 1).

COSA recommends that each Implementing Partner identify a Project Coordinator (or project lead) that is responsible for the steps throughout this process, including:

1. Adapting the survey to ensure local relevance
2. Managing data collection
3. Supervising local field staff
4. Managing feedback mechanisms for continuous improvement
5. Regularly communicating with project partners

Table 1: Planning Assessment Phases

Phase	Milestone	Timeframe
1. Creating project framework	1. Project Set-up	3 months before fieldwork
	2. Work Plan	2 months before fieldwork
	3. Survey Adaptation	1 months before fieldwork
2. Fieldwork	4. Training	<1 week before fieldwork
	5. Conducting surveys & Ensuring Data Quality	Ongoing
3. Discovering and communicating conclusions	6. Reporting & Learning	Ongoing (for simple reporting allow one month)

Phase 1

Creating the Project Framework

The work completed in Phase 1 is necessary to create a clear understanding among the project partners about precisely what the project will entail and who will be responsible for each milestone. Ultimately, it creates a shared responsibility for project success.

Milestone 1: Project Set-Up

In this milestone, partners determine the resources available, methodological considerations, and clarify the details of the collaboration between project partners. The objectives are:

1. **Identify research and implementing partners.** The agency or group of partners who are proposing the assessment should identify an implementing firm and a research partner who respectively carry out the fieldwork and the data analysis. The research partner should have extensive experience in the field of quantitative and statistical analysis. The implementing firm should provide a core group of qualified surveyors together with a project coordinator to carry out the surveys and offer assistance during the fieldwork and the research process.
2. **Build understanding.** This objective involves conceptualizing the project and its goals and identifying the responsible parties that will carry out the work. Through discussions, this step helps ensure clarity around what the different partners expect from their engagement in this work together and helps align the goals of each partner's work.
3. **Gather information about the initiative to be monitored as well as its context.** Here are the key issues to keep in mind for a comprehensive understanding of the working environment:
    1. Understand the initiative and its intentions
    2. Map the key actors and critical factors affecting the initiative
    3. Guide research plan and indicator selection
    4. Calculate data validations (e.g., reasonable ranges for yields) for data quality control
    5. Ascertain the best methods, time and locations for surveying farmers
    6. Adapt the survey to the local context (e.g., identifying and defining local units, input types, species, etc.) so that only what is relevant is specifically addressed in the survey

4. **Define a Research Plan.** The research partner should develop a research strategy together with the agency or group of partners who are proposing the resilience assessment. The Research Plan should address data collection strategies, sample design, and selection for both quantitative and qualitative approaches that the researchers deem optimal for achieving the project goals within the project's constraints.
1. **Select Indicators.** Partners select a short list of key performance indicators1 or a long one depending on the needs of the project and the budget. Implementing Partners can also

include any relevant KPI for their operations as part of this process (as discovered through the Context Worksheet). The indicators and associated survey questions are used to build the survey and are designed to uncover useful and practical information for project managers about the initiative's progress. For more information on selecting relevant indicators, partners can reference the Indicator Master List in COSA's website. For a complete list of the indicators used by the Market Transparency workstream of the International Coffee Organization Coffee Public Private Taskforce, please access the ICO CPPTF Global Knowledge Hub.

2. **Select the best methods.** Research partner determines the sample design and data collection methods. The basic decision points include:
   a. Define the universe of study: specific regions, organized farmers, specific type of crop, etc.
   b. Sample size: Determine how many people should be surveyed (a sample that is representative of the universe). Typically, sample size is determined by using finite population random sampling strategies.
   c. Sample selection: Fully random selection may lead to a dispersed and costly sample. Stratification or cluster sampling may be a useful method.
   d. Define fieldwork strategy: where the data gathering is going to take place (e.g., processing stations, demonstration plots, selling locations, group meetings, etc.) and when data gathering will take place (time of year or season). For the latter, note that the closer after the harvest, the better data collection, as recalling information is easier.

   For reliable results, it is essential that the farmers surveyed are representative of the farmer population. Decisions about the number of farmers to interview will be influenced by the resources available at the cost of precision. Surveys are usually conducted of individual farmers.

3. **Select the technology providerIf** using an independently developed or a client's mobile data collection technology during fieldwork, it is important to test the technology (tablets, smart phones, etc.) under actual field conditions.

   It is important to consider that standard mobile data collection applications rely on internet connection to be updated and to send the information to the cloud, Mobile data collection applications may also rely on Internet connection at key times during the process, so it is important to test connectivity to identify and remedy any issues before fieldwork begins or work with an equipment that allows for offline data collection. The field coordinator should make sure that surveyors are uploading data to the cloud on a daily basis to avoid any risk of losing the data when it is collected in offline mode.

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Milestone 2: Develop the Work Plan

1. Determine resource needs. Accurately determining resource needs directly affects the project's ability to produce useful and credible results by ensuring the availability of needed staff, time, and money to work effectively and stay on schedule. Providing adequate resources
2. for a quality project depends on a good understanding and realistic assessment of how long it will take to do the work required. The work plan should address any logistical bottlenecks that could occur and is typically overseen by a project coordinator who identifies the factors that could cause difficulty in the actual fieldwork (refer to the section in this manual, "Before beginning your work," for more info).
    a. Devise a robust quality assurance process. The ability to draw useful project conclusions relies on having a sound quality assurance process in place. The quality assurance process should cover the supervision and communication needed to maintain data quality across the project's geography, staffing, and telecommunication capacity. The plan should ideally cover:
    b. The supervisory structure, noting who is responsible for reviewing and reporting data
    c. How often data will be reviewed so that work can be checked on an ongoing basis. (If mobile data collection technology is used, surveyors should be instructed to upload surveys promptly and regularly.)
    d. How to communicate with surveyors when mistakes are made
4. Secure permissions. Obtaining the needed permissions for fieldwork at this stage reduces any potentially unwelcome surprises about the ability to interview farmers as planned. Working together with local project partners is key to gaining the necessary permissions.

Milestone 3: Survey Adaptation

1. **Adapt surveys.** The training should be carried out by the implementing firm in collaboration with the research partners. Training is directly administered to the surveyors. During the training process, indicators and associated survey questions are extensively described and discussed in order to ensure surveyors understand them fully. The training should be conducted following a specific training schedule, together with a training protocol (please refer to training protocol on COSA's website). The survey goes through two stages of adaptation for field use:
    a. The "training-ready" survey—this is based on all the initial input from partners (Context Worksheet, etc.) about project- specific indicators
    b. A "field-ready" survey—this includes any further adaptations identified during training that help provide additional clarity

    At this Milestone stage, the goal is to create the "training-ready" survey.
    This is composed of:
    1. The selected indicators for the project or supply chain
    2. Any additional information or KPI that the Implementing Partner wants to track
    3. The relevant project information from the work done around the context of where the survey will be conducted.

Translate to the local language. If translation is necessary, the Project Coordinator should allow sufficient time to translate and review the survey locally before training. It is also important to maintain an accurate full version of the survey written in the language that analysts will use.

Phase 2

Fieldwork

The goal of this phase is to build a good foundation for the fieldwork through training and logistics planning.

Milestone 4: Training

The training milestone develops competent and confident surveyors who understand their value in the Resilience Assessment process, the importance of the data they collect, the survey content, and how to use the technology.

1. Identify Surveyors. An exhaustive screening process should be made to ensure new surveyors have the capacity to carry out the work. In this sense, it is critical to go beyond standard methods (e.g., reviewing CVs, conducting interviews, letters of recommendation, etc.). Enumerators should be assessed at the end of the training process to verify their capacities. Selection should be based on grades, conditional on approving the assessment.
2. Organize training logistics. Training usually lasts about 3-4 days. The training schedule should cover the logistics and curriculum for the training session to ensure that participants get the most out of their time together. At a minimum, the following logistics should be in place before a successful training:
    a. Confirm the persons to attend (trainees and supervisors), the location, date, and times of the training.
    b. Ensure that all surveyors have "training-ready" surveys whether on an appropriate number of mobile devices.
    c. If using mobile data collection devices, make sure surveyors are familiar with the technology and have clear step-by-step information on how to troubleshoot any problems arrange logistics for classroom training. The training room should be the appropriate size with seating for each surveyor, access to wireless Internet, a projector and projection screen, notepads and pens for each surveyor, and refreshments.
3. **Conduct training.** Training should cover:
    a. The purpose of the assessment
    b. Targeting farmers and specific areas
    c. Interview techniques
    d. Survey questions and content
    e. Use of the technology
    f. Reporting and uploading guidelines

Important: An essential part of training is ensuring that surveyors practice the survey while supervised. It is ideal to arrange practice with actual producers (perhaps even under actual field conditions). However, even if practice is limited to a role-playing exercise during classroom training, each surveyor should have experience asking the full survey questions at least 3-5 times. This ensures that each surveyor has feedback from others and is supervised by the trainer(s). This practice is a critical component and can lead to a dramatic improvement in the quality of the subsequent months or years of work. It is important to take the time to ensure that each surveyor can be coached to improve technique or correct interpretations.

4. **Capture surveyor adaptations.** As surveyors review and practice the questions in training, their observations may reveal the need to further refine some of the questions or their wording beyond the initial adaptation already completed. Partners should incorporate final adaptations to the survey where appropriate, and promptly share the "field-ready" surveys before going to begin fieldwork.
5. **Clarify expectations with surveyors.** The Implementing Partner supervisors should share the responsibilities and expectations developed during the Work Plan Milestone with the surveyors—there should be clear agreement (in writing) about the surveying plan and how it will fit into the staff's current duties.

Milestone 5: Conducting Surveys and Ensuring Data Quality

1. **Interview farmers and enter their data.** When preparation has been thorough and well executed, this milestone should proceed smoothly. Data collection consists of asking the pre-identified producers the set of survey questions and accurately recording their answers. The key objective of this milestone is very basic: remain on schedule while ensuring high-quality data collection. The Project Coordinator will oversee project progress, monitor it against the work plan, and make any adjustments to logistics needed.
2. **Maintain data quality.** This step refers to enacting the quality assurance plan developed during the Work Plan Development Milestone. The Project Coordinator should work to make sure any problems during the data collection phase are uncovered and addressed as soon as possible by monitoring the uploaded data and by ensuring a weekly check-in discussion with each surveyor at the start. Surveyors help in this effort by making sure that completed surveys are regularly submitted (either uploaded to the server or entered from paper into the system) so that they can be checked for accuracy and can be used to populate the dashboard.

Phase 3

Discovering and Communicating Results

The goal of this phase is to use the data collected in the field to generate results that provide stakeholders with the useful information they need to make better decisions about the general panorama of the coffee sector, assessing the impact of their interventions or any other objective.

Milestone 6: Reporting & Learning

With this Analysis and Reporting phase comes a shift from the fieldwork to working with the data to ensure its quality and to distill conclusions. The milestone includes a range of analytical techniques to work with the data to discover what it reveals.

Analysis: The data analysis is composed of three tasks:

1. **Data Cleaning: To** clean the data, analysts review indicators for each sample farmer to identify improbable data, outliers, and anomalies. After an initial assessment of data issues, the project coordinator meets with the lead analyst to discuss the condition of the data, adjust any estimates of the time needed for data cleaning, and agree on the **Data Analysis and Cleaning Plan.** The Data Analysis Plan identifies specific needs and outputs from the cleaning and analysis process that researchers will deliver.
2. **Data Analysis:** Analysts conduct the analysis as outlined in the Plan for Data Analysis and Data Cleaning.
3. **Develop findings and conclusions:** At the completion of the analysis, analysts will present a synopsis of the results and suggested findings and conclusions. The agency or group of partners who are proposing the assessment and the researchers meet to discuss these findings to allow for clarifications and fine-tuning.

Reporting: Reporting is a collaborative process; it benefits from the ideas and creativity of the researchers as well as the client. The aim is to present conclusions in a way that highly engages stakeholders with the information they need to make decisions in order to enhance agricultural sustainability. The process starts with standard information products and shapes them according to the researcher's influence and the data itself. This milestone is composed of four tasks:

1. **Select the communications approach:** Usually the communications approach is a formal report. The audience is typically the client but may also include others.
2. **Develop graphics and write narrative:** The findings and conclusions constitute the main narrative that needs to be developed. The background and methods sections have already been compiled by assessing the context of where the study is taking place.
3. **Validate findings with relevant experts and stakeholders:** Feedback to evaluate and explain results can be gathered using a variety of formats and methods. Typically, this occurs through

workshops or focus groups of various stakeholders and knowledgeable informants. It is similar to the initial pre-launch workshop. The clients and researchers choose the format, the participants, and the moderator. The researchers secure the logistics and invitations as well as arrange for capturing the suggestions of the stakeholders. This step is key to ensure transparency and get the necessary buy-in for the study which is especially important when studies will be used to influence policy.

4. **Create final report:** After the feedback process is complete, the client and researchers agree on who resolves which issues and how, and then take the necessary actions to create the final presentation. Each entity then completes their agreed-upon tasks for creating the final report.
5. **Disseminate findings:** To help ensure that the findings are useful, it is vital to ensure suitable and adequate sharing of the findings. This can mean adapting for different audiences and may thus require appropriate packaging for each. Although this is one of the last steps, it should be discussed with key stakeholders earlier in the process to reduce duplicate or rushed efforts at the end.

Conclusion

We have purposely kept this document focused on the key steps to make it functional at any level of application. For more involved projects, such as those conducting impact assessment, we also offer additional tools to help guide you in a smooth application. We appreciate any feedback you can offer to help us continuously improve this service. You can contact us through our website (www.thecosa.org) or via email: info@thecosa.org