



pep+TM
pepsico **positive**
planet + people

Livelihoods Implementation Framework for Engagement (LIFE): Guidance Note

INTRODUCTION

This Guidance Note, developed in collaboration with the Committee on Sustainability Assessment (COSA), offers instructions for PepsiCo programs, investments and other supply chain partners on how to select metrics and track progress on the PepsiCo objective of improving 250,000 livelihoods in our agricultural supply chains and communities by 2030. It is designed to inform and guide internal teams as well as supply chain partners and other entities associated with PepsiCo's sustainability programs.

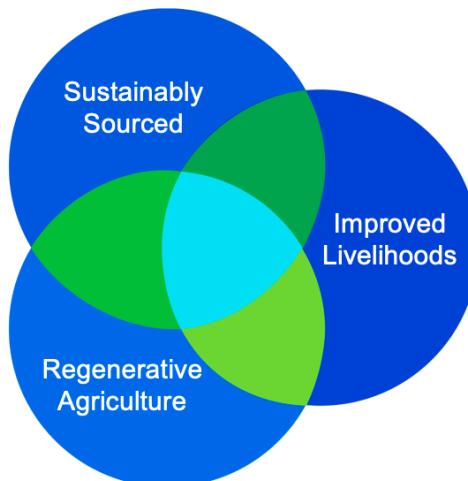
This document provides the indicators, methods, and processes for supply chain and other program entities to be able to consistently and credibly measure livelihood engagement and improvements as part of PepsiCo's Positive Agriculture – Livelihoods goal. It is sectioned into three parts:

1. Livelihoods Framework Overview
2. Indicators & Metrics
3. Methods

1. LIVELIHOODS FRAMEWORK OVERVIEW

Our goal of improving the livelihoods of more than 250,000 people in our agricultural supply chains is focused on supporting economic prosperity, agency, and sense of security of the people in our agricultural supply chains and communities, including farmers, farm workers, and their households. The livelihoods improvement goal is a key component of our [Positive Agriculture commitment](#). *The baseline for this goal is January 1, 2021 or the launch date of a program aimed to improve livelihoods in our agricultural supply chains, whichever is later.*

Figure 1: PepsiCo Positive Agriculture: 3 Goals



The livelihoods improvement goal will focus on improvements in three areas, which are further elaborated in **Section 2: Indicators & Metrics**:

1. Economic Prosperity
2. Farm and Farm Worker Security
3. Women's Economic Empowerment

While our programs and approaches to improve livelihoods will look different across our markets and supply chains, it is vital to apply a consistent framework and set of metrics to capture progress and impacts toward our livelihood goal. For example, we may seek to improve livelihoods through our Sustainable Farming Program (SFP), by leveraging rigorous sustainability certifications for agricultural commodities, or through various supply chain programs working with producers on specific targeted engagements to livelihood improvement objectives (for example, our programs with USAID, CARE, IDB, etc.). Guidance for measuring livelihood improvements in consistent ways across the various pathways are detailed in **Section 3: Methods**.

2. INDICATORS & METRICS

Through a focus on standardized KPIs and a common methodology and measurement approach PepsiCo and its partners are able to readily draw valuable lessons and compare livelihood outcomes in a credible and consistent manner. This approach is designed to deliver quality data that is both accurate and also comparable across geographies, crops, conditions, and scale of operations (i.e., the approach covers both large-scale industrial systems and small-scale farming systems). The indicators, presented by key focus area, are displayed below in [Figure 2](#). For the complete indicator and metric details, see the associated Livelihoods Implementation Framework for Engagement **LIFE Metrics** sheet.

The Livelihood Outcome Indicators are designed as **SMART indicators**¹ for global learning and comparison. They are aligned with a broad range of international norms including the UN Sustainable Development Goals (SDGs), International Labor Organization (ILO), FAO, UN Guiding Principles on Business and Human Rights, as well as measurement frameworks currently implemented for programs active in PepsiCo's supply chain projects (USAID, CARE, IDB, etc.).

To encourage widespread uptake, the KPIs and the approaches are purposely designed to be relatively lean, practical to implement in different markets and types of supply chains, and suitable to deploy at scale. After tens of thousands of field tests, COSA's experience is that many of the selected indicators can serve as a valid proxy for more complex issues that would be impractical to measure at any scale. In addition to the critical role this framework plays in measuring progress toward our livelihoods goal, the KPIs can be used by PepsiCo and partner organizations to identify trends and take opportunities to

¹ An acronym related to characteristics of good indicators: Specific, Measurable, Achievable, Relevant and Time-bound

reflect, course-correct and improve program design to increase the likelihood of successful outcomes.

Figure 2. Livelihood Outcome Indicators



 Primary  Secondary

² A note on inflation as related to capturing improvements in profitability and income: inflation rates are an important part of understanding how far farm household income stretches. Most inflation rates are calculated using a generic figure for a normal basket of goods at a national level, but the same rates of inflation do not typically capture the effect on people in rural areas accurately, especially in the global South. PepsiCo will continue to report on income improvements for programs in different countries and sectors and will be transparent about national inflation rates to address the general effectiveness of that income improvement. However, the company will not calculate the actual level of reduction in incomes as a result of inflation, which would be nuanced for each origin and different production systems.

³ Can only be used as a Primary Indicator in contexts where PepsiCo has indicated high labor practice risks

Primary vs. Secondary Indicators - Primary (light blue) indicators have the most direct link to PepsiCo's improved livelihoods objective, i.e., each is a milestone on an impact pathway that, when validated, suggests a likely progression to better livelihoods. Secondary (yellow) indicators reflect those indicators that are associated with livelihood benefits, but whose linkages to livelihoods are less direct. Note that 'Labor Practices' can only be used as a Primary Indicator in contexts where PepsiCo has indicated high labor practice risks—e.g., in a supply chain with significant risks of forced or child labor, Labor Practices can be applied as a Primary Indicator. However, in a supply chain with limited or low Labor Practices risks, the indicator should be considered as Secondary.

Basic & Advanced Metrics – The framework, as displayed in [Figure 3](#) allows for maximum flexibility, starting with simple and business-friendly approaches and allowing a smooth interface with more rigorous assessment methodologies for those organizations or supply chains that can conduct further research or deeper evaluation. Both Basic and Advanced approaches are detailed for each of the above indicators (for both Primary & Secondary). **Basic** level livelihoods improvement metrics rely on preliminary output or outcome improvements (stages or precursors to potential impact) which rely more heavily on producer perceptions. **Advanced** metrics, in most cases, go beyond producer perceptions to gather more robust data for measuring actual amounts of change or provide additional metrics to dig deeper into a given topic area.

PepsiCo has offered these two pathways to allow programs and entities to participate towards livelihood improvement measurement goals regardless of current program maturity, with the desire that more Advanced reporting will be adopted by partners over time. This system removes the barrier of entry for those organizations who are in earlier stages of their sustainability journey and may not have the systems and protocols in place to more formally calculate outcomes, although their work is expected to make positive livelihood improvements. Details on these two pathways are described in more detail below.

Figure 3. Example of Basic & Advanced Metrics at Household Level

Indicator	Basic Metric	Advanced Metric
Profitability (Income)	Whether producer indicates an increase, similar, or decrease in target crop income during the last production year (perception; no actual amount required)	USD/ha of target commodity production If desired: USD/total farm production (beyond target crop) USD/household income from all sources

Cross-tabs and Aggregation - The metrics have been designed so that they can be aggregated or disaggregated across country, region, or crop. This also allows PepsiCo and its partners to be able to cross-tabulate vital aspects of the data to see the effects for a range of applied factors such as gender, poverty,

youth, and ethnicity. Both household level metrics (for program partners) and aggregate reporting metrics are detailed in the **LIFE Metrics** sheet.

3. METHODS

COUNTING LIVELIHOODS IMPROVED

The following are instructions for justifiably counting people in our agricultural supply chains towards the 250,000 livelihoods improved goal:

1. **Select Relevant Indicators** – For any entity to claim livelihoods improved as a result of their activities, the entity will first need to **select all relevant indicators for their program or investment from the bank of 21 indicators listed above**. A relevant indicator is any indicator (Primary or Secondary) on the list that is associated with the individual program or investment's theory of change or desired impact pathway.
2. **Primary Indicator & Advanced Metric** – To be considered as a program in which PepsiCo may be able to claim improved livelihoods, a program must measure and demonstrate positive improvement in **at least one Primary indicator, using the Advanced Metric**. The number of producers that have had a positive improvement as measured by the defined metric can count towards the livelihood improved goal. For example, if a program has 1,000 participants and they determine (through appropriate measurement techniques laid out in this section) that 96% reported an increase in income compared to the initial assessment, that program could count 960 producers towards the livelihoods improved goal.

While our aim is to support maximum positive impact through our livelihoods programs, there is no requirement for a specific magnitude of positive impact to be achieved to count toward our goal (although in a few cases, the measurement framework refers to certain basic thresholds (poverty lines, minimum wage rates, etc.) to be considered improved). The indicators are designed to measure both year to year progress over the lifespan of a program or intervention (to ensure programs remain on track to meet goals) and for measuring changes against an initial assessment, which allows PepsiCo to count livelihoods improved related to participation in the program.⁴ This allows PepsiCo richer insights into both yearly progress and how the program is progressing relative to its long-term goals.

The framework provides two metric levels for each indicator: Basic & Advanced. These metrics guide the data that will be collected and evaluated in a project with a livelihood improvement

⁴ Note that the approach detailed here cannot be used to claim "Impact" in its most scientific sense. To claim true impact, the scientifically rigorous process of identifying a control group would need to be employed because it acts a counterfactual, which allows the ability to truly understand and attribute the impact of a program or investment on a population over time.

objective and provide a progression showing “engagement” through the “Basic Metric” and ultimately improved livelihoods using the “Advanced Metric.”

3. **Relevant Supporting Indicators are Required** – All entities or programs **must also report on any additional indicators relevant to the focus of the investment or intervention**, whether those are Primary or Secondary. We recognize that sustainability improvements can come with tradeoffs (i.e., advancements in one area of sustainability may come at the expense of other areas). PepsiCo does not require that ALL indicators see positive improvement in order to count improved livelihoods (only one or more Primary indicators as indicated in #2 above). It does, however, require that all relevant Livelihoods indicators for the program activities be tracked and reported—according to the specified metrics—to better understand tradeoffs and the multi-dimensional aspects of livelihood improvement programs. This enables PepsiCo and its programs to not only have much richer insights but also to use the data as feedback loops to management about what is and is not working in supply chain programs to improve livelihoods.

4. **Annual Reporting is Required**- Each partner will be responsible for reporting two items on an annual basis:
 - a. Results on all relevant aggregate program indicators (whether Basic or Advanced) that relate to the program’s Theory of Change or desired impact pathway
 - b. The Livelihood Count Metric for the Primary Indicator at the Advanced Level, used towards the livelihood improvement goal. This is the number of people who are experiencing the positive livelihood improvement that PepsiCo can count towards its objective. The details for reporting this metric are outlined in Livelihoods Implementation Framework for Engagement **LIFE Metrics** sheet.

Note that the Livelihood Count Metrics may in different cases refer to producers, household members, women and/or workers depending on the focus of the indicator. For example, an increase in income or improvement in poverty level will affect the producer and the other members of the household, so all members of that household should be included towards the livelihood goal if possible. The Wages and Labor Practices indicators refer to workers, and the Women’s Economic Empowerment indicators refer to improvement in women’s conditions specifically. For reference, a *household* refers to the number of people, regardless of relationship, who normally live in a particular residence (for at least six consecutive or non-consecutive months of the year), occupying it wholly or partially and who together fulfill their nutritional needs and share expenses from a common pot. Workers refer to permanent or temporary laborers that undertake tasks such as management or supervision, technical services or other indirect support activities, or laborers that work on crop production, harvesting, and/ or processing.

Note: For those projects working with village administrations or other community entities (and not directly with producers or those directly associated with individual production systems), beneficiaries can still be counted, but outcome level reporting will be required, whether through community-based opinion surveys, or focus groups to ensure that the investments are having the intended effects. Please reach out to PepsiCo or COSA for more details on appropriate outcome reporting methods in these contexts.

5. **Supplier Code of Conduct Compliance Remains a Requirement** – Livelihood improvements **cannot** be counted if the entity showing such improvement has violated or not been fully compliant with any of [PepsiCo Supplier Code of Conduct](#) criteria (e.g., human or labor rights abuses, harassment or discrimination, unsafe working conditions, etc.).
6. **Mitigating Adverse Human Rights Impacts** – Projects implemented in markets or regions with high risks of adverse human rights impacts may wish to supplement the program with a mechanism to evaluate and validate that adverse human rights impacts are not occurring among the program population. This is particularly relevant in high risk markets / regions / crops in which a verification/certification to a credible industry standard is not part of the program. Please see the Appendix for a list of high-risk markets, determined based on analysis from expert risk consultancy, Verisk Maplecroft.

For example, programs may wish to deploy a periodic mobile worker survey that allows for anonymous reporting of worker perceptions and experiences. The PepsiCo Sustainable Agriculture team has experience using direct worker reporting tools from [&Wider](#) and [Ulula](#) and can help facilitate using either of these tools.

ADDITIONAL METHODOLOGICAL CRITERIA

Data Sources - Ideally, the reported outcome data should come from direct assessment or observation of producers, workers or the other targeted population (women, youth, etc.). Data is often more reliable when gathered by an entity that does not have a direct stake in the outcome and when that entity has reasonable capacity to target and collect data, although internal project monitoring is also appropriate. Sources can include supply chain reports, compliance assessments, and program reporting from local technicians. Secondary data (e.g., from public sources), can be a reasonable substitute in some cases or to add additional understanding but should align with the same metrics and come from a credible source to be fairly included. Secondary data sources would need to meet the methodological considerations outlined in this document and should also be recent (i.e., within the last two years) in order to be considered.

Data Collection Frequency - PepsiCo requires annual reporting of livelihood improvements as part of an ongoing effort to track progress of livelihood interventions over time. Specifically, results are requested by the end of Q1 of the calendar year, referencing the previous year's results. Some measures may be taken more frequently, where feasible, to improve management. Note that it is the responsibility of each program or partner to report on any significant additions or reductions in program participation during the life of the project to keep the livelihood count accurate on a year to year basis.

Sampling – It is not necessary to track every producer's progress on the livelihoods metrics if a representative sample is used. It can be as effective and less costly to understand performance of projects and interventions across a population. Appendix 1 offers sampling guidance so that partners can credibly use assessment results to make claims on the full population.

Baseline – Determining a baseline is a vital initial step to allow an assessment or a claim of improvement. Sampling protocols can be used to reduce resources and collect data from a smaller percentage of producers. Where deeper learning is desired, a counterfactual or control group can also be established to help understand a new intervention or the impacts and the ROI of an investment.

Disaggregation – While not required for all programs, best practice is to report on the indicators disaggregating the results by relevant factors such as gender, youth, poverty status, smallholder status and/or ethnicity. For those programs focused on gender specifically, gender disaggregated data on the select metrics is expected. This allows another layer of depth to reporting that provides insights into how those groups are experiencing livelihood improvements.

Improving the data – Ensuring the quality of the data is a critical function and can be done with an appropriately and relatively simple mix of validation and verification tools that are not difficult to engage.

Where surveys are deployed, those that rely on multiple choice and scaled questions enhance data quality (as compared to open-ended questions). When survey software is used (instead of paper surveys), this has the advantage of enabling skip logic and built-in validations which reduce input errors and increase the accuracy of results while substantially reducing the time required for data cleaning. Surveyor training is also an important part of the data quality process—when surveyors are trained on the question content and approaches, data quality improves dramatically.

PepsiCo reserves the right to deploy verification protocols with any claims or data reported as it deems appropriate (e.g., based on the potential risk of claims within certain regions or supply chains). PepsiCo can ask for further evidence of claims made (by virtually requesting farmer lists or training attendance records, etc.) or can utilize more formal audit or verification protocols if desired.

Attribution & Correcting for Double Counting –

In some landscapes/supply sheds, PepsiCo may support multiple programs with livelihood improvement objectives, which has the potential to result in the unintended double counting of beneficiaries. To alleviate that risk and maintain the goal of transparent reporting, PepsiCo has included a field in the **LIFE Reporting Template** to learn whether projects or investments are part of a shared multi-investor or landscape initiative and the details of that. Where beneficiaries cannot be disaggregated by supply chain, each investor can independently report on the full beneficiary reach separately for their own reporting to PepsiCo provided they also document the details of the shared investment in their reporting. PepsiCo will then report on the full beneficiary reach across multi-investor programs without double counting beneficiaries.

If there are other potential situations where duplicate beneficiary counting may occur, PepsiCo and COSA can assist with analytical tools to adjust for the potential of double counting (i.e., reduction rates). If there is any concern for double counting risk, please reach out to PepsiCo and/or COSA for additional assistance.

Counting Suppliers Outside of the Immediate Supply Chain –

PepsiCo's investments, in some cases, extend beyond immediate supply chain partners, instead focusing on either: 1) a particular region or landscape *in proximity* to where PepsiCo sources and/or 2) where PepsiCo may be planning to source from in the *future* (i.e., in an effort to build market capacity). It is appropriate to count livelihoods improved as a result of these investments as long as reporting is transparent regarding whether the beneficiaries are part of the current supply chain or are in a regional supply shed or potential future supply chain (if in a future supply chain, the partner will have to demonstrate intentionality of future sourcing). PepsiCo will report on these metrics separately. PepsiCo will not include investments that target beneficiaries who are outside or not affiliated with the current or potential future supply chain. The **LIFE Reporting Template** asks for these details.

Additionally, for those suppliers who are engaging with producers that are experiencing livelihood improvements as the result of participating in other projects not directly under investment by PepsiCo or its partners, those producers should not be counted towards the livelihood goal as the livelihoods goal is tied to PepsiCo direct investment or shared investment only.

CERTIFIED SUPPLY:

Requirements for Livelihood Improvement Claims

Select certifications or standards can be used to demonstrate progress toward improved livelihoods provided certain conditions are met. COSA has conducted analysis of a number of sustainability standards recognized by PepsiCo (e.g. RSPO, Bonsucro, RTRS) that can be considered at the “**Basic**” level as engaged.

However, **in order to count towards the livelihoods improvement goal**, the certification or the certified farmers must demonstrate credible evidence of improvement on one or more of the Primary indicators listed above at the “**Advanced**” level, using the same methodological requirements outlined in this document for any other program or partner. As an alternative, certified producers can also count towards the “Advanced” level if rigorous, third-party studies are available that measure the livelihood impacts of the certification as consistently positive (which also must meet the methodological requirements outlined in this document).

PepsiCo’s approach of requiring certifications to measure the Advanced metrics on Primary indicators to count towards the livelihood improvement goal reflects the fact that there tends to be mixed evidence on the effects of certifications on producer livelihoods, with some variance amongst the individual certifications as well. Therefore, certifications will have to provide the same evidence as other programs and projects to have their producers count towards the livelihood improvement goal.

APPENDIX 1: SAMPLING GUIDELINES

The sampling methodology proposed for counting improved livelihoods requires a robust sampling strategy designed to track actual amount of improvement (e.g., yields, income, etc.) and therefore requires a larger sample size to have a reasonable level of accuracy.

Below are instructions for deploying the sampling strategy recommended by COSA for the Livelihoods Implementation Framework for Engagement. It is based on a simple random sample of a mean for a population.⁵ The guidelines are as follows:

1. Determine the size of the target population: Identify how many farmers are targeted by the intervention.
2. Sample size recommendations: As a general recommendation, in order to be statistically valid, we suggest that the sample size fall between the 5%-10% margin of error below (given the considerations above):

Population	Sample size (for finite population)	
	Margin of error	
	5%	10%
100	87	61
200	152	88
300	202	102
400	243	112
500	277	118
1000	382	134
2000	471	143
5000	549	150
10000	580	152
15000	592	153

*Note: 90% confidence level, COSA can share the assumptions used to create this model

3. To refine the sample size number within the ranges presented above, consider:
 - a. The size of the project (number of farmers targeted)
 - b. Relative homogeneity of the farmers
 - c. Desired scope and budget for gathering data on farmers
 - d. Geographical dispersion of farmers and logistics capabilities to reach them

⁵ Stratified and clustered sampling plans are also accepted, provided that details of the sampling methodology are shared with PepsiCo.

- e. Number of surveyors
 - f. Timing and window of opportunity (seasonality, timeframes)
4. Determine the sampling ratio: The ratio of your sample size to the size of the total target population tells you how many farmers you will be surveying. For example, if the target population is 3,000 farmers and the sample size is determined to be 500, you would need to survey 1 out of 6 farmers ($500/3,000 = 1/6$). You would then randomly select 1 out of every 6 listed target farmers to survey—this will help ensure a more representative sample and will minimize bias.

A good sampling plan generates a representative sample and minimizes bias so that the results can be applied to the rest of the target group as a whole. Below are different surveying options that can be followed if you are not doing a census. The choices will depend on the information already available and the desired level of rigor in the results.

1. **Simple Random Sample.** Requires you to have a list of all targeted farmers or other beneficiaries in your project and their locations in order to use this approach. (It is worth noting that surveying on individual farms is considerably more accurate than surveying in group settings, but the tradeoff is that it is also more costly and time consuming).
 - a. Randomly select the farmers or beneficiaries to survey (according to the sample size) from the list of targeted farmers.
 - b. Surveyors go to the random list of farms or households to conduct the survey
2. **Systematic Random Sample.** If you do NOT have a list of targeted farmers or you have a list without farm locations, you will need to use this method. You may also choose this method because it is more cost effective.
 - a. Sampling is done in collective settings where project technicians or implementers interact with target farmers or household members (e.g., collection points, training, demonstration plots)
 - b. Use the sampling ratio above to determine which producers at the collective location will be surveyed. For example, if your ratio is 1 out of 6 producers, you would survey every 6th producer that comes to training, for example.

Seven simple practices to improve your data

1. Accuracy of farmer recall (memory) diminishes significantly beyond one year, so try only to ask about the last production cycle.
2. If there is only one visit to interview farmers, then it is optimal to visit farmers soon after the main harvest period.
3. To compare data (year to year) you need to gather it at approximately the same times of year or throughout the year.
4. Note that different questions or indicators may refer to different people in the household (women, youth, etc.). Try to ensure that the appropriate people are asked about the indicators relevant to them.

5. Quality checks in the first week of a surveyor's work can also make a big difference; make sure surveyors stick to the questions as written.
6. Be consistent in where you survey—you might get different answers at collective settings than on individual farms. Remember that individual farm sites are optimal for collecting data.
7. Make sure surveyors understand why you are asking the specific survey questions and you will get better quality and more motivation (you might even share how the data will be used).

Comparison in Sampling Methodology from PepsiCo Sustainable Farming Program (SFP)

The sampling methodology proposed for counting improved livelihoods requires a more robust sampling strategy than what is deployed in the PepsiCo SFP protocol. While the SFP protocol is based on adherence to established criteria (e.g., “whether the basic productivity, efficiency and stability of the current operation has been ensured”), the Livelihoods Improvement indicators are designed to track the actual amount of improvement (e.g., yields, income, etc.) and therefore require a larger sample size to have a reasonable level of accuracy.

For reference, the below (Figure 4) is the PepsiCo SFP sample size table:

Figure 4: SFP Sample Size Table

NUMBER OF GROWERS IN AN FMG	0-30	31-200	201-300	301-400	401-500	501-1K	1K-4K	4K-30K	>30K
Sample Size for FMG assessment	Every grower	30	33	34	35	37	39	40	41

APPENDIX 2: HIGH RISK MARKETS

Based on analysis by expert risk consultancy Verisk Maplecroft, countries with high environmental, social, governance (ESG) risk are:

LATAM

- Brazil
- Peru
- Ecuador
- Guatemala
- Nicaragua
- Honduras
- Dominican Republic
- Cuba

APAC

- China
- Vietnam
- Laos
- Cambodia
- Philippines
- Indonesia
- Papua New Guinea

AMESA

- India
- Pakistan
- Myanmar
- Afghanistan
- Iran
- Egypt
- Ghana
- Cote d'Ivoire
- Burkina Faso
- Tanzania
- Madagascar