

PepsiCo’s Regenerative Agriculture Scheme Rules

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1. Introduction

1.1 Purpose of the Scheme Rules

The scheme rules provide an implementation framework for the PepsiCo Regenerative Agriculture (Regen Ag) goal. This framework is intended to provide executional guidelines that promote consistency across PepsiCo’s global deployment of the Regen Ag goal, as well as clearly articulate what is meant by any claims PepsiCo may make about regenerative acres or materials. As the Regen Ag goal is a global goal, the scheme rules were designed with enough flexibility to accommodate the differing circumstances found within PepsiCo’s supply chain.

PepsiCo reserves the right to modify this document, which will be reviewed annually.

1.2 Setting the Stage and Defining Regenerative Agriculture

As a leading beverage and convenient foods company, agriculture is core to PepsiCo’s business. Our products depend on a safe, high-quality, and affordable supply of agricultural raw materials to meet the demands of our business as well as the expectations of our consumers, customers, and other stakeholders. Agriculture sits at the nexus of three critical agendas for PepsiCo: Business Impact, World Relevance and Corporate Reputation. Given the importance of agricultural materials to PepsiCo, we are committed to championing the best thinking, practices, and technology to support sustainable and regenerative agriculture within our global agricultural supply chain.



Figure 1: Agriculture sits at the nexus of three critical agendas: Business Impact, World Relevance and Corporate Reputation

Agriculture is the foundation of the food system and the root of PepsiCo’s business. To make our beverages and convenient foods, we use more than 30 agricultural crops and ingredients from approximately 60 countries. Agriculture contributes to many of the urgent environmental and social challenges we face around the world but can also be a solution.

Conventional agriculture practices have contributed to significant soil loss and degradation over the last century. According to the UN, more than half of fertile topsoil is now degraded, reducing its potential to grow food and sequester carbon, increasing the vulnerability of our lands to extreme weather events, and impacting water quality and biodiversity¹. As the impacts of these practices have become clear, a movement has grown to shift to regenerative practices.

Regen Ag is a system of farming principles and practices that seeks to create a resilient farming system by rehabilitating and enhancing the farming ecosystem. It does this by placing a heavy premium on soil health with attention also paid to greenhouse gas emissions (GHGs), water management, agricultural inputs, biodiversity and community. It is a method of farming that aims to improve the resources it uses, rather than destroying or depleting them. At its heart, it is about ensuring financial profitability, community resilience, and ecological viability to enable farmers to keep farming into the future.

Regenerative farming practices are not a new concept by any means, and they are in practice all over the world, from large-scale commercial farming systems to smallholder farms. The core goal of regenerative agriculture is to improve the resilience of the agricultural system to adapt to and flourish as the world and the climate changes.

While this document outlines the core requirements of a piece of land to be considered delivering regenerative impacts for PepsiCo, the objective of our goals and the core of PepsiCo activation is one

¹ IPCC report: <https://www.ipcc.ch/>

of continuous improvement. Once an acre is delivering impact, it qualifies as able to be reported as “regenerative”, but the classification is a waypoint, not an endpoint in the journey. PepsiCo will strive to partner with farmers to continually increase the magnitude of positive impacts and to ensure that we are increasing the resilience of communities, farmers, ecosystems, and agricultural lands over time. In this spirit, PepsiCo recognizes and supports farmers who have been regenerative prior to PepsiCo engagement and the critical role they play in helping to support other farmers in their transition, to help normalize Regen Ag, and to provide evidence of what best practices are most applicable in their regions and farming systems.

While the specific [definition](#) differs from organization to organization, generally Regen Ag supports several **beneficial outcomes** for farmers, society, and companies that depend on agricultural supply chains. Our approach to regenerative agriculture will aim to generate positive impact across these five dimensions below:

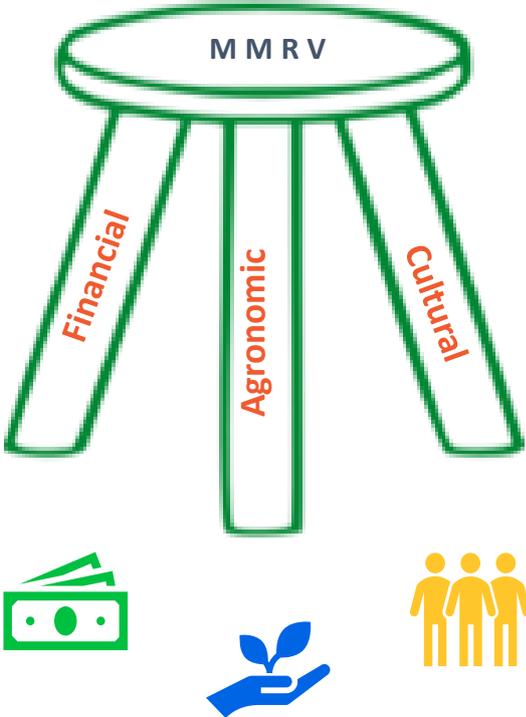
- **Soil Health:** Build the health and fertility of the soil to support a healthy and productive ecosystem above and below ground and increase farm resilience.
- **Climate Mitigation and Adaptation:** Increase resilience to climate change impacts, sequester carbon, and reduce emissions in support of our [greenhouse gas targets](#).
- **Watershed Health:** Improve watershed health through reducing nutrient runoff and the quantity of water needed for farms and communities to thrive.
- **Biodiversity:** Protect and improve biodiversity across our agricultural landscapes - examples include forest conservation and restoration, bees and other pollinators for crops as well as improving the soil microbiome.
- **Livelihoods & Women’s Empowerment:** Improve livelihoods in accordance with PepsiCo’s Livelihoods Improvement Framework for Engagement (LIFE) with a focus on the most vulnerable farming communities linked to our value chains: smallholder farmers, farm workers, women in farming communities, migrant and temporary farm workers, and medium to large scale farmers struggling with economic viability, ensuring their access to training, decision making and resources to implement sustainable agricultural practices and achieve improved farm performance.

We believe that spreading positive farming practices across our agricultural footprint will help us to become a faster, stronger, and better company. A healthier planet, with productive soils and healthy watersheds, thriving farming communities, and dignity in farming as a profession helps ensure that PepsiCo can continue to provide beverages and convenient foods that make our customers smile and support our future growth. Our work in regenerative agriculture can also help contribute to reductions in greenhouse gas emissions in support of our science-based climate target and net zero ambition.

We also believe that HOW we go about driving regenerative outcomes matters, and we are dedicated to partnering with farmers and with organizations that share our approach to shared value with farmers and farm operators at their core. As PepsiCo activates our Regen Ag journey, we approach farmers with what we think of as our “three-legged stool” of Regen Ag activation. Without any of the legs, the activation is much more likely to fail.

The first leg is **expert agronomic support** because we recognize that implementing Regen Ag practices can be challenging and require adjustments to operations that may harm yields and

endanger farm operations if not done well with support from agronomists who understand the ways in which a practice change requires adjustments across multiple parts of a farming operation. The second leg is **financial support** because we recognize that some Regen Ag practices have an upfront cost or a transition period before becoming profitable. The third leg is **cultural support** because we know that farmers know their context best and that the ability of farmers to learn from each other and be supported by their community in the journey of trying new practices is critical. The seat of the stool is a **strong data MMRV** (measurement, monitoring, reporting, and verification) in order that farmers and those assisting farmers in their Regen Ag journey are able to report accurately and credibly to PepsiCo such that we can feel confident in the reported impacts. We support data management that is both credible and has a light touch for farmer time with strong confidentiality such that farmers are always the owners of and arbiters of sharing their data.



PepsiCo’s Regen Ag commitment applies to PepsiCo’s Key Ingredients, including **potatoes, corn, oats, wheat, cornmeal, rice, vegetable oils, cane sugar, beet sugar, HFCS, banana, raw milk feed, dairy seasoning and cocoa/chocolate**, within our purchasing control.

PepsiCo considers an acre as delivering regenerative impact when the adoption of regenerative agriculture practices results in quantified improvements in at least two of the environmental outcome areas, with a preference for GHG to be one impact area. Qualifying acres can be

- Directly traceable to providing PepsiCo products; or
- Within the supply region of our suppliers’ primary processing point that could be within the PepsiCo supply shed, herein referred to as “supply shed”.

Note that PepsiCo does not require fully traceability or segregation to the farmer or farm land for a Regen Ag or climate claim, nor do we accept mass balance that is not physically linked to our operations. Activities and impact within the supply shed for which PepsiCo has purchasing control of these ingredients for our company-owned operations will be in scope for this goal.

To further detail the types of acres that can count towards the PepsiCo Regen Ag goal, our emerging nature and people agenda, and our climate goals, please see below. Acres can fall into the following categories, with different levels of validation or verification requirements:

Table 1

	Regen Ag Acre	Eligible for climate reduction targets	Eligible for climate removal target	Minimum Level of validation/ verification required*
Impacts measured on production area producing ingredients PepsiCo uses in our supply shed	X	X (if not claimed by any other private entity)	X (if not claimed by any other private entity)	Self assessment or 2 nd party assessment on field, data validation
Impact measured on rotational areas of farms on land that supplies ingredients in other years and within our supply shed (rotational acre) ²	X		X (if not claimed by any other private entity)	Self assessment or 2 nd party assessment on field, data validation
Impact measured on adjacent to production area (e.g., riparian zones, edge of field) of farms producing PepsiCo ingredients in our supply shed	X		X (if not claimed by any other private entity)	Self or second party reported, potential for 3 rd party data validation or verification
Landscape restoration ³ (same region as our product and our product contributed to degradation)		X	X (if not claimed by any other private entity)	3 rd party verification

*See Section 1.4 for definitions of self-assessment, verification, validation, etc. See Section 1.7 for baseline setting and sampling guidance.

² A rotational acre is defined as: an acre pertaining to a farm operator or landowner who has acres of crop assignable to PepsiCo inventory (a crop PepsiCo buys in a PepsiCo supply shed, see above for definition) that is delivering regenerative impacts, and then after they are reporting on one PepsiCo crop, they can add in any acre they self-certify is in a rotation with that crop and is delivering measurable impact in at least two of the impact areas

³ To align with the Consumer Goods Forum Forest Positive Coalition definition when final

Measurable improvements in agriculture take time. To communicate progress internally towards the positive agriculture goals, the concept of an *engaged acre* was created. An acre is engaged if there are at least two regen ag practices deployed but no measured / modelled improvement yet.

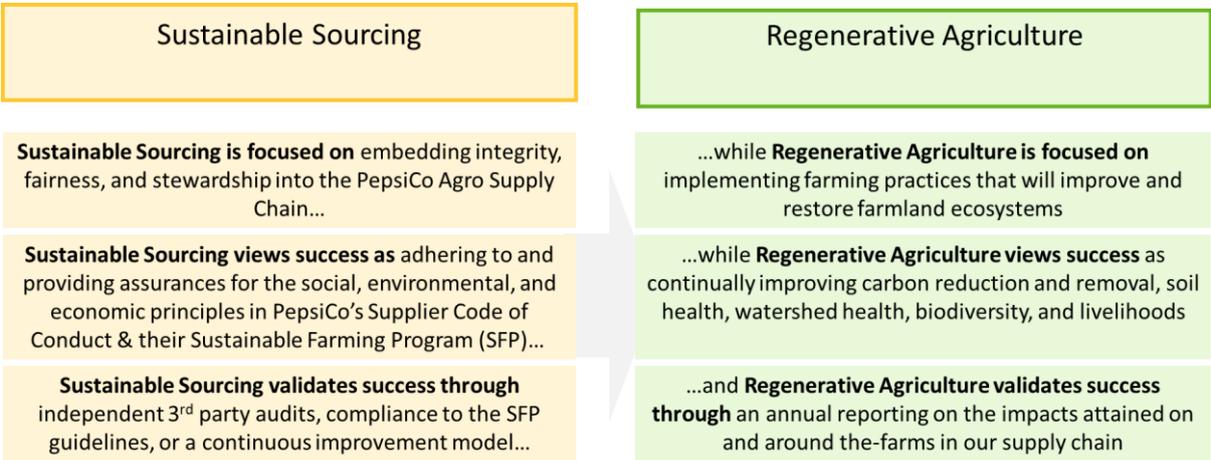
Critical points:

- Engaged acres will not be reported externally
- It is not required for an acre to first be engaged to then become impacted.

PepsiCo has developed and published a [regen ag practice bank](#) that defines common Regen Ag practices and maps them against the outcome areas. It does not represent a comprehensive list, but a starting point for suggestion. We have also assessed certifications that may meet the engaged definition and that Assessment can be found here.

1.3 Regenerative Agriculture and Sustainable Agriculture

For PepsiCo, **sustainable sourcing** describes farming practices that strive to do no harm and ensure that people and the environment are protected, and that good economic practices are employed by the farming operation. For PepsiCo, **Regen Ag** is a system of farming principles and practices that seeks to improve human, environmental and economic conditions. Regen Ag creates a resilient farming system by rehabilitating and enhancing the farming ecosystem. It does this by placing a heavy premium on soil health with attention also paid to greenhouse gas emissions, water management, agricultural inputs, biodiversity, and community. It is a method of farming that improves the resources it uses, rather than destroying or depleting them.



1.4 Regen Ag as a Self-Assessment

Regen Ag attainment is not intended to be a third-party certification or a program for which every farmer must undergo a verification audit on every acre. Rather, Regen Ag is designed to be a continuous improvement process that is entered into by each farmer or acre in the way that best fits their farming circumstances. Please see Table 1 for more specificity of the type of validation or verification that is required depending on where on or around the farm impact is being attained.

The assessment of impact on a Regen Ag acre is done through use of qualified tools (See Section 1.6) either directly by the farmer (self-assessment) or by a second party assessor. Engaged acres do not need to use any particular tool to note practice uptake for internal progress metrics. PepsiCo views the self-assessment as the **farmer's** interpretation and representation of the regenerative agricultural practices and technologies currently implemented on the farm which have led to measurable positive impact, regardless of whether it was completed by the farmer or with assistance.

A Regen Ag self-assessment is intended to represent particular acres related to the uptake of Regen Ag practices. Any acre that is reporting impact should be represented by either a direct reporting or as part of a sampling of impact (see Section 1.7).

Prior to PepsiCo recognizing the Regen Ag results as final, Data Quality Assurance should be carried out on the data. Quality Assurance simply confirms the self-assessments have been completed in full and according to instructions. It should be performed for each group of data. Generally, this analysis should be done by the receiving entity – which may include, but is not limited to, an implementation partner or a supplier to PepsiCo or PepsiCo.

Defining terms:

- **Self Assessments:** are those in which the farmer/grower evaluates their own Regen Ag practices within a specified timeframe and geographical area and completes their own Regen Ag Self-Assessment Questionnaire. These highly capable growers need to have a high understanding of the concepts and practices used within Regen Ag. If required, farmers can obtain support for questions they have about the Regen Ag goal by either a qualified second party, a supplier to PepsiCo or PepsiCo.
- **Second Party Assessments:** involve the review of Regen Ag practices by someone other than the farmer/grower to complete a self-assessment on behalf of the grower, and is the recommended approach when farmers require support with completing a self-assessment. The second party assessor is able to interview the grower in such a way that it is clear to the grower what is meant by all the concepts and practices in the assessment. The grower responses are then used to complete the assessment, and the data is recognized by PepsiCo as a self-assessment (i.e., the grower's representation of the sustainability practices on the farm). In cases where second party assessments are required, PepsiCo may serve as the second party assessor when we have local capabilities and resources available and a direct relationship with the growers. When capable resources are not available or PepsiCo does not have a direct relationship with the growers, PepsiCo may hire or work with a qualified second party or work through a supplier. The second party assessor's role is to interview the farmers to support them with completing the assessment and to provide the assessment results to PepsiCo. Often the second party assessor may provide an analysis of the results that can be used to drive improvement actions. The second party assessor is responsible for:
 - Interviewing the farmer based on the assessment content
 - Documenting the assessment results
 - Taking note of valuable information that may aid acreage inclusion for the Regen Ag goal progress reporting
- **Data Validation:** involves cross-referencing aggregated results against what local experts and third-party risk assessments indicate. Discrepancies between self-assessment results and known (or strongly perceived) risks will be addressed through farmer follow-up. The Data Validation process is performed by PepsiCo to ensure accurate reporting of Regen Ag acres

and may also be used to obtain additional information from the farmers that will shed light on the root causes for their sustainability opportunities, aiding in the development of more targeted Regen Ag practices.

- Third Party Verification: is a recognized review conducted by an independent party to determine reported information accurately represents practices and activities in accordance with documented internal guidelines and applicable established external standards.

1.5 Regen Ag Management / Practice Uptake Groups

As Regen Ag is about change on the ground, it is logical to create groupings of farmers who are implementing practices that lead to improvements in the metrics. These groupings can be logically created based on geography, crop, practice uptake, soil type or other. For example, a group of farmers that have irrigation may all be working towards more efficient irrigation together and choose a complementary set of actions that also contribute to soil, carbon or biodiversity. Or a group of farmers may have similar soils in a geography and cover multiple PepsiCo crops and form a logical group for action.

Each group will need to follow the relevant sampling methodology for reporting. Acres associated with GHG reductions reporting may not exceed acreage planted in the crop being purchased by PepsiCo or its suppliers. Regen Ag reporting may include all acres in the rotation for which two impacts are reported as per Table 1. Other impacts outside of GHG reduction may be claimed for rotational, edge of field, and landscape acres as per Table 1 and may be updated following the release of final Forest Land and Agriculture and Greenhouse Gas Protocol guidance.

The initial year an acre will be counted as delivering regenerative ag impact is when at least two relevant impacts are measured vs. baseline. Over time, the preference is for improvement to be counted on a three-year rolling average vs. baseline. Once a project has been in place for three years or more after the baseline has been established, a three-year rolling average of improvement vs. baseline should be utilized to determine improvement against outcomes. See Section 1.7 for more on baselines.

Many farms do not grow 100% of their acres for PepsiCo and, in fact, rotate with other crops. As per Table 1, during these rotational years, most farmers will grow a crop for PepsiCo only one or two of those years depending on the crop. In accordance with governing reporting requirements, these “rotational” acres can be counted towards the acres goal once a regenerative agriculture impact has been attained - even if the land is not currently used to grow crops for PepsiCo. A rotational acre is defined as an acre pertaining to a farm operator or landowner who has acres of crop assignable to PepsiCo inventory (a crop PepsiCo buys in a PepsiCo supply shed) that is delivering regenerative impacts; after they are reporting on one PepsiCo crop, they can add in any acre they self-certify is in a rotation with that crop and is delivering measurable impact in at least two of the impact areas.

1.6 Tools for measuring impacts

Pepsico has [defined a set of tools, models, and methods](#) that are applicable for measuring outcomes. These tools have been evaluated and approved based on their robustness, broad applicability, and credibility. These tools and methods should be used in a management/practice uptake group based on appropriate sampling guidance (Section 1.7). This list is reviewed periodically, and tools may be

added or removed. Additionally, suppliers, farmers and implementers may submit a request to have a new tool evaluated.

1.7 Baselines and sampling protocol

This guidance has been developed to enable PepsiCo partners and suppliers to report environmental metrics to PepsiCo. The guidance may be updated as science-based industry norms and guidance become widely available.

This guidance can be used in the absence of either measurement of impact on each farm in a reporting group, or a more rigorous standard sampling methodology required by a particular tool or program leveraged to measure on-farm greenhouse gas emissions. For example, if a program is measuring GHGs as one of their impacts and leverages the ISCC+ greenhouse gas module, the sampling methodology defined by that protocol should be followed if it exceeds the protocol below. Similarly, if every farm in an activation of Regen Ag is tracking performance, those may be reported as well. If not all farmers are reporting impact and no sampling methodology is required/provided by the tool or program used, please follow the guidance below.

The guidance below is only relevant to projects promoting a consistent on-farm intervention across a homogeneous farmer population (for example, programs that promote adoption of a specific practice or set of practices across the program population). If farmers in a program population select a widely varied set of practices, are implementing practices in conditions that would lead to widely varied outcomes, or if PepsiCo/a supplier wants to determine the individual progress of each farm, the actions and impacts on each farm should be measured/modelled.

- a. The farmer population to be sampled should be grouped to create homogeneity among the sample population, accounting for elements such as similar farm size, soil type, geographic location, and baseline practices.
- b. Intervention groups can either sample a minimum of the square root of the total number of participating farmers, or follow sample size guidance established by the Sustainable Agriculture Initiative Platform:

Number of participating farmers	0-30	31-200	201-300	301-400	401-500	501-1,000	1,001-4,000	4,001-30,000	30,000+
GHG measurement sample size	Every farmer	30	33	34	35	37	39	40	41

- c. In the first year of measurement, farmers selected for sampling must represent a random selection of participating farmers.
- d. Preference for the same or similar farms should provide data annually (best efforts, as some attrition is expected) to enable year on year comparison.
- e. A single **baseline** must be established for each grower group, and the methodology for establishing the baseline must be documented and sampling follow the guidance above. The baseline should be created through project-based modelling (see f. below on project-based modelling), or if it is determined that project-based modelling using control fields will not be representative of historical scenario for the location (1) historical data from the sample group can be used to generate a baseline from the same

- model used for intervention data or (2) an industry specific figure may be used if developed by a credible source for that specific region and crop.
- f. If the **baseline** will be calculated through project-based modelling, data must be collected on at least one control field that is representative of "conventional" practices among each of the selected farmers in the growing region. Baseline data must be collected for the first three years of reporting. Baseline can also be constructed based on three years of historical data if available and accurate. Reconstruction of a baseline based on modelled impact of practices implemented is allowed and must be thoroughly documented on what actual data was used and what assumptions were used. When assumptions are made, they must be on the conservative side and not try to maximize reductions over time. This means that if continuous impacts are being delivered even though the practices were implemented before 2015 (our GHG baseline year), those count towards our goals. Example - a farmer could have implemented soil health practices in 2010 and still be getting additional improvements in soil health in 2023. If modelled or measured impact shows continuous improvement, those acres count as regenerative.
- g. Modelled regen ag outcomes can be achieved through implementation of regenerative practices and impact must be calculated using information from at least one representative field per farm selected for sampling. The land area included in the sample must represent 10% of the acres under regenerative practices and management on the farm. For example, if a 500-acre farm is selected for sampling and it implements cover crops on 100 acres, data from at least one field of at least 10 acres planted in cover crops should be used to complete the tools to measure each of the outcome areas.

Note on Accumulation and Time Validity: for purposes of accounting for the number of regenerative acres, each year stands alone. Any acres from previous years not maintained are lost and cannot be counted if they are not reporting regen outcomes in the current year. For acres that continue to report year over year, further guidance is forthcoming on the ability to account for the multi-year accumulation of soil carbon. It is strongly encouraged to keep acres in a Regen Ag program over time as the ability to count "rotational" acres allows a Regen Ag activation to incentivize long-term actions on each parcel of land involved.

1.8 Certifications and their relationship with Regen "engaged" acres

PepsiCo recognizes several certifications that meet the "**Engaged**" acres requirement, and some additional certifications that may be recognized based on certain conditions. Additional impact measurement is needed to recognize acres under any certification as "**Regenerative or Impacted.**"

Ongoing Certification Analysis:

- PepsiCo's sustainable agriculture team is continuing to evaluate certifications.
- New certifications may be added to the list, and current versions will continue to be evaluated to ensure the most up to date certification is recognized.
- Work with your PepsiCo buyers to understand which certifications and versions are currently recognized.
- Understand which regenerative agriculture practices are promoted within the certification standard and evaluate the extent to which these practices address the relevant risks and opportunities for the grower group.

The following certifications may meet the “Engaged” acres requirement, with full or conditional recognition:

FULL RECOGNITION:

Version 4.0

CONDITIONAL RECOGNITION:

3.0 – Silver
or Bronze

1.9 Conclusion

PepsiCo’s Regen Ag Scheme Rules provide a backbone for activation and accounting for the impact happening to improve the resilience of the land and people in our supply chains. In activating these scheme rules, we strive to partner with farmers and other supply chain actors to support the transition for farmers and report credibly against the improvements that happen over time. These scheme rules will be reviewed and updated annually.