



**Nestlé** Good food, Good life

# Regenerative Agriculture AT NESTLÉ

Measuring progress and performance

January 2024



# NESTLÉ'S AMBITION: ADVANCING REGENERATIVE FOOD SYSTEMS AT SCALE

We deliver on this ambition by deploying regenerative agriculture at scale and transparently measure our progress with a robust methodology and clear indicators.



Good food depends on diverse and quality ingredients, so protecting the ecosystems where they grow is vital to our long-term success.

As part of the [Nestlé Net Zero Roadmap](#), we made the commitment to achieve net zero greenhouse gas emissions by 2050, on emissions emitted directly (Scope 1) and indirectly (Scope 2), and all other indirect emissions (Scope 3). As two thirds of our gas emissions come from raw materials, addressing them is one of our main focus areas.

We believe we can address this challenge by transforming the way we source the ingredients we use in our products and by scaling up regenerative agriculture.

Regenerative agriculture is an approach to farming that aims to conserve and restore farmland and its ecosystem, to improve soil health and soil fertility. [The Nestlé Agriculture Framework](#), released in September 2022, describes Nestlé's corporate vision for agriculture as a central building block for a regenerative food system.

Restoring soil health helps draw down and capture increased levels of carbon in soils and plant biomass, thus contributing to reduce and remove carbon emissions from the atmosphere. The techniques associated with regenerative agriculture also improve the resilience of farmland to climate change and can contribute to improved farmers' livelihoods.

That is why, in line with the key milestones of our Net Zero Roadmap, we committed to source 20% of our key ingredients from regenerative agriculture methods by 2025, and 50% by 2030.

## WHAT ARE THE KEY INGREDIENTS IN SCOPE?

Nestlé's priority ingredients in scope for this performance measurement include:



Fresh milk and dairy derivatives



Green coffee



Cereals and grains



Vegetables



Cocoa



Palm oil



Sugars



Meat, poultry and eggs  
(excluding by-products)



Fish and seafoods  
(excluding by-products)

### Explaining our performance indicator

We are committed to report transparently on our progress in our net zero journey and we value the importance of sound and reliable measurement methods. Our key performance indicator (KPI) consists in reporting **% of key ingredients produced from regenerative agriculture methods** and is audited by a credible third-party audit firm.

Nestlé will include in its performance measurement the key ingredients sourced directly from farmers or groups of farmers (direct sourcing) and from third-party suppliers (indirect sourcing).

### FOR OUR 2023 REPORTING, WE FOCUS ON:

- Fresh milk and dairy derivatives
- Green coffee (excluding blended green coffee and Blue Bottle)
- Cocoa
- Cereals and grains
- Soy
- Vegetables

## What do we mean by regenerative agriculture methods?

Building on long-lasting experience in sustainable agriculture, Nestlé is working and investing with its partners, including the company's network of more than 500,000 farmers in direct sourcing, to advance regenerative farming practices at the heart of the food system, guided by agroecological principles and practices outlined in [The Nestlé Agriculture Framework](#).

So as to assess the maturity level of regenerative agriculture implementation, we created Farm Assessment Tools (FAT). The tools consist of a set of regenerative agriculture practices and outcomes related to soil health, biodiversity, water, livestock and farm management. To meet each crop specificities, the approach has been tailored with crop-specific tools.

Each tool allows us to classify the maturity level of regenerative practices implementation in the farms assessed, as:

- **Engaged** in transition toward regenerative agriculture (Level 1)
- **Advanced** (Level 2)
- **Leading** (Level 3)

This reflects the progressive journey toward regeneration. Engaged farmers (Level 1) are at an entry point in the regenerative agriculture journey and this maturity level constitutes a transition toward actual regenerative agriculture. The farms not falling in these categories are considered as practicing conventional agriculture.



AS OF 2022,

the volumes of ingredients from farmers at least qualifying for Level 1 – Engaged will be taken into account for the calculation of our global KPI “ % of key ingredients produced from regenerative agriculture methods.” The majority of volumes currently accounted within the KPI are in farms meeting Level 1 – Engaged status. This approach is in line with our strategic objective to embark farmers and suppliers on this journey.

## Going forward

We keep adjusting our approach to the latest learnings and scientific developments. Hence, the implementation and reporting of the achievements for the various key ingredients will be staggered until 2025. This means that the content of our KPI will evolve toward more comprehensiveness as we increase the coverage of our key ingredients in scope and develop relevant FAT. All changes and updates will be reflected in future iterations of this document.

The following pages provide details about the corresponding criteria for each of the maturity levels according to our FAT, as well as the regenerative agriculture and impact measurement models for the in-scope ingredients.



# ANNEX 1

## FARM ASSESSMENT TOOL

Maturity levels classification



Farm assessments are conducted based on a sampling strategy, elaborated to achieve statistical representation per product category at global level. In addition to monitoring achieved maturity levels, the initial baseline assessment allows us in the first year to understand better the specific gaps and opportunities related to a given crop/region, and to elaborate meaningful programs, adapted to local needs.

Depending on local conditions, such as soil type, climate, production system (e.g. smallholder farmers) and regulatory framework, some requirements can be subject to specific considerations. This has to be approved by the category leader at Nestlé's Corporate Sustainable Agriculture department. Specific Nestlé FAT are under elaboration for crops with specific farming practices.

The FAT for annual crops can be used for cereals and grains (excluding wetland rice), oilseed crops, sugar beet and vegetables as of 2023 reporting.

For meat, poultry and eggs (excluding by-products), fish and seafoods (excluding by-products), which are part of Nestlé's key ingredients, specific FAT are being developed and aim to be based on the models on the following pages. They will be included in future versions of this document.

# ANNEX 1 – FARM ASSESSMENT TOOL



## DAIRY

Conditions to achieve regenerative agriculture levels in Nestlé’s FAT

	ENGAGED	ADVANCED	LEADING
<b>Score</b>	Achieves at least 25% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)	Achieves at least 50% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)	Achieves at least 75% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)
<b>Soil tillage</b>	More than 30% of crop land under minimum soil tillage	More than 50% of crop land under minimum soil tillage	More than 70% of crop land under minimum soil tillage
<b>Crop rotation</b>	More than 30% of crop land with 2 different types of crops over 3 years	More than 50% of crop land with 3 different types of crops over 3 years	More than 70% of crop land with 4 different types of crops over 3 years
<b>Cover crops</b>		More than 30% of crop land under cover crops	More than 50% of crop land under cover crops
<b>Soil cover</b>	More than 30% of crop land covered by at least 10 months (with crops, cover crops, mulch and/or pasture)	More than 50% of crop land covered by at least 10 months (with crops, cover crops, mulch and/or pasture)	More than 70% of crop land covered by at least 10 months (with crops, cover crops, mulch and/or pasture)
<b>OR</b>			
<b>Multispecies pastures/ grasslands</b>	More than 25% of multispecies pasture land or grassland with 3 different fodder species	More than 50% of multispecies pasture land or grassland with 3 different fodder species	More than 75% of multispecies pasture land or grassland with 3 different fodder species
<b>AND</b>			
<b>Manure application</b>	At least manure application level 2 (back to the fields)	At least manure application level 3 (same as engaged + fertilization plan)	At least manure application level 4 (same as advanced + ammonia losses in place)
<b>Crop residue burning</b>		Crop residues not burned in more than 10% of the fields	same as advanced
<b>Nutrient management</b>		3 out of 4 integrated crop nutrient management principles applied	4 out of 4 integrated crop nutrient management principles applied
<b>Integrated pest management (IPM)</b>		3 out of 5 integrated pest management principles applied	5 out of 5 integrated pest management principles applied

# ANNEX 1 – FARM ASSESSMENT TOOL



## DAIRY Continued

Conditions to achieve regenerative agriculture levels in Nestlé’s FAT

	ENGAGED	ADVANCED	LEADING
<b>Biodiversity habitat</b>		At least 5% of agricultural area under biodiversity habitat OR agroforestry	same as advanced
<b>Precision farming</b>			3 out of 4 types of precision farming technologies used
<b>Soil organic matter</b>			Demonstrated with evidence of proven increase of soil organic matter





## ANNUAL CROPS<sup>1</sup>

Conditions to achieve regenerative agriculture levels in Nestlé’s FAT

	ENGAGED	ADVANCED	LEADING
<b>Score</b>	Achieves at least 25% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)	Achieves at least 50% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)	Achieves at least 75% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)
<b>Soil cover</b>	More than 30% of crop land covered by at least 10 months (with crops, cover crops, mulch and/or pasture)	More than 50% of crop land covered by at least 10 months (with crops, cover crops, mulch and/or pasture)	More than 70% of crop land covered by at least 10 months (with crops, cover crops, mulch and/or pasture)
<b>Crop rotation</b>	More than 30% of crop land with 3 different types of crops over 3 years	More than 50% of crop land with 4 different types of crops over 3 years	More than 70% of crop land with 5 different types of crops over 3 years
<b>Soil tillage</b>		More than 50% of crop land under minimum soil tillage	More than 70% of crop land under minimum soil tillage
<b>Cover crops</b>		More than 30% of crop land under cover crops	More than 50% of crop land under cover crops
<b>Crop residue burning</b>		Crop residues not burned in more than 10% of the fields	Same as advanced
<b>Nutrient management</b>		3 out of 4 integrated crop nutrient management principles applied	4 out of 4 integrated crop nutrient management principles applied
<b>Integrated pest management (IPM)</b>		3 out of 5 integrated pest management principles applied	5 out of 5 integrated pest management principles applied
<b>Biodiversity habitat</b>		At least 5% of agricultural area under biodiversity habitat OR agroforestry	same as advanced
<b>Precision farming</b>			3 out of 4 types of precision farming technologies used
<b>Soil organic matter</b>			Demonstrated with evidence of proven increase of soil organic matter

1. Cereals & Grains, oilseed crops, sugar beet, root crops and vegetables (excluding sugarcane and rice monocrop)

# ANNEX 1 – FARM ASSESSMENT TOOL



## COFFEE

Conditions to achieve regenerative agriculture levels in Nestlé’s FAT

	ENGAGED	ADVANCED	LEADING
<b>Compliance</b>	Sustainably produced (Nestlé Responsible Sourcing Core Requirements)	Sustainably produced (Nestlé Responsible Sourcing Core Requirements)	Sustainably produced (Nestlé Responsible Sourcing Core Requirements)
<b>Score</b>	Achieves at least 25% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)	Achieves at least 50% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)	Achieves at least 75% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)
<b>Training</b>	Participated in training sessions on good agricultural practices	Received training on the concept of regenerative agriculture	Received a comprehensive training package on the concept of regenerative agriculture and its practices
<b>Fertilization management</b>		Application of organic fertilizer or compost or biochar (minimum more than 50% of the field acreage) OR fertilization based on soil analysis (on the basis of crop nutrient requirements)	Fertilization based on soil analyses (on the basis of crop nutrient requirements) AND application of organic fertilizer or compost or biochar (on 100% of the field acreage)
<b>Soil cover</b>		Soil is covered through cover crops, mulching or agroforestry/ intercropping (minimum more than 50% of the field acreage)	Soil is covered through cover crops, mulching or agroforestry/ intercropping (minimum more than 100% of the field acreage)
<b>Herbicide management</b>			No chemical herbicide application (100% of the coffee farm)
<b>Water</b>			Monitoring total water usage at the farm if applicable (irrigation and/or wet processing)

# ANNEX 1 – FARM ASSESSMENT TOOL



## SUGARCANE

Conditions to achieve regenerative agriculture levels in Nestlé’s FAT

	ENGAGED	ADVANCED	LEADING
<b>Score</b>	Achieves at least 25% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)	Achieves at least 50% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)	Achieves at least 75% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)
<b>Farmers training</b>	Participated in training sessions on regenerative agriculture practices	Same as Engaged	Same as Engaged
<b>Rational tillage criteria</b>	3 criteria	4 criteria	5 criteria
<b>Frequency of renovation</b>	Between 3 and 5 years	Between 6 and 10 years	More than 10 years
<b>Use of green manures</b>	Yes	Same as Engaged	Same as Engaged
<b>Harvest residues left in the field</b>		Yes - minimum 25% of farm area	Same as Advanced
<b>Interval of soil analysis</b>	5 years	4 years	Between 1 and 3 years
<b>% of organic fertilizer</b>	0-25%	26-75%	Above 75%
<b>Compliance with 4R Nutrient Stewardship Principles</b>		Yes	Same as Advanced
<b>Cropland without use of synthetic pest/disease control</b>	0% to 25%	26% to 50%	Above 51%
<b>Integrated Pest Management (IPM)</b>		3 to 4 principles	5 principles
<b>For Engaged:</b> 1 to 2 principles			

# ANNEX 1 – FARM ASSESSMENT TOOL



## SUGARCANE Continued

Conditions to achieve regenerative agriculture levels in Nestlé’s FAT

	ENGAGED	ADVANCED	LEADING
<b>% of cultivated area without chemical herbicides</b>	0-25%	26% to 50%	Above 51%
<b>Natural or semi-natural vegetation</b>		Yes	Same as Advanced
<b>Irrigation system</b>	Gravity irrigation	Reduced-flow irrigation Alternating furrow irrigation	Piped irrigation with opening Sprinkler irrigation Drip irrigation
<b>Water usage monitoring (in m<sup>3</sup>) and Water source protection</b>		Yes	Same as Advanced
<b>Drainage system</b>	No	In partial area	Yes
<b>Use of precision farming (# of technology used)</b>	None	1	2 and above



## RICE MONOCROP<sup>1</sup>

Conditions to achieve regenerative agriculture levels in Nestlé’s FAT

	ENGAGED	ADVANCED	LEADING
<b>Score</b>	Achieves at least 25% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)	Achieves at least 50% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)	Achieves at least 75% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)
<b>Soil cover</b>	More than 30% of crop land covered by at least 10 months (with crops, cover crops, mulch and/or pasture)	More than 50% of crop land covered by at least 10 months (with crops, cover crops, mulch and/or pasture)	More than 70% of crop land covered by at least 10 months (with crops, cover crops, mulch and/or pasture)
<b>Alternate Wet and Dry (AWD) Irrigation</b>		AWD applied on the crop either on the 1st half cultivation period (low biomass) or on the 2nd half cultivation period (high biomass)	AWD applied on the crop during the entire season
<b>Land flooding</b>			Not flooded for more than 1 month before cultivation
<b>Nutrient management</b>		3 out of 4 integrated crop nutrient management principles applied	4 out of 4 integrated crop nutrient management principles applied
<b>Integrated pest management (IPM)</b>		3 out of 5 integrated pest management principles applied	5 out of 5 integrated pest management principles applied
<b>Biodiversity habitat</b>		At least 5% of agricultural area under biodiversity habitat OR agroforestry	Same as advanced
<b>Crop residue burning</b>			Crop residues not burned in more than 10% of the fields
<b>Precision farming</b>			3 out of 4 types of precision farming technologies used
<b>Soil Organic Matter</b>			Demonstrated with evidence of proven increase of soil organic matter

1. Only rice cultivated in monocrop farming system (rice in rotation is assessed via FAT Annual Crops)



## COCOA

Conditions to achieve regenerative agriculture levels in Nestlé’s FAT

	ENGAGED	ADVANCED	LEADING
<b>Compliance</b>	Sustainably produced (Nestlé Responsible Sourcing Core Requirements)	Sustainably produced (Nestlé Responsible Sourcing Core Requirements)	Sustainably produced (Nestlé Responsible Sourcing Core Requirements)
<b>Score</b>	Achieves at least 25% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)	Achieves at least 50% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)	Achieves at least 75% of maximum score in FAT, based on the Regenerative Agriculture Practices and Impact Measurement chart for the relevant key ingredients (Annex 2)
<b>Farmers training</b>	Supply chain Farmers Received training on good agriculture practices	Received training on the concept of regenerative agriculture	Received a comprehensive training package on the concept of regenerative agriculture and its practices
<b>Fertilization management</b>		Annual application of organic fertilizer or compost or biochar (Minimum more than 50% of the field acreage) OR fertilization based on Biennial Soil analyses (on the basis of crop nutrient requirements)	Fertilization based on Biennial Soil analyses (on the basis of crop nutrient requirements) AND annual application of organic fertilizer or compost or biochar (Minimum more than 75% of the field acreage)
<b>Soil cover</b>		Cocoa plot Soil is protected throughout the year rather through cover crops, mulching or agroforestry/intercropping, cocoa canopy (Minimum more than 50% of the field acreage)	Cocoa plot Soil is covered throughout the year rather through cover crops, mulching or agroforestry/intercropping (Minimum more than 75% of the field acreage)
<b>Herbicide management</b>			Adoption of integrated weed management
<b>Water</b>			Annual Monitoring and recording total water usage at the farm if applicable (irrigation and/or wet processing)

# ANNEX 2 REGENERATIVE AGRICULTURE PRACTICES AND IMPACT MEASUREMENT

for the key ingredients sourced by Nestlé



The implementation and reporting of the achievements within the various Nestlé categories will be staggered until 2025. As of 2022, we have developed a comprehensive model for the in-scope ingredient in the reporting that will happen in 2023 (fresh milk, green coffee and annual crops).

Summary of the status of the Regenerative Agriculture Practices and Impact Measurement models for Nestlé key ingredients as of 2022:

Ingredients	2022 status
Fresh milk and dairy derivatives	✓ Criteria are developed
Green coffee	✓ Criteria are developed
Annual crops <sup>2</sup>	✓ Criteria are developed
Cocoa	✓ Criteria are developed
Rice monocrop	✓ Criteria are developed
Palm oil	→ Work in progress
Sugarcane	✓ Criteria are developed
Meat, poultry and eggs (excluding by-products)	→ Work in progress
Fish and seafoods (excluding by-products)	→ Work in progress

2. Cereals & Grains, oilseed crops, sugar beet, root crops and vegetables (excluding sugarcane and rice monocrop)

## ANNUAL CROPS<sup>1</sup>, SUGARCANE, RICE MONOCROP

Priority areas	Criteria	Impact areas	Main practices KPIs
<b>Soil</b> 	Soil health	Soil organic matter Soil structure Water and nutrient retention capacity of soil GHG sequestration	Duration of soil cover Area under cover crops and mulching Area under minimum tillage or pastures
	Crop nutrition	Synthetic and organic fertilizer efficiency Yield GHG footprint	Organic fertilizer usage Percentage of synthetic nitrogen versus total nitrogen Integrated nutrient management practices
	Crop rotation	Crop diversity Soil health	# of crops in the rotation Area under diverse crop rotation
	Soil analysis	Soil organic matter Soil health parameters	Frequency of soil sampling and analysis
<b>Biodiversity</b> 	Natural and semi-natural habitat	Plant and animal diversity Agroforestry	Share of habitat area on farmland Vegetated field borders and buffer strips Riparian buffers
	Chemical inputs	Integrated pest management	IPM implementation Percentage of area without application of pesticides and herbicides
<b>Water</b> 	Irrigation	Water consumption Water evaporation	Efficient irrigation systems and practices Monitoring of water consumption
	Protection of water resources	Riparian buffers	Length and width of riparian buffers
<b>Farmer competences</b> 	Farm records	Economic performance	Cost and income tracking
	Trainings	Good agricultural practices	Participation in trainings
	Precision agriculture	Efficiency of resource usage	Precision agriculture practices implementation

1. Cereals & Grains, oilseed crops, sugar beet, root crops and vegetables (excluding sugarcane and rice monocrop)

## DAIRY

Priority areas	Criteria	Impact areas	Main practices KPIs
<b>Soil</b> 	Soil health	Soil organic matter Soil structure Water and nutrient retention capacity of soil GHG sequestration	Duration of soil cover Area under cover crops and mulching Area under minimum tillage or pastures
	Crop nutrition	Synthetic and organic fertilizer efficiency Yield GHG footprint	Organic fertilizer usage Percentage of synthetic nitrogen versus total nitrogen Integrated nutrient management practices
	Crop rotation	Crop diversity Soil health	# of crops in the rotation Area under diverse crop rotation
	Soil analysis	Soil organic matter Soil health parameters	Frequency of soil sampling and analysis
<b>Biodiversity</b> 	Natural and semi-natural habitat	Plant and animal diversity Agroforestry	Share of habitat area on farmland Vegetated field borders and buffer strips Riparian buffers
	Chemical inputs	Integrated pest management	IPM implementation Percentage of area without application of pesticides and herbicides
<b>Water</b> 	Irrigation	Water consumption Water evaporation	Efficient irrigation systems and practices Monitoring of water consumption
	Protection of water resources	Riparian buffers	Length and width of riparian buffers
<b>Farmer competences</b> 	Farm records	Economic performance	Cost and income tracking
	Trainings	Good agricultural practices	Participation in trainings
	Precision agriculture	Efficiency of resource usage	Precision agriculture practices implementation

## DAIRY Continued

Priority areas	Criteria	Impact areas	Main practices KPIs
<b>Livestock</b> 	Manure storage	Storage and application of liquid and solid manure	Procedures on farm for manure storage and application
	Antibiotics and hormones	Animal health	Tracking and use of hormones and antibiotics on farm
	Productivity level	Productivity level per herd	kg milk/day
	Multispecies pastures	Soil organic matter	Percentage of multispecies pastures on farm
	Feed	Traceability of feed and self produced	Percentage of traceable feed
	Rotational and mob grazing	Grazing management	Percentage of rotational/mob grazing
	Farm-related water	Waste water from farm	Treatment of water

## GREEN COFFEE, COCOA

Priority areas	Criteria	Impact areas	Main practices KPIs
<b>Soil</b> 	Soil conservation	Soil organic matter Synthetic and organic fertilizer efficiency Yield GHG footprint	Minimum soil cover, mulching, erosion control
	Crop nutrition		Organic fertilizer usage, fertilization practices
<b>Biodiversity</b> 	Agroforestry/intercropping	Tree species diversity Pesticides usage Herbicides usage Natural vegetation	Minimum number of different tree species beyond coffee (shade or commercial purpose)
	Chemical inputs		IPM, responsible sourcing pesticides list
	Weed management		Integrated weed management, limiting usage of herbicides
	Natural habitat		Occurrence of biodiversity infrastructure
<b>Water</b> 	Irrigation/wet processing	Water source protection Water footprint (usage m <sup>3</sup> )	Riparian buffers (minimum 10 meters), responsible irrigation and processing practices
<b>Farmer livelihoods</b> 	Financial management	Coffee net income Household revenue sources	Training and improved income above poverty line
	Farm economics	Crop profitability	Positive impact on farm profit and loss statement



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