



McCain's  
**Regenerative Agriculture  
Framework.**



# WHAT IS REGENERATIVE AGRICULTURE.

Potato growers face increasing challenges from climate change and variable weather, rising input costs, and regulatory uncertainty. To face these existential threats to our industry, McCain is partnering with our growers to re-imagine the way we grow potatoes with a commitment to implement regenerative agricultural practices across 100 percent of our potato acreage worldwide by the end of 2030.

McCain defines Regenerative agriculture as an ecosystem-based approach to farming that aims to improve farmer resilience, yield, and quality by improving soil health, enhancing biodiversity, and reducing the impact of synthetic inputs.

McCain, in partnership with key stakeholders, has developed six key principles of Regenerative agriculture that can be applied to the farming of potatoes:



Ensure farm resilience



Armour soils, preferably with living plants



Enhance crop and ecosystem diversity



Minimize soil disturbance



Reduce agro-chemical impact & optimize water use



Integrate organic and livestock elements

The result is a farm with better climate resilience, lower input costs, reduced greenhouse gas emissions, improved biodiversity and soil health, including increased water holding capacity and more.

## OUR COMMITMENTS.

1

Onboarding level of regenerative agricultural practices reached across 100 percent of McCain potato acres by 2030

2

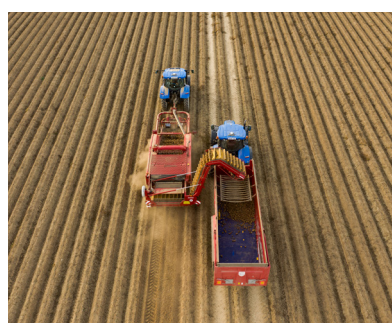
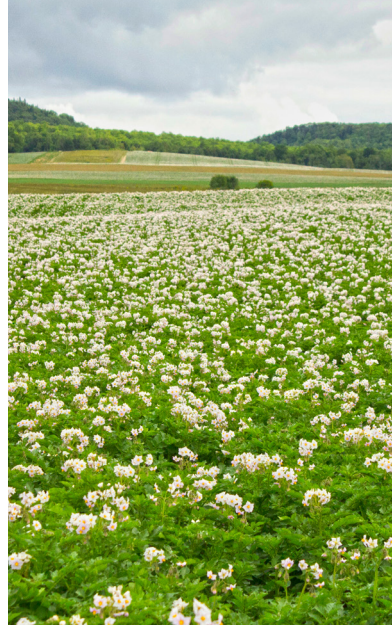
Reaching Beginner level for regenerative agricultural practices across 50 percent of McCain potato acres by 2030

3

Operating three Farms of the Future by 2025, dedicated to developing regenerative agriculture practices and transferring this knowledge to growers

4

Developing research partnerships and leveraging collective action to advance Regenerative agriculture



## THE FRAMEWORK.

The McCain Regenerative Agriculture Framework is a pathway to progress and guide for our farmers to support their progression toward a more regenerative model.

The Framework provides the measurement criteria for the achievement of our goals across different levels: Onboarding, Beginner, Master and Expert. As farmers expand the regenerative practices they put into action on their farm, or adopt new ones, they move up the continuum.

The Framework measures progress based on seven indicators: Armoured soils, preferably with living plants; Enhanced crop diversity; Minimized soil disturbance; Reduced toxicity of pesticides; Enhanced farm and ecosystem diversity; Reduced agro-chemical impact and optimized water use and Increased soil organic matter.

We have created two versions for the Northern and Southern hemispheres to reflect the differences in climate and soil types.

### ONBOARDING

At this level farmers must have (1) participated in a McCain Regenerative agriculture training, (2) met at least one beginner indicator of the farmers choice and (3) completed a soil health assessment which is crucial for setting a baseline for measuring improvement in soil health. By 2030, we will support all McCain potato farmers to be at least at this onboarding stage.

### BEGINNER

Farmers need to have implemented at least five of the seven indicators, including certain required elements (e.g. armouring soils and crop diversity). This sets a minimum standard while allowing for regional flexibility on which indicators farmers want to prioritize. Our aim is for 50 percent of our potato acreage to be at beginner level by 2030. We know in many regions champion growers are leading the way and are already at this level.

### MASTER

Farmers have advanced their progress in each of the indicators, including increasing the number of species grown and reaching 5 percent of non-cultivated land dedicated to natural habitat.

### EXPERT

The most advanced level includes increased soil protection, minimized tillage, increase in soil organic matter and 30 percent of the crop nutrient needs provided from organic sources (plants/manure).

The framework aims to set a minimum credible standard for the industry, while allowing for regional flexibility through a menu approach on which indicators growers want to prioritize. Regenerative agriculture is not “one-size-fits-all”; it is critically important to allow tailoring for the significant differences across farms and potato growing regions around the world.

While it is a global framework, we are working closely with our farmers to discover what works best on their farms in the way that makes economic and agronomic sense in each region, for example, how can the practices help solve local challenges like soil erosion due to storm or wind events. To do this, local McCain teams are undertaking baseline surveys with growers to inform regional goals and action plans. We are also trialing key practices with volunteer growers as well as investing in research and development. Proving the environmental and economic business cases across our regions with volunteer growers is a key area of focus.

## HOW WE DEVELOPED THE FRAMEWORK.

We developed the Framework in consultation with a range of stakeholders including academia, scientific organizations, farmer representatives, public institutions, customers and NGOs. We have also aligned our framework with the work of coalitions focused on these topics, including the Sustainable Agriculture Initiative (SAI) platform and One Planet for Business Biodiversity (OP2B). We welcome further feedback



and engagement to improve and see wider adoption across the potato industry. We recognize research into soil science is continuing to develop and will be ensuring we update our guidance and standards as necessary.

## SUPPORTING FARMERS.








We have worked side-by-side with our farmers for generations, and we will continue to partner with them on this journey. We will meet each of our farmers where they are and make it as easy as possible to participate.

- **Status mapping and regional action plans:** We are surveying our farmers to understand their level of adoption of Regenerative agriculture. This will help to inform McCain agronomists and field representatives to prioritize opportunities and set regional goals and action plans.
- **Training:** In collaboration with training experts, we have developed new programs to increase farmers' understanding of the benefits and opportunities of Regenerative agriculture in potato cropping systems, and equip them with the knowledge to address any challenges.
- **Research & development:** We are committed to research and development on key issues, such as reduced tillage, fumigation alternatives and biological control products. We are also leveraging our learnings from our Farms of the Future program, as well as undertaking university trials, developing unique partnerships and creating innovation hubs.
- **Data collection and measurement:** We are deploying digital agriculture technologies to ensure farmers have access to better data and quality insights. We continue to work collectively with other stakeholders to harmonize and align measurement tools and verification practices.
- **Financial partnerships:** We have conducted preliminary analyses of local costs and economic benefits of the journey to Regenerative agriculture at the farm level. We are identifying the right local financing approaches, including partnerships with banks, helping farmers access government funds, and other solutions.

We have made a strong start, laying the foundations towards delivering on our commitment to Regenerative agriculture. Looking ahead, our focus is rolling out the McCain Regenerative Agriculture Framework across our global grower base and further accelerating knowledge transfer and local financing approaches. This is the beginning of McCain's Regenerative agriculture journey. It is our commitment to make a difference, and it starts where our roots are — on the farm.










# What Defines a Regenerative Potato Grower in the Northern Hemisphere.

INDICATOR	ONBOARDING	BEGINNER	MASTER	EXPERT	
 <p><b>Armoured soils preferably with living plants:</b> Fields on the farm are covered by living plants with an average NDVI value &gt;0.25 for all fields during the season and at least 30% of soil surface is covered by living crops or residue year round.</p>		<b>90 Days</b>	<b>180 Days</b>	<b>270 Days</b>	
 <p><b>Enhanced crop diversity:</b> Over a 4-year period, crops of different species are grown providing a range of growth cycle (annual, bi-annual and perennial) as well as growth characteristics (plant architecture and root types).</p>		<b>4</b> Crop species are grown, including grass & legumes	<b>6</b> Crop species are grown, including grass, legumes and a perennial	<b>8</b> Crop species are grown, including a grass, legume, brassica and 2 perennials	
 <p><b>Minimized soil disturbance:</b> Intensive tillage is kept to a minimum across the rotation cycle. Tillage associated with cover crops/residue incorporation, planting and potato harvest excluded from potato tillage measurements. *Measured by Soil Tillage Intensity Rating (STIR-USDA).</p>	<p><b>1</b> Beginner indicator of choice + Regenerative agriculture training</p>	Reduce tillage by 1 event on potato crop & adopt conservation tillage in rotation crops or decrease tillage intensity across rotation by 10% *	Reduce tillage by 2 events on potato crop & adopt conservation tillage in rotation crops or decrease tillage intensity across rotation by 25% *	Reduce tillage by 3 events on potato crop & adopt conservation tillage in rotation crops or decrease tillage intensity across rotation by 50% *	
 <p><b>Reduced toxicity of pesticides:</b> Crop protection products are selected to reduce environmental, human and consumer impact. Growers exceeding 2,500 EIQ values for potato crop cannot be considered as Beginner or higher. Onboarded growers have 2 years to lower their EIQ values below this threshold.</p>		<b>800</b> EIQ per hectare	<b>500</b> EIQ per hectare	<b>200</b> EIQ per hectare	
 <p><b>Enhanced farm and ecosystem biodiversity:</b> Small natural habitats and natural landscape elements are promoted. Small natural habitats are present within 250 m from the edge of the field, and on 70% of the field.</p>		<b>1%</b> of non-cultivated land is dedicated to natural habitat	<b>5%</b> of non-cultivated land is dedicated to natural habitat	<b>8%</b> of non-cultivated land is dedicated to natural habitat	
 <p><b>Reduced agro-chemical impact and optimize water use:</b> Use of inputs is justified and managed to reduce risks. Decision support systems (IPM, 4R's) and technology are used to precisely apply inputs.</p>		All inputs are applied based on DSS or expert advise from recognized crop advisor. GPS is used	Meet beginner level and 15% of crop nutrient needs to be provided from organic sources (plant/manure)	Meet beginner level and 30% of crop nutrient needs provided from organic sources (plant/manure)	
 <p><b>Increased soil organic matter:</b> Every 5 years, soil health is assessed for organic matter, as well as biological, physical and chemical properties.</p>		<b>Soil health assessment every 5 years (minimum of 1 fields for each soil type / cropping system)</b>	<b>OM% increase</b> target TBD based on local expertise	<b>% OM increase</b> TBD Over 5 years	<b>% OM increase</b> TBD Over 5 years

**Red indicators are required. The grower must meet 5/7 indicators to achieve the beginner level.**



# What Defines a Regenerative Potato Grower in the Southern Hemisphere.

INDICATOR	ONBOARDING	BEGINNER	MASTER	EXPERT
 <p><b>Armoured soils preferably with living plants:</b> Fields on the farm are covered by living plants with an average NDVI value &gt;0.25 for all fields during the season and at least 30% of soil surface is covered by living crops or residue year round.</p>	<p style="text-align: center;"><b>1</b> Beginner indicator of choice  + Regenerative agriculture training</p>	<b>230 Days</b>	<b>280 Days</b>	<b>320 Days</b>
 <p><b>Enhanced crop diversity:</b> Over a 4-year period, crops of different species are grown providing a range of growth cycle (annual, bi-annual and perennial) as well as growth characteristics (plant architecture and root types).</p>		<b>8</b> Crop species are grown, including grass and legumes	<b>12</b> Crop species are grown, including grass, legumes and a perennial	<b>12</b> Crop species are grown, including a grass, legume, brassica and 2 perennials
 <p><b>Minimized soil disturbance:</b> Intensive tillage is kept to a minimum across the rotation cycle. Tillage associated with cover crops/residue incorporation, planting and potato harvest excluded. <i>*Measured by Soil Tillage Intensity Rating (STIR-USDA).</i></p>		Reduce tillage by 1 event on potato crop & adopt conservation tillage in rotation crops or decrease tillage intensity across rotation by 10% *	Reduce tillage by 2 events on potato crop & adopt conservation tillage in rotation crops or decrease tillage intensity across rotation by 25% *	Reduce tillage by 3 events on potato crop & adopt conservation tillage in rotation crops or decrease tillage intensity across rotation by 50% *
 <p><b>Reduced toxicity of pesticides:</b> Crop protection products are selected to reduce environmental, human and consumer impact. <i>Growers exceeding 2,500 EIQ values for potato crop cannot be considered as Beginner or higher. Onboarded growers have 2 years to lower their EIQ values below this threshold.</i></p>		<b>800</b> EIQ per hectare	<b>500</b> EIQ per hectare	<b>200</b> EIQ per hectare
 <p><b>Enhanced farm and ecosystem biodiversity:</b> Small natural habitats and natural landscape elements are promoted. Small natural habitats are present within 250 m from the edge of the field, and on 70% of the field.</p>		<b>1%</b> of non-cultivated land is dedicated to natural habitat	<b>5%</b> of non-cultivated land is dedicated to natural habitat	<b>8%</b> of non-cultivated land is dedicated to natural habitat
 <p><b>Reduced agro-chemical impact and optimize water use:</b> Use of inputs is justified and managed to reduce risks. Decision support systems (IPM, 4R's) and technology are used to precisely apply inputs.</p>		All inputs are applied based on DSS or expert advise from recognized crop advisor. GPS is used	Meet beginner level and 15% of crop nutrient needs to be provided from organic sources (plant/manure)	Meet beginner level and 30% of crop nutrient needs provided from organic sources (plant/manure)
 <p><b>Increased soil organic matter:</b> Every 5 years, soil health is assessed for organic matter, as well as biological, physical and chemical properties.</p>		<b>Soil health assessment every 5 years (minimum of 1 fields for each soil type / cropping system)</b>	<b>OM% increase</b> target TBD based on local expertise	<b>% OM increase</b> TBD Over 5 years

**Red indicators are required. The grower must meet 5/7 indicators to achieve the beginner level.**