



REGENERATIVE AGRICULTURE

FOR A REGENERATIVE FUTURE



JUNE 2021

At Danone,



At Danone, we have for decades embraced a dual project, where we seek business but also societal impact. This is why we became an 'Entreprise à Mission' in 2020, and why we are committed to being certified globally as a B Corp⁽¹⁾ by 2025.

Danone works directly with over 50,000 farms and partners to regenerate soils across the world. Our goal is to transform our products by changing the way our key ingredients are produced - starting with dairy but extending to other ingredients such as fruits and almonds. We work with farmers of all varieties to expand the regenerative agriculture movement and deliver positive impact.

As a food company, one of the most important ways we deliver societal impact is through the farming model we choose. Agriculture today represents 60% of our GHG emissions, and roughly 90% of our water footprint. Through agriculture, we touch the lives of communities around the world, starting with the 50,000 farms we work with directly, and many more indirectly⁽²⁾.

Regenerative agriculture is at the heart of Danone's commitments to achieve net zero emissions by 2050, and be a water impact positive company.

Danone has a choice between a linear model of agriculture, which degrades resources, or a circular one that regenerates them. Our decision is clear.

We are committed to growing food in a way that regenerates natural ecosystems, starting with the soil, and strengthens the well-being of farmers, local communities and consumers.



WHY BUILD A REGENERATIVE MODEL FOR FOOD

The conventional farming model has shown its limits. Climate change is accelerating. Biodiversity is disappearing. Water scarcity is growing and water quality declining. Farmer poverty remains endemic⁽³⁾. At this rate, within 50 years, we will struggle

to find enough arable topsoil to feed 9 billion people. We need to embrace a different model, one that can transform agriculture from a challenge to a solution, that can bring us all closer to nature.

For Danone, regenerative agriculture — which includes organic production — is defined as a set of farming practices that:

ACKNOWLEDGES THE KEY ROLE OF FARMERS

and the positive impact of farming, while taking into account its economic viability.

PROTECTS SOIL, WATER, BIODIVERSITY

RESPECTS ANIMAL WELFARE



Agriculture can degrade resources but it can also regenerate them. Soils can be a powerhouse in drawing excess carbon from the atmosphere, absorbing excess rainwater, and fostering biodiversity. There is also [growing evidence](#) that the quality of soil impacts the quality of food, making regenerative agriculture not just an environmental and social imperative but a health one as well.

Moreover, regenerative agriculture is fundamental to responding to citizen and consumer concerns, which are increasingly focused on nature. Indeed, a Boston Consulting Group survey of

more than 3,000 respondents across eight countries found that 70% of participants are more aware now than before the covid-19 pandemic that human activity threatens the environment, and 75% of respondents said that environmental issues are as concerning as health issues. It comes as no surprise that consumers are changing their behavior, with searches for sustainable goods increasing globally by 71% since 2016⁽⁴⁾, and sustainability-marketed products growing seven times faster than conventionally marketed products⁽⁵⁾.

TRANSFORMING AGRICULTURE FROM A CHALLENGE...



1/3
of the world's surface
Source: FAO ⁽⁵⁾

70%
of freshwater use
Source: World Bank ⁽⁶⁾

1/5
of GHG emissions worldwide
Source: IPCC ⁽⁷⁾

33%
of soils moderately to severely degraded
Source: UN's Global Land Outlook ⁽⁸⁾

1 MILLION 
animal and plant species threatened with extinction, with agriculture and land use change as a key driver
Source: IPBES ⁽⁹⁾



...TO A SOLUTION



Increasing the carbon content of the world's soil by just 2 % would return greenhouse gases in the atmosphere to safe levels, according to soil scientist Dr Rattan Lal, winner of the 2020 World Food Prize ⁽¹⁰⁾.



Organically managed soils have a 20 to 40% higher water-holding capacity than conventionally managed soils ⁽¹¹⁾.



In some areas, water springs that dried up several years ago have begun to flow again due to new regenerative farming ⁽¹²⁾.



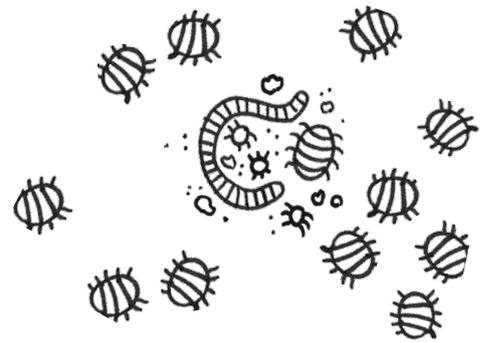
WHAT DANONE IS DOING ABOUT IT

1 - DEVELOPING THE CONCEPT

In 2018, we worked with WWF France and other experts to define a holistic approach that benefits nature, people and animals. These three principles are at the core:

1 Restoring soil

so that it can draw carbon from the atmosphere, strengthen biodiversity and retain more water.



2 Supporting the Next Generation of farmers and farm workers

by giving them the knowledge and tools they need, but also ensuring regenerative agriculture models are economically viable.



3 Respecting animal welfare

Securing the welfare of animals, from dairy cows to pollinators, which have a key role to play in healthy ecosystems.





The three working in synergy are critical, if we are to reverse climate change, and create more just and humane food systems. Regenerative agriculture owes a great debt to indigenous peoples, which have maintained farming practices in harmony with nature even as they were abandoned by conventional agriculture. It builds on traditional methods like intercropping and polycultures while aiming to maximize impact and scale, including through technologies like artificial intelligence (AI) and machine learning.

2 - DEFINING THE PRACTICES

Farmers and farm workers are the lead actors in the transition to regenerative agriculture, and we are committed to supporting them whether they are just starting on this journey or well on their way.

This is why we worked with World Wildlife Fund (WWF) for Nature France, technicians,



an a diverse group of environmental and agricultural experts, to create a scorecard that defines regenerative practices across three tiers: initiated, advanced and best-in-class practitioners. These practices can be applied no matter what the farming system or ingredient.

Danone's Regenerative Agriculture Scorecard

developed with WWF France, helps farmers track progress on key regenerative agriculture practices, including

- Soil:** intensity of tillage, proportion of soil covered, land with crop rotation and number of species, monitoring and content of organic matter
- Biodiversity:** strategies for weed and pest control to limit chemical entrants, proportion of natural habitats on agricultural lands, proportion of locally grown animal feed
- Water:** use of natural sources, integration of buffer zones, irrigation management




« Degraded land accounts for 2 billion hectares worldwide. It is urgent to change our agricultural model in favor of more sustainable practices that will improve soil health, help anticipate future climate shocks, feed a growing population, provide a decent living wage for producers and reduce our dependence on fossil fuels. In partnership with WWF France, Danone has developed its regenerative agriculture framework based on a continuous improvement approach in order to embark all agricultural producers, from less advanced to best in class. We are glad to be part of this journey. »



Arnaud Gauffier, Conservation Programs Director, WWF France.

To learn more: [Danone-regenerative-agriculture-2021-scorecard.pdf](https://www.danone.com/na/en/regenerative-agriculture-2021-scorecard.pdf)

The Danone Regenerative Agriculture Scorecard is a fundamental step toward ensuring that we are transparent about what regenerative farming is and how it is being implemented.

We hope it will help other companies and farmers on their own regenerative journey, creating credibility and transparency for the movement while maximizing impact.



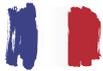
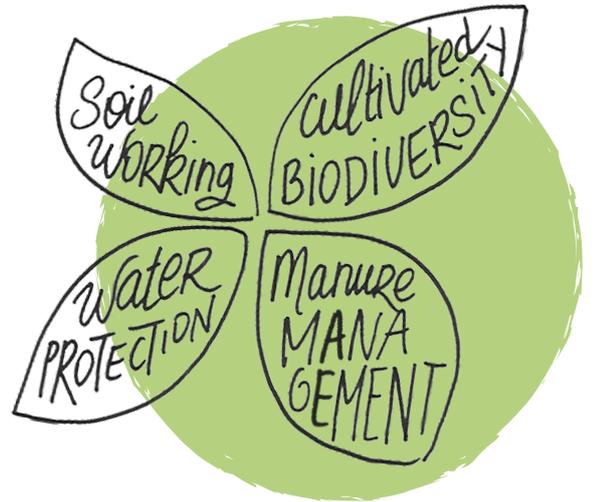
3 - DRIVING TRANSFORMATION ON THE GROUND



Since 2017, we have been working to transform practices on the ground to transform the way our ingredients are sourced. We now have regenerative agriculture programs in the United States, France, Spain, Mexico, Algeria, Morocco, Egypt and Romania. To date we have converted over 150,000 hectares to regenerative agriculture, representing over 12% of our direct sourcing.



In the US, we have the most comprehensive regenerative dairy program in the country, on 82,000 acres now and expanding to new ingredients like almonds. Through practices like reducing tillage and chemical pesticides, and expanding cover crops, the program has reduced the equivalent of 80,000 tons of carbon dioxide and sequestered more than 20,000 tons of carbon.



In France, we have invested over 40 million Euros since 2016, to help cover farm costs as more farmers transition to regenerative practices. We are on track to source 100 percent of ingredients in France - including fresh milk, fruits and vegetables, and sugarbeet - from regenerative agriculture by 2025. Through these efforts, we aim to reduce greenhouse gas emissions from fresh milk 15% by 2025.



In Mexico, we are working with the Inter-American Development Bank to transform dairy farming practices - equipping close to 2,000 cows on 37 farms with sensors and connected collars to optimize their well-being and productivity. We are also working with 140 strawberry farmers to transition to regenerative practices, with the ambition to secure 30% higher income for farmers, 20% less water usage, and fewer agro-chemicals for 50% of our North American strawberry sourcing.

Danone works with farmers in the United States, Europe and Russia to develop innovative contracts, with an average term of three to five years, to reduce milk price volatility and thereby offer farmers greater visibility and financial stability. These long-term Cost Performance Model (CPM) contracts factor production costs into milk pricing and are developed in partnership with milk producers or their organizations. In 2020, 43% of milk collected in Europe and 55% of milk collected in the United States came from producers with CPM contracts. Altogether, 29% of the milk Danone collects is covered by CPM contracts.

4 - MEASURING IMPACT

Thanks to our climate reporting, we know our projects on the ground are delivering impact in the fight against climate change. In 2020 alone, we reduced our GHG footprint by more than 1 million tons, and half of this reduction was thanks to regenerative agriculture.

We are also working to understand and measure the broader social and environmental outcomes of our efforts, and ensure this is supported by data and validated by third parties.

This is why we are partnering with Sustainable Environmental Consultants and their EcoPractices tool, a sustainability risk management platform in



the United States, to gather rigorous data on soil health and get a compelling picture of how farming practices are impacting carbon and water-content as well as economic viability. New technologies like machine learning and AI have an important role to play here in building and leveraging the evidence base. This impact measurement initiative has allowed us to build a unique tool to help farmers estimate the return on investment for specific regenerative practices, on nature, productivity and profit.

5 - DRIVING INNOVATION AND COLLABORATION

If we have learned one thing on this journey, it's that we need to vastly expand and transform collaboration if we want to go further. Danone co-founded two initiatives aimed at advancing regenerative agriculture through private-sector collaboration. We are delighted that these initiatives have supported other companies as they join the regenerative agriculture movement.



One Planet Business for Biodiversity (OP2B) promotes regenerative agriculture as one of the most important ways a company can protect and restore biodiversity. It brings together 25 companies from different sectors (including beauty, fashion, retail and food).



Farming for Generations aims to refine and share best practices for regenerative dairy farming. F4G brings together companies specialized in animal health and welfare, animal nutrition, crop nutrition and science and artificial intelligence, as well NGOs like World Wildlife Fund for Nature, Compassion in World Farming, and Wageningen University. F4G is not only about sharing good practices but also about strengthening peer-to-peer learning among farmers. The alliance has built a practical toolbox of best-in-class solutions (more than 30 so far), including for soy replacement, feed autonomy, optimized nutrient management, crop rotation, and optimal herd management.

We are also working with the Danone Ecosystem Fund and Livelihoods Funds to drive transformation on the ground. The Danone Ecosystem Fund, for instance, has co-created more than 45 projects with NGOs to help farmers transition to regenerative agriculture. The fund provides technical expertise as well as financial support to train farmers and facilitate their transition to new practices. Through its regenerative agriculture projects, the fund is creating inclusive business models that have empowered 32,000 people and improved the living conditions of more than 200,000 people.



DANONE
ÉCOSYSTÈME



LIVELIHOODS
FUNDS
ACT TODAY
FOR A BETTER FUTURE

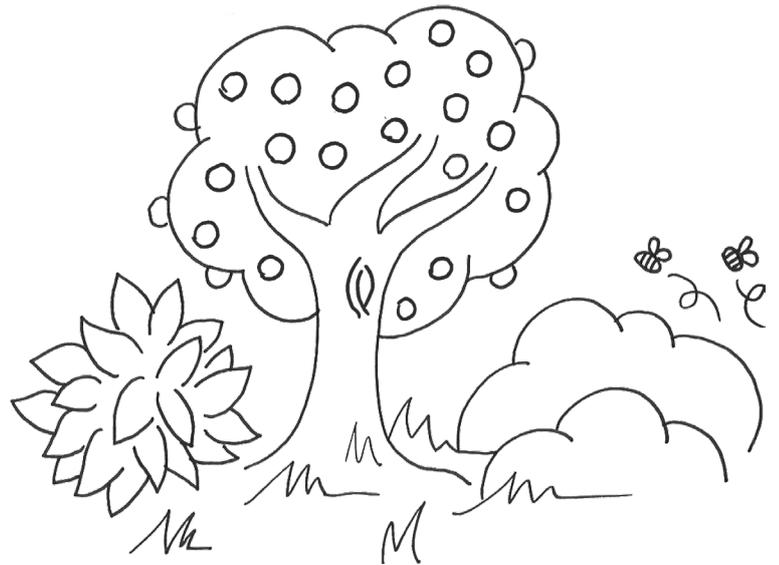


Danone Essential Dairy and Plant-Based in France joined forces with the Danone Ecosystem Fund, *Les prés rient bios*, *Idele* (French Livestock Institute), and MiiMOSA crowdfunding platform to support French dairy farmers in the transition to regenerative agriculture through the *Les 2 Pieds Sur Terre* program.

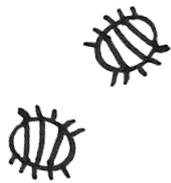
The program aims to help farmers improve soil health and reduce carbon emissions 15% by 2025, while strengthening competitiveness. As of 2020, Danone saw a 3.6% reduction in GHG emissions for each liter of milk collected as part of this project. In addition to offering financing and technical support, *Les 2 Pieds Sur Terre* helps farmers raise awareness and funds via the MiiMOSA crowdfunding platform.



To drive systemic change, we believe that new forms of collaboration with the public sector are essential, as governments play a major role in defining and shaping agricultural systems worldwide. According to the OECD, the 54 leading countries spend over \$500 billion a year on direct support to farmers, giving these governments tremendous influence over farming practices.



This is why we advocate for policy changes such as government targets to protect and restore soil health and strong incentives for farmers that encourage regenerative practices and help secure farmer livelihoods.



CONSUMERS ARE CORE TO OUR APPROACH



Consumers are fundamental to the regenerative agriculture movement - through what they eat and drink each day, they have the power to help shift demand heavily in favor of regenerative forms of agriculture. Our brands are engaging consumers so that they join us in this movement. Here are a few examples:

IN THE UNITED STATES,

Horizon Organic milk brand is pledging to be carbon positive by 2025, primarily through regenerative agriculture practices. Horizon is mobilizing consumers in the fight against climate change, inviting them to advocate for ambitious public climate policy in partnership with Environmental Defense Fund.



IN MEXICO,

Danone's **Leche de Origen** line in Mexico is engaging consumers in support of around 500 smallholders who are transitioning to practices that protect soil health and animal welfare. The smallholders receive technical and financing support through a program co-led by Danone Mexico, the Danone Ecosystem Fund, the Inter-American Development Bank and the NGOs *Technoserve* and *Plataforma Nuup*, together with local and international private and public partners.



IN EUROPE

Alpro is working with developing regenerative practices for its key ingredients like soy, almond and oats. Almonds, for instance, are sourced from mainly small farms in the Mediterranean. These farms depend mostly on rainwater, which could become less abundant with a changing climate. This is why Alpro turning to regenerative practices that optimize water and bring wildlife back into farming through plants, ponds and hedges.



IN FRANCE

Blédina is sourcing more and more ingredients locally, from regenerative agriculture. The baby food brand collaborates with the Danone Ecosystem Fund, *Pour une Agriculture du Vivant* and *Fredon Bretagne*, to support farmers of fruits, vegetables and grains in their transition to regenerative farming practices. So far, 185 farmers and technicians are receiving technical support, and 30 pilot farms are testing regenerative agriculture practices. To raise public awareness, it [invites citizens and consumers](#) to visit farms where their ingredients are grown to see how biodiversity on our farms brings biodiversity on our plates.



IN THE UNITED STATES,

Happy Family Organics launched a new Regenerative & Organic line of baby food, made with ingredients from farms that implement regenerative agriculture practices. The brand leads a farmer training program and educates consumers on the impact regenerative farming can have on climate change, inviting them to support farmers “dedicated to making an impact on the planet that our little ones will inherit.”



Danone is proud of its regenerative agriculture journey to date but we know we have a long way to go. We invite our suppliers, peers, public and private partners and of course our consumers to join us, and to regenerate our future, starting with our plates.



END NOTES



1 - Certified B Corporations are businesses that meet the highest standards of verified social and environmental performance, public transparency, and legal accountability to balance profit and purpose. A total of thirty-three Danone entities have now earned B Corp™ Certification. As a result, approximately 50% of Danone's global sales are now covered by B Corp™ certification, marking significant progress towards Danone's ambition to become one of the first certified multinationals.

2 - These include smallholder farmers, as around 30% of Danone's total milk volumes are sourced from farmers with less than 10 cows.

3 - According to the USDA, in 2018, the majority of farmers in America instead of earning money, had negative income. Retrieved from:

<https://www.euractiv.com/section/agriculture-food/news/frances-young-farmers-are-finding-it-difficult-to-start-a-farm/>

In France, according to a study by the Mutualité Sociale Agricole (MSA), the average income of farmers is around €1,250 per month, but one-third of the farmers earn less than 350 euros per month.

Retrieved from: <https://www.strategie.gouv.fr/sites/strategie.gouv.fr/files/atoms/files/dp-pac-anglais-octobre-2019.pdf>

Euractiv. (2019). France's young farmers are struggling to establish themselves. Available online at <https://www.euractiv.com/section/agriculture-food/news/frances-young-farmers-are-finding-it-difficult-to-start-a-farm/>

<https://www.euractiv.com/section/agriculture-food/news/frances-young-farmers-are-finding-it-difficult-to-start-a-farm/>

According to the Instituto Nacional de Estadística y Geografía (INEGI), a Mexican governmental data collection agency, 78 percent of 5.2 million farmers are in a condition of multidimensional poverty.

Available online at: <https://indicepolitico.com/5-5-millones-de-jornaleros-agricolas-perciben-salario-2-1-veces-menor-que-el-salario-promedio-nacional-unimoss/>

4 - See the latest report by the Economist Intelligence Unit (commissioned by WWF): An eco-wakening: Measuring awareness, engagement, and action for nature. Retrieved from:

<https://www.worldwildlife.org/publications/an-eco-wakening-measuring-awareness-engagement-and-action-for-nature;>

See CSB Sustainable Market Share Index™ - NYU Stern

5 - Food and Agriculture Organization of the United Nations (FAO). 2020. Land use in agriculture by the numbers.

Available online at: <http://www.fao.org/sustainability/news/detail/en/c/1274219/>

6 - World Bank (n.d). Water in Agriculture. Available online at:

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7 - The Intergovernmental Panel on Climate Change (IPCC). (2019). Summary for policymakers. In: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems. Retrieved from:

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8 - United Nations Convention to Combat Desertification (UNCCD). (2017). Global Land Outlook first edition.

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Retrieved from: <https://doi.org/10.5281/zenodo.3553579>

10 - EIT Food. (2020). Can regenerative agriculture replace conventional farming? Available online at:

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12 - Food and Agriculture Organization of the United Nations (FAO). (2012). Introduction to Conservation Agriculture: principles and benefits.

Available online at : <http://www.fao.org/3/CA3033EN/ca3033en.pdf>