COUNTRY / IN DEPTH

Fonterra accused of 'greenwashing' to impress big foreign buyers keen on 'regenerative agriculture'

8:25 am on 19 August 2024

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A Fonterra presentation boasting of 'regenerative agriculture' practices by its farmers is "utterly greenwashing", according to freshwater ecologist Mike Joy. Photo: Screenshot

A grassroots movement has gone mainstream, with international food giants adopting 'regenerative agriculture' targets. But how robust are their criteria for what counts as regenerative - and is it greenwashing?

In a soothing navy blue, the words "Regenerative Agriculture" unfurl across a bucolic scene of cows grazing. Tucked beneath is the presentation subheading, "Our natural advantage". Hovering in the top right corner is Fonterra's logo.

The presentation says New Zealand farmers are already using practices - like grazing cows outdoors - considered to be part of farming regeneratively.

But rather than soothe or inspire, the March presentation ruffled the feathers of regenerative agriculture and water quality advocates.

"Utterly, utterly greenwashing," says Mike Joy, an academic well known for his freshwater advocacy. "We've kind of gone as far away from regenerative as possible."

Fonterra accused of greenwashing to win favour with Nestle 3′ 56″

He goes as far as saying the presentation makes Fonterra look silly.

Adam Canning, from Australia's James Cook University, is an expert in regenerative agriculture and has worked closely with sugar cane growers. "It's total greenwashing," he says. "I think what they are trying to do is brand and control the narrative that they are already doing regenerative, and they are trying to call, for example, their rotational grazing regenerative - actually it's not."

Regenerative agriculture is a term coined 30 years ago to encapsulate a type of farming vastly different from what is practised in industrialised farms in North America.

Despite its decades of history, an internationally agreed-upon definition for regenerative agriculture remains elusive and, in some ways, contentious. There is worry that too closely defining practices won't work for different types of farming in different types of locations. Instead, principles and objectives are sometimes cited, giving farmers the flexibility to tailor practices to their farms. On the flip-side, there is concern that using an aspirational principle-based definition will leave so much wiggle room that the term will get green-washed.

Joy says regenerative agriculture is farming where the land regenerates itself. "You don't have to bring stuff in from the outside, it regenerates from within, so you have a closed loop."

Some of the practices to achieve this focus on the health of the soil. They may include growing a wider range of plants in pastures, having stock graze pastures rather than be fed in feedlots and making sure there is always a 'cover' crop on fields, rather than leaving them bare after tilling.

In theory, the traditional way New Zealanders farm is far closer to these practices than countries where cows are kept in feedlots or barns.

This paddock-based grazing system is something Fonterra's presentation highlights, but Joy maintains regenerative agriculture is much more than having cows on pasture.

Canning agrees, saying most regenerative farmers practise what they describe as "adaptive managed grazing".

"That's another level again, from just simply rotating your livestock around from paddock to paddock."

The growth of intensive dairying has pushed the ability of pastures to produce enough food for stock, Joy says. "The only way you can have that many cows on an area of land is by having lots of external inputs."

The inputs he refers to include fertilisers to help the grass grow, such as synthetic nitrogen which is produced using fossil fuel, imported phosphate and additional food, such as palm kernel extract.

Estimates of nitrogen applied to New Zealand's farmland in fertiliser skyrocketed from 62,000 tonnes in 1996 to 452,000 tonnes in 2019, a 629 percent increase in a little over two decades.

In 2023, more than 1.7m tonnes of palm kernel extract was imported from Indonesia and Malaysia, where rainforests have been felled in favour of palm plantations. In 2022, more than $371 million worth of fertiliser containing phosphate was imported.

"There's no way it can be regenerative if you're having to use fossil fuels to produce the energy inputs that go into your system. Likewise, if you're having to import from the other side of the world phosphate and palm kernel. With all the harm that goes with it there's no way any of those practices could be considered regenerative. It's the opposite," Joy says.

Canning agrees that true regenerative agriculture avoids things like synthetic nitrogen, which he says New Zealand's style of farming uses "shitloads" of. However, there may be a place for its use for farmers at the beginning of a regenerative journey. "Ideally most of the time people would be working towards getting themselves off synthetic inputs, but sometimes you just need to do the inputs either as part of a transition phase or because you've had a blip in the season."

Joy says he is not surprised at Fonterra's move to highlight a pasture-based system as proof of an advantage in claiming the regenerative agriculture mantle. "There's certain voices within agriculture in New Zealand who have been saying all along that we are already regenerative and we don't need to change anything."

But, Joy believes, "it's so far from reality it's not funny."

There are farmers in New Zealand who have embraced regenerative agriculture long before Fonterra staked its claim, he says. "There are some really good people involved and the big guys come and take over and turn it into a farce."

Mark Anderson checks his cows. Photo: Cosmo Kentish-Barnes

A grassroots movement

"Cocksfoot, multiple different clovers, herbs like plantain, chicory, sheep's burnet," Mark Anderson says, launching into a list of some of the different plants he started sowing in his South Island dairy farm's pasture a decade ago when he started on the journey of regenerative agriculture. "Prairie grass, Yarrow," he continues. "Tall herbs, short herbs and perennial grasses. Sometimes we add some annuals in there."

It is the mix of root structures that are important to him, as well as the seasons in which the different plants thrive. Cool season grasses form part of the mix he has sowed on the 580 hectare farm.

"We were having consecutive, longer dry spells. Not just through summer, but extending into late autumn as well."

The dry spells were one of the reasons his thinking shifted to making the farm more resilient. Financial pressure was another; low payout years had taken their toll. Things like additional food for the 550 cows or buying fertiliser to stimulate grass growth ate into profits.

Anderson does not use synthetic fertiliser on his farm at all now. "When you're moving towards deeper regeneration there's not really room for synthetic fertiliser in that thinking, it's very much about the soil food web."

The cows add to this soil food web, he says. He grazes the paddocks in a different way to what New Zealand farmers would do traditionally. Grass is allowed to grow for longer and cows are 'mobbed' closer, but shifted more frequently, sometimes more than once a day. This is to mimic the way herds on a savannah grassland would move. The cow's manure, urine and saliva adds to the soil's microbiome, he says, and improves the structure of the soil, which could improve its ability to hold water.

He uses other regenerative techniques as well, including composting and bale feeding.

So, has the change paid off?

"We're staying above board," he says. "We saw it as more of a risk to stay in the other farming model long term, of importing fertility and continuing down that spiral of soil degradation. What we learned was, the more you fall down that spiral of soil degradation and landscape function degradation, the more inputs you need."

Caring for soil health is a key part of Mark Anderson's approach to farming. Photo: Cosmo Kentish-Barnes

Selling the New Zealand pasture story

Industry leaders saw the marketing potential in claiming the term regenerative agriculture in the early 2020s.

A document published by Beef + Lamb NZ stresses the importance of owning the narrative because "there is a concern that the term will be greenwashed or co-opted by brands and businesses in bad faith". It says New Zealand should move quickly.

Hugh Good was Beef + Lamb NZ's global market intelligence and research manager when that report was written. He says regenerative agriculture seemed like the next big thing.

"There was this feeling that overseas farmers were making a big deal about 'Oh, we're doing regenerative, we're doing all these things.', And then New Zealand's like, 'Well, that's actually how we farm anyway.'"

Beef + Lamb NZ has not done much on regenerative agriculture since the research it commissioned for its report. Good says the intense wave of interest in regenerative agriculture has receded.

He wonders if Covid-19 lockdowns played a part in the spike of interest. "There were probably people at home looking at regenerative agriculture and watching a two-hour YouTube video. People were doing atypical weird stuff and focusing on things that they might otherwise not. Who knows? It did feel like the tide went out afterwards and people got back to business as usual."

There were also hurdles in the way of using a story about regenerative agriculture as a marketing tool. Explaining what exactly it is to consumers is complicated. Plus, environmental claims don't top the list of reasons people buy things. "We're quite selfish about what we care about," he says. Taste ranks first, followed by healthiness, then convenience and cost, while "bumping along the bottom has been sustainability".

Pursuing a marketing advantage by promoting regenerative agriculture practices may have fallen by the wayside for Beef + Lamb NZ, which has chosen to focus on its 'Taste Pure Nature' message, but other international companies have embraced it.

One of the key things international companies seemed keen on was how it might help them meet emissions targets through the sequestration of carbon in the soil. Back then, they were not using the term 'scope three emissions', but Good says this is the terminology which would be used now. These are emissions a company is responsible for from outside its immediate activity. Emissions from the growing of ingredients is one example of a scope 3 emission for which a food manufacturing company might be responsible.

Danone has committed to sourcing 30 percent of key ingredients from farms transitioning to regenerative agriculture by 2025. General Mills has a target to implement regenerative practices on one million acres of land by 2030.

Mondalēz International, which boasts brands like Cadbury and Oreo, aims to produce 100 percent of its wheat through regenerative agriculture by 2030. Nestlé aims to source 20 percent of its key ingredients through regenerative agriculture by 2025, growing to 50 percent by 2030.

Driven by multinationals

Fonterra's director of sustainability Charlotte Rutherford says it is customers like Nestlé who its regenerative presentation was aimed at.

"Many of them have goals within their own sustainability programmes related to sourcing ingredients from farms with regenerative practices. That includes companies like Nestlé, or McDonalds."

So far, she says feedback about the presentation has been positive.

She rejects claims the presentation is greenwashing, saying the co-operative takes making claims seriously. The co-operative is not claiming to be regenerative agriculture, she stresses - it is saying it has regenerative practices.

"We're definitely not saying we're at an endpoint, but compared particularly to overseas dairy systems there are many regenerative practices that we use everyday that we are improving."

Part of Fonterra's presentation introduces a definition framework it has chosen for regenerative agriculture. Rutherford says the co-operative looked at many options but settled on one created by the Sustainable Agriculture Initiative (SAI). The food industry-led group is backed by large food manufacturing multinationals like Pepsi, Danone, Unilever and Nestlé.

Rutherford says the SAI platform seemed a natural fit as Fonterra's customers were already part of it.

The SAI's definition of regenerative agriculture is "an outcome-based farming approach that protects and improves soil health, biodiversity, climate, and water resources while supporting farming business development".

It hones in on soil, water, biodiversity and climate, identifying criteria and outcomes for each, with suggested metrics to measure these by.

SAI describes the choice of outcomes as being based on scientific consensus, with universally used metrics, such as MTCO2eq per area for carbon sequestration and suspended solids in bordering water bodies, to measure them. Adopting this approach "can allow for global comparisons", its documentation says. However, the exact definition and metrics for some outcomes may be adapted to local context, it says.

In addition to the 10 outcomes are 20 suggested principles and practices which SAI believe contribute to achieving the platform's objectives.

Fonterra's presentation includes a table which lays out metrics, outcomes, performance and progress. The data behind these results was gathered by farmers and analysed by Fonterra's "internal modelling calculators" according to the presentation.

Much of what is in the table has open-ended improvement objectives, others have targets which have already been met and some are yet to have measures applied to them. At the moment, there are no metrics where there is a failure.

There are no strict rules around excluding fertilisers or food from outside the farm.

Water advocate Mike Joy takes issue with some of the measures, including the measure of nitrogen, which he is scathing about. Fonterra has chosen the metric of purchased nitrogen surplus, this is the amount of applied nitrogen estimated to be lost to water and is aiming to continuously improve this. "It's not a great measure," he says. "You wouldn't have to measure that if you didn't put so much artificial nitrogen on the farm in the first place."

Fonterra's framework says farmers must be compliant with law around the amount of nitrogen allowed per hectare without a resource consent. This is set at 190 kilograms per hectare. "That's crazy high. It's like having an around town speed limit of 190 kilometres per hour."

He comes back to the concept of a closed loop as being at the heart of regenerative agriculture, where there is no place for external inputs like synthetic fertiliser.

Does Fonterra's Charlotte Rutherford see a future where we are not adding synthetic nitrogen to our fields?

"Goodness, look, I don't see that in the short term," she says. Cutting out synthetic nitrogen would be driven by what customers

and consumers are looking for and what regulation dictates.

Joy also points out that Farm Environment Plans, a metric which Fonterra has linked to water quality, might not be much use in turning around degraded water quality seen in some areas with intensive dairying. He sees Farm Environment Plans as useful as an educational tool for farmers, but says often they are vague. In a "lessons learnt" report about water quality in Ashburton Lakes they were shown to be ineffective in achieving better outcomes for water.

Rutherford acknowledges Farm Environment Plans do not measure water quality but says they put in place practices "we know will have a positive impact on water quality".

Is measuring doing something - like the percentage of farms with a Farm Environment Plan - the same as measuring whether it works?

When it comes to water quality, Rutherford says it is tough to link water quality to individual farm activities.

"It's challenging to measure water quality in a catchment that has a lot of different land uses and say that our impact is the one that is having the greatest effect, positive effect."

The customer is always right

"We use dairy ingredients from New Zealand in factories all around the world," says Nestlé's director of corporate affairs and sustainability Margaret Stuart. Fonterra's milk is in a number of the company's well known products, such as KitKats, Maggi soups and Milky Bars sold globally. "I would say it's on public record that we are Fonterra's biggest customer."

Two-thirds of Nestlé's greenhouse gas emissions come from agriculture. "So regenerative agriculture is right at the heart of our net zero targets."

Everything starts with soil health, she says. "There's a really close correlation between the percentage of organic matter in the soil and the content of carbon in the soil."

Nestlé is well on its way to hitting its goal of 20 percent of its ingredients from regenerative agriculture by 2025. Last year it hit 15.2 percent up from 6.8 percent in 2022.

It has set its own framework and criteria for regenerative agriculture, as well as being involved in the creation of the SAI platform. Much like other platforms, there is plenty of flex in Nestlé's criteria.

"There's no silver bullet for any of this," Stuart says, explaining the flexibility of the system. What works for one farm might not work for another, and even paddocks on the same farm might require different management. Farmers are categorised by their progression to being regenerative, starting with "engaged" and moving onto "advanced" or "leading".

An example of a measure for dairy farms is a goal to have several types of plants in a pasture. An "engaged" farmer would have 25 percent of pasture with at least three species of plants for the cattle to eat. An "advanced" farmer would have increased this to 50 percent and to be "leading" the percentage would need to be 75 percent. Farms are audited by Nestlé or by third party partners, says Stuart. Farmers at any of the three levels are counted towards Nestlé's regenerative targets.

There is no ban on synthetic fertilisers. Stuart says Nestlé's criteria does talk about nutrient management, but says as farmers better manage their soils the need for boosting plant growth with fertiliser will reduce.

She is not sure what the company's stance is on whether Fonterra's farmers should follow Nestlé's assessment framework, or whether Nestlé will accept Fonterra's adoption of the SAI platform as proof of regenerative practices.

"Greenwashing is something we're very, very conscious of, that's why we are not making claims on pack, because we are right at the beginning," she says.

Climate change "is a significant risk" to Nestlé's business, and the farmers that supply it need support to transition to more "resilient" practices. Talking about what the company is planning will encourage others - like Fonterra and its suppliers - along a similar path, she says.

Put a sticker on it

On pack claims are a strong driver of consumer behaviour, says Massey University professor of marketing Bodo Lang, especially in a cluttered supermarket environment, where a decision to buy one product over another is made in a matter of seconds.

He gives wine as an example where our propensity to look for bottles with gold stickers that look like medals on them has been

exploited. "I've seen instances of wine having completely meaningless certifications, like 'proudly family owned', or 'New Zealand owned and operated'."

Even when certifications are not as blatantly set out to mislead, there can be scales of rigour involved. Some certifications are awarded and monitored by independent third party organisations but other industry-created certifications may not be as rigourous.

He warns of "fluff" and "vagueness" like claims which can't be quantified. "What are the impacts on the planet? The soil, the water, the animals?"

Typically, the aim of greenwashing is to make end consumers buy the product because it appears 'greener' than it actually is, he says. For business customer relationships, like the relationship between Fonterra and Nestlé he sees less of an opportunity for greenwashing. "Nestlé has the capability and motivation to assess any green claims by its suppliers."

As well as wanting to be seen as doing what it claims there's the fear of scandals. "There is a solid body of literature that shows that media scandals can have devastating effects on brands and finances.

"My sense is that Fonterra is trying to balance operating efficiency and the needs of its shareholders - its farmers - with demands of greater sustainability. It is a tightrope walk.

"It is so difficult to get the balance right, there is a risk of greenwashing here, particularly if the industry is left to their own devices without independent checks by third party agencies."

Incentivising regenerative

Mike Joy says he finds the use of the regenerative agriculture term heartbreaking.

"I just think this is a blatant greenwashing attempt by Fonterra. It just makes them look silly and actually harms the genuine regen farmers when they try to jump on this bandwagon and make out they are part of it when they are not at all."

He would like to see Fonterra offer financial incentives to farmers who do not use synthetic nitrogen. "Pay them more and to get the extra money, take it off the ones who are doing badly - pay them less."

Fonterra's Rutherford says there is a scheme where Fonterra pays more for some milk. The 'Co-operative Difference' programme pays an extra 7 cents per kilogram of milk solids to farms that have a Farm Environment Plan where three of five key practices are in place. These include: a nitrogen surplus lower than the top 25 percent of Fonterra farms, a product stewardship plan for plastics and agrichemicals, no discharge of effluent to waterways, 80 percent of food grown on farm, and a plan and evidence of good winter grazing practices.

Animal wellbeing plans and workplace safety practices also need to be in place.

Another 3 cents is paid to these farms if the quality of their milk is ranked excellent for at least 30 days. In the 2022-2023 season, 83 percent of farmers achieved one of the three levels of the programme. There is also a check on milk quality which incentivises farmers to keep palm kernel extract use to a minimum.

"Regenerative agriculture is a job that's never done. There's always more we can do when we're using land to produce food. We're acutely aware of that."

Mark Anderson, the regenerative dairy farmer from Otago, has some advice. He runs off a list of things people could ask themselves to check if they are truly farming in a regenerative way.

"Ask yourself, are our landscapes regenerating? Is our soil regenerating? Is our mental health and wellbeing regenerating? Is biodiversity regenerating? Are our bank accounts regenerating? Are our waterways regenerating?

"The answer to that is probably no."

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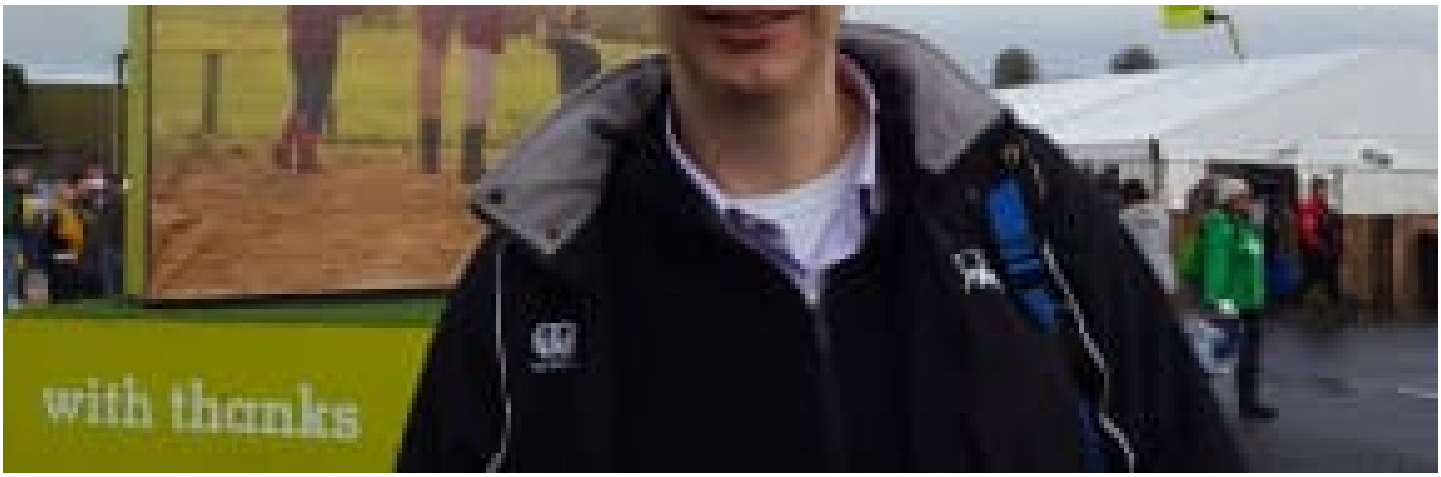

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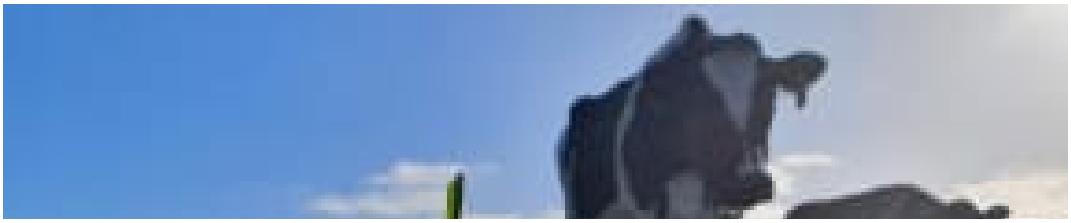

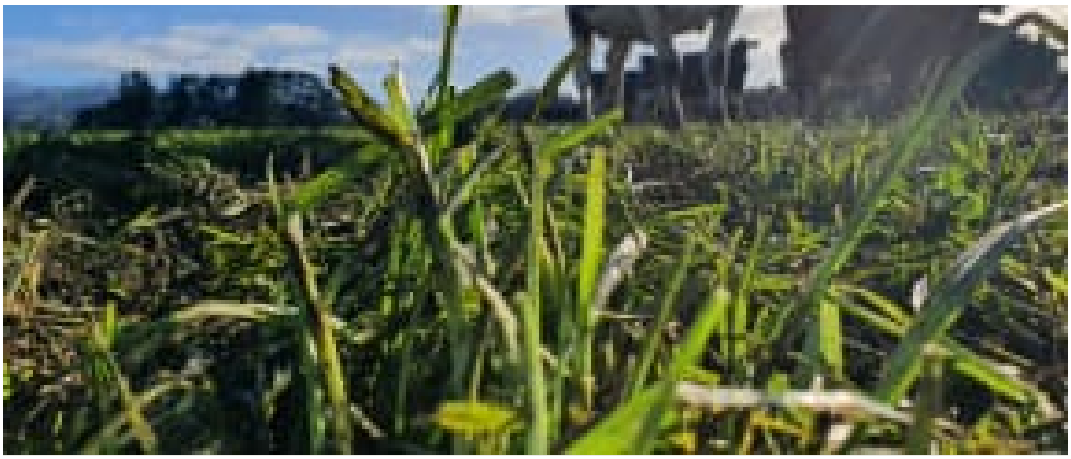

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