

Brief Farmers of Ireland

Regenerating Systemic Risk A Case Study on Ireland

A Case Study on Ireland
and the Impact Potential of
Regenerative Agriculture

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Appeal to the Farmers of Ireland

From the Irish Farmer Members of the European Alliance for Regenerative Agriculture (EARA)

We are a farmer-led organisation, governed by a community of over 100 of Europe's pioneering regenerative farmers, representing over 17 different production systems. This paper and the key systemic risks identified within sprouts from the experiences of our Irish farmer members, and a wider community of land stewards farming across Ireland's arable, livestock, horticulture and mixed systems. It was then reviewed and refined with independent experts.

What We See

Irish farmers provide milk, dairy, meat, and grain to over 190 countries, remarkable given the size of the island. However, this productivity is at risk of failure through multiple pressures that continue to tighten margins, reduce the health of animals and landscapes, and a lack of new farmers to take over existing farms. EARA's Irish farmer members have identified four key systemic risks that are driving this, creating a fragile agricultural system that continues to degrade. Input dependency and unstable commodity markets are taken as a matter of National Security, the connection between soil, plant, animal, and human health is grouped under the Health Nexus, declining water systems and the rising pressure of drought is discussed under Water, and the collective impact of these risks is discussed as a primary driver for a lack of Generational Renewal.

Regenerative agriculture offers a pathway to address these challenges through a new system that prioritises

ecological, social, and economic health of Irish farmers and Irish farmland.

We explore how this is possible, with what first steps, and the potential impact it would have on the agricultural sector within the scope of these four risks. We draw this knowledge from an Irish case study that shows the journey of Tom Stack, a dairy farmer in Limerick, as well as two other European dairy farmers in Germany and Portugal. All three case studies are dairy farmers to illustrate the different pathways available to farmers, even under the same production type.

To see how this can be made possible at the national level, we put numbers to your experiences over the last few years, calculating the rising input costs, disease and water quality pressures, and demographic decline of Irish agriculture against the minimum funding needed to enable regenerative systems across the country.

Input Dependency

In the six years to 2025, Irish farmers spent over €20 billion on imported feed, fertiliser, fuel and plant protection alone, and the wider population spent a further €9.6 billion on imported fresh produce. Variable costs account for 50-60% of average annual costs on Irish dairy farms, and between 40%-50% on arable and other livestock farms. The fragility of this system has been made clear over the last years. When gas prices spiked in 2022, farmers paid €1.2 billion for fertiliser, double the previous year, for 18% less product. Food sovereignty is also at risk, as Ireland imports around two-thirds of its animal feed and nearly all its fertiliser, along with 83% of its fresh produce.

Disease Pressure

Ireland's bTB eradication programme has cost the state over €600 million since 2020, with an annual budget of €157 million for 2026. Still, herd

incidence reached its highest level in over 20 years in 2025. The current approach focuses almost entirely on exposure, with very little attention to why some exposed animals resist infection. We explore how healthy, rich soils that produce diverse swards can deliver the nutrients needed for an animal to build resilience against disease pressure. Tom has fed his pastures using Korean Natural Farming, a system that works with microorganisms and fungi to make locked nutrients plant-available, which are then passed on to his cattle. Because his cattle have access to these nutrients, their gut health and immune system has improved, and in August his herd returned bovine Tuberculosis zero reactors, despite increasing herd incidence in surrounding farms. We also discuss how this same pathway from soil to consumer can influence human health, particularly for inflammatory bowel diseases like Crohn's, as well as cardiovascular diseases.

Water Quality Failure

The health of Irish waterways have been in decline for the last 15 years, and agriculture is considered a primary cause. However, the problem is not agriculture, it is what has enabled an excess of nutrients to be lost from the land. The nitrates derogation allowed up to 220kg of nitrogen per hectare again until 2028. Now, farmers that have had a stocking rate of 2-2.5 LSU/ha are looking at an average income loss of 39% as it is pulled, and farmers are forced to reduce their herd size. Regenerating forms of agriculture minimise losses through diverse pasture and different plant root depths that capture potential nitrogen losses. They also offer organic slurry treatments that stabilise urea, making what is applied more plant available. Drought is a rising threat to farmers, both for their land and their economics. In 2026, dry matter production was less than half the 10-year average, meaning farmers will likely have to purchase feed to supplement their cattle as winter stores run out. Healthy soils infiltrate and store more water, thanks to different root depths and microbial activity. Tom only started feeding his cattle with hay 6 weeks after neighbours had already started.

Demographic Decline

Collectively, these risks are creating an agricultural sector that does not entice new entrants. Young or new farmers are faced with tight or negative margins, a dependence on foreign markets, governments, and synthetic input production, and a declining landbase with more frequent climate stresses. Because of this, only 4% of Irish farmers are under 35, having halved in just one generation. With one in three farmers saying they're thinking of getting out, and only 60% with a succession plan, this is a critical threat to the future of Irish agriculture and family farms.

Together, they put Irish agriculture in jeopardy. But these are not isolated problems. They are different symptoms of a fragile production model built on external inputs, high stocking pressure, biological simplification and narrow commodity margins.

What We've Learned From the Land
Regeneration journeys are different on every farm. The point of the journey is to understand what to do with each farmer's different context. Ecological, social, and economic regeneration can not be achieved through a set of prescriptive practices but a direction of travel. Every farm must take its own route, but it is made easier if done collectively, supported by neighbours and the Irish nation.

Our case studies show what's possible when farmers prioritise the regeneration of soils, animals, independence, and margins. All chosen examples and case studies give expression to the diversity of journeys and the necessity for each farmer to chart their own path. Crucially, regeneration journeys should be structurally supported by governments and businesses to make sure that the farmers who improve the wellbeing, health, and security of the wider population are rewarded.

The three journeys we detail in the paper take place on dairy farms. We do this to exemplify the diversity of the regenerative journey, even if the

production type remains the same.

Tom Stack, Limerick

Tom Stack runs a 59-hectare organic dairy farm in Co. Limerick. He stocks roughly 100 head of cattle, with 50-60 milking cows.

Since 2017:

- Feed purchases have fallen by 96%
- No synthetic fertiliser has been used since 2019
- His herd has been antibiotic-free since 2017
- At its most recent test in August 2026, his herd returned zero TB reactors despite rising incidence in surrounding farms

Between 2022 and 2025, his gross margin ran at 40 to 58 cent per litre, excluding subsidies, against a national average of 30 to 39 cent. This sits above his given organic premium of roughly 5-10c/L, showing a stronger margin of up to 11c/L from resilient management.

Tom produces less milk per cow and per hectare than intensive neighbours, having stocked his herd for resilience, with Friesian, Shorthorn, Ayrshire and Irish Moiled crosses. Yet, he does it on a fraction of the inputs, with healthier animals and improving land. His farm survived Ireland's driest July on record in 2026 drought six weeks longer than neighbours before needing to supplement feed.

As Tom says:

„A system that drives farmers into debt and off the land is destroying our economy, and with it our democracy. Sometimes you have to go back to go forward. We've put in the time, and now it's time for all the hard work and journeys of success across farms in Ireland to be backed. Healthy soil makes healthy animals, healthy food and healthy people. It's all about education, showing there is a better way, and farmers learning with farmers.“

Henrique Cordeiro, Azores (Portugal)

Henrique Cordeiro in the Azores has increased yields from 8800l to 9900l per cow while

reducing feed input dependency by 25% and eliminating synthetic phosphate and potassium entirely, drastically cutting pesticides and achieving a >100% improvement in net profit per hectare in 4 years.

Felix Riecken, Schleswig Holstein (Germany)

Felix Riecken in Germany has transitioned from conventional to regenerative organic over eight years, now farming at about 8,500 litres per cow while reducing external feed from 30% (mainly non EU) to 6% from the neighbouring farm. He reduced fuel use by 41%, synthetic NPK and pesticides by 100% and antibiotics by 80%. His land now farms at 38% higher whole year photosynthesis production than his neighbours. The farm today runs a Kindergarten, a Market Garden, as well as agroforestry and research projects.

The Regenerative Toolbox

Beneath every regenerative tool sits the shared imperative to restore Irish agriculture to restore the health and biological function of soil. A farming mindset in which farmers prioritise a living, structurally sound soil is what allows a farm to cycle nutrients, hold and infiltrate water, resist disease, grow independence and improve margins.

Diverse Swards

UCD work shows multi-species swards reducing nitrogen applications by at least 60%, producing up to 25% more herbage, with cattle reaching slaughter weight five to six weeks earlier. Teagasc Moorepark trials found diverse and clover-based swards matched ryegrass production on substantially less nitrogen.

Rotational Grazing

Adaptive multi-paddock grazing mimics natural grazing patterns, limiting selective grazing, distributing nutrients evenly, and building soil organic matter through trampled litter and root exudates.

Slurry Treatment

Lactic acid bacteria treatment can reduce ammonia emissions by up to 95% under optimised conditions, with nitrogen retention during storage improved by around 20%. Treated slurry is a farming asset rather than a disposal problem.

Cover Crops and Long Rotations

These provide weed, pest and disease mitigation, improved water drainage and retention, nutrient cycling, and reduced leaching.

Diversification

Reintroducing vegetables and horticulture into rotations, integrating agroforestry, and producing your own feed all reduce exposure to volatile international markets.

The tools and practices listed here should be taken as part of a broader toolbox at your disposal. Please refer to the paper itself for more detail, or get in touch with us if you would like more information or resources.

Our Choice Ahead

„Most farmers I know are working flat out and still carrying the risk for everyone else. It's high time we stop talking about these problems one at a time. Fertiliser, TB, water, the weather, young people not coming in. It's all one conversation. When one in three farmers say they're thinking of getting out, that's not a statistic to me. That's my neighbours. We can't keep asking people to carry all the risk and then wonder why nobody wants to take over.“

Michelle Donnelly, regenerative farmer together with her husband Cathal Donelly, Mulroy Meadow Farm, Co. Donegal

The real expense is inaction. In the report we show, a conservative reduction in imported inputs alone, **modelled from established regenerative farms, is projected to be able to save roughly €9.1 billion in just 4 imported inputs over six years.** Reducing this dependence through regenerating forms of agriculture does need to come at the cost of yield, but at the resilience

gains.

Funding the regenerative transition is not wasted money, it secures the future of Irish agriculture and national food sovereignty and nutrition security. It secures the resilience of farm incomes. It is about whether farming becomes a viable, attractive future for the next generation and whether our land, our water, our animals and our communities can thrive together.

It is possible to transform Irish agriculture to a more resilient, profitable, and socially cohesive sector. One practice, one growing season, one learning at a time. At the core of regenerative agriculture is the concept of ongoing improvement, for ourselves, and for future generations.

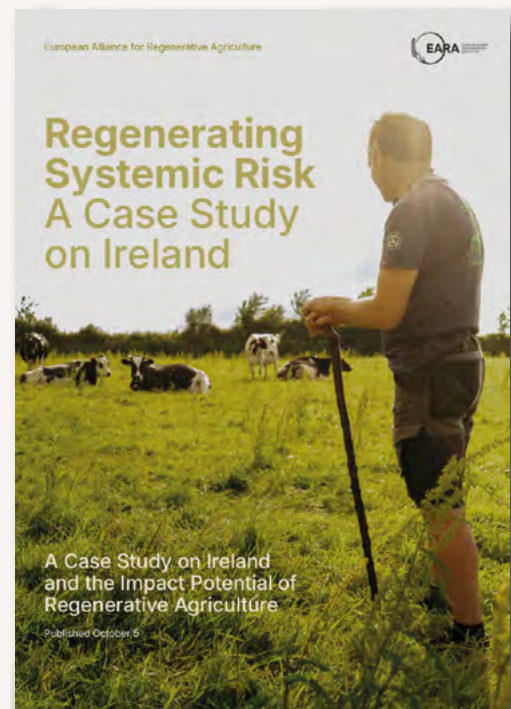
Let's keep regrowing Irish farming, from the ground up, finding unity through agricultural and social diversity, from communities of Irish farmers, neighbours and friends.

An té nach gcuireann san earrach, ní bhaineann sé san fhómhar

He who does not sow in spring will not reap in autumn

To access the full report visit and read up on the impact potentials of regenerating forms of agriculture for a strong, resilient Ireland visit our website under the link.

→ [Read the report](#)



Acknowledgments

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About the European Alliance for Regenerative Agriculture

The European Alliance for Regenerative Agriculture is the independent, farmer-led coordination, advocacy and collective action organisation of the movement of regenerative agriculture at the European level. EARA is striving to enable the transformation of our agrifood ecosystems through accountable ecological, economic and social regeneration.

More information can be found on our website at www.eara.farm

EARA is independently funded through mission-aligned, politically independent philanthropic partners and maintains no corporate or industry ties, ensuring our work remains farmer-led and free from commercial interests. We never accept funding that could have an influence on EARA's strategy or decision-making. All our funders decisively support EARA's farmer-led decision-making.