

## By Carlos Agnes, SYSTEMIQ

## "Mother Nature, Father Profit, and a Rebirth for Agriculture"

Last year I had the privilege of visiting a group of regenerative farmers in southern Spain - a region with a long history of farming and grazing, but challenged by a warming climate, recurring drought and rural depopulation.

The farms were all different, but one common thread was the farmers' inspiration and drive to find a new way of producing food.

In a region with a declining population, that inspiration can be in short supply. I asked one farmer: why did you make the switch to regenerative farming? If you couldn't get a premium for your products, would you go back to farming the way you did before? "No", she said, "but if it was clearer we could somehow earn more than before, we would not need so much convincing to start".

This is a central challenge of regenerative food systems. Many food producers that I spoke to know they operate in a system that has made food cheap at the cost of soil health and the resilience of crops and livestock. But this awareness doesn't always lead to action - especially when the economic benefits of change on farms, which are already facing financial instability, are unclear.

Many farmers feel stuck. They cannot afford to risk changes that may not pay off.

Safeguarding farmer livelihoods is therefore crucial to the success of any transition looking to restore natural systems.

So, the question is: How would agricultural profitability, and the environment, be affected if all farmers working in the same agricultural landscape collectively adopted regenerative approaches, and what would the drivers of this change be?

To address this question, Regen10 will showcase a series of transition pathways over the coming weeks covering different regions and agricultural products.

These pathways explore the potential outcomes of moving five landscapes from conventional to regenerative agricultural practices. Critical to this process is understanding the economics of transitioning; estimating what it would cost farmers to make this change, and what they could gain from it; and determining the potential benefits or losses for the landscape over a decade. Additionally, the series will provide insights into accompanying environmental and social outcomes deriving from this change.

We'll be looking at the following key landscapes:



Country	Landscape	Focus Ag Product
Brazil	Querencia city	Soy & Beef
India	Punjab State	Rice
United States	North Dakota	Wheat & Maize
United Kingdom	East of England	Potato
New Zealand	Waikato Region	Dairy

## **Querência City**

We begin in Querência City, where large soybean and cattle farms coexist with ancestral indigenous territories at the Amazon frontier, leading to nuanced agricultural dynamics. Like its counterparts in Mato Grosso state, Querência grapples with interconnected environmental, economic, and social challenges:

- Monoculture farming and extensive cattle ranching dominate, resulting in degraded pastures and legal forest reserve deficits.
- Economic pressures, including stringent deforestation regulations and dwindling cattle profitability, cast shadows over the region's prosperity.
- Social tensions exist around Indigenous land rights and rapid population growth.

The alternative approach we've modelled for Querência centres on integrating crop, livestock, and forestry systems. It seeks not to prescribe an approach, but to find a feasible equilibrium between regenerative ambition and practicality in the local context that can be further enhanced over time.

Integrated livestock and forestry systems, such as agroforestry, could boost cattle productivity, diversify income with timber production, and curtail land encroachment. The "boi safrinha system," which integrates crops and livestock on soy fields, can boost the weight of livestock and improve soil health, while restoration of forest legal reserves fosters biodiversity and compliance with Brazil's Forest Code legislation.

Economically, the modelled transition shows promise:

• Integrated agricultural systems could increase farmers' annual net income by 34% on average.

Over a decade, investments yield a net present value of \$471 per hectare.
The transition remains financially viable, even with forest reserve restoration.
Reduced input costs, resilient crop yields, new revenue from timber, and increased cattle productivity are main contributors to positive outcomes.

## Read the reports:

- View a summary of the analysis: EN PT
  - View the full analysis: **ENPT**