



**The Next Agricultural Revolution
is About Growing Affordable,
Nutrient-dense Food on
Regenerating Soils at Scale**

A growing body of evidence confirms that we can grow food at lower cost and, potentially, with greater productivity by aligning with natural processes. For years, debates about the future of food have had one underpinning assumption - a trade-off between the ecology and the economy. We have been told we can either have abundant cheap food, or we can have food grown in a nature-friendly way, but in smaller quantities and it will cost more. The need for trade-off no longer exists. In short, we no longer need to dominate nature with the tools of industrial farming in order to grow affordable food at scale.

A 12,000-year story of ecological destruction

Little did Neolithic growers in the Levant in 9,500 BC know that they were unleashing a cycle of destruction of the soils on which we depend for our existence. In many areas of the world, rich farmland eventually turned to desert and our ability to continue growing food has depended on figuring out ways to repair the damage to keep the practice of extractive nutrient harvesting going. In modern times, our efforts to dominate nature have benefitted from the availability of abundant cheap energy which unleashed the full power of the industrial revolution and everything that has flowed from it. The result is a global resource-intensive and input-intensive industrial farming system. It is a game of high cost and (in theory) high yields at a relentless ecological cost. Whilst we have broadly succeeded in producing enough food to sustain a population explosion from less than 1 billion in 1800 to nearly 8 billion today, the impact on water cycles and biodiversity have both been catastrophic. And then there is the elephant in the room: catastrophic global heating. Agriculture and the transport impact of food supply chains are responsible for 25% of all greenhouse gas emissions globally.

At the heart of this tragedy is that conventional farming is a process which uses up the key asset – the soil. Every seasonal cycle of ploughing, monoculture, chemical fertilizers, and pesticides leads to both loss of soil through erosion, and the degradation of what remains. In the UK, for example, Government analysis concludes that they have lost over 80% of all topsoil in less than 150 years. It does not have to be like this. International evidence of the potential for an agroecological revolution is compelling. From large scale organic sugar production in Brazil to both arable and livestock farming in the Midwest of the USA, a consistent picture has emerged. The legacy we have created through industrial agriculture is that much of our so-called ‘soil’ is, in reality, biologically dead dirt. It is literally lifeless.

“Soil dysfunction also impacts on human and animal health. It is sobering to reflect that over the last seventy years, the level of every nutrient in almost every kind of food has fallen between 10 and 100%. An individual today would need to consume twice as much meat, three times as much fruit and four to five times as many vegetables to obtain the same amount of minerals and trace elements as available in those same foods in 1940.” **Dr Christine Jones**, Soil Scientist and Founder of Amazing Carbon

Modern soil science provides insights into how to harness nature to fix this, and indeed, why we should.

Farming Secrets says: The Game Of High Cost And High Yields At The Cost Of Ecology Has To Stop

Ref: <https://www.newfoundationfarms.com/regenerative-agriculture/why-would-a-sane-society-support-ecologically-destructive-food-production-when-it-isnt-necessary/>