

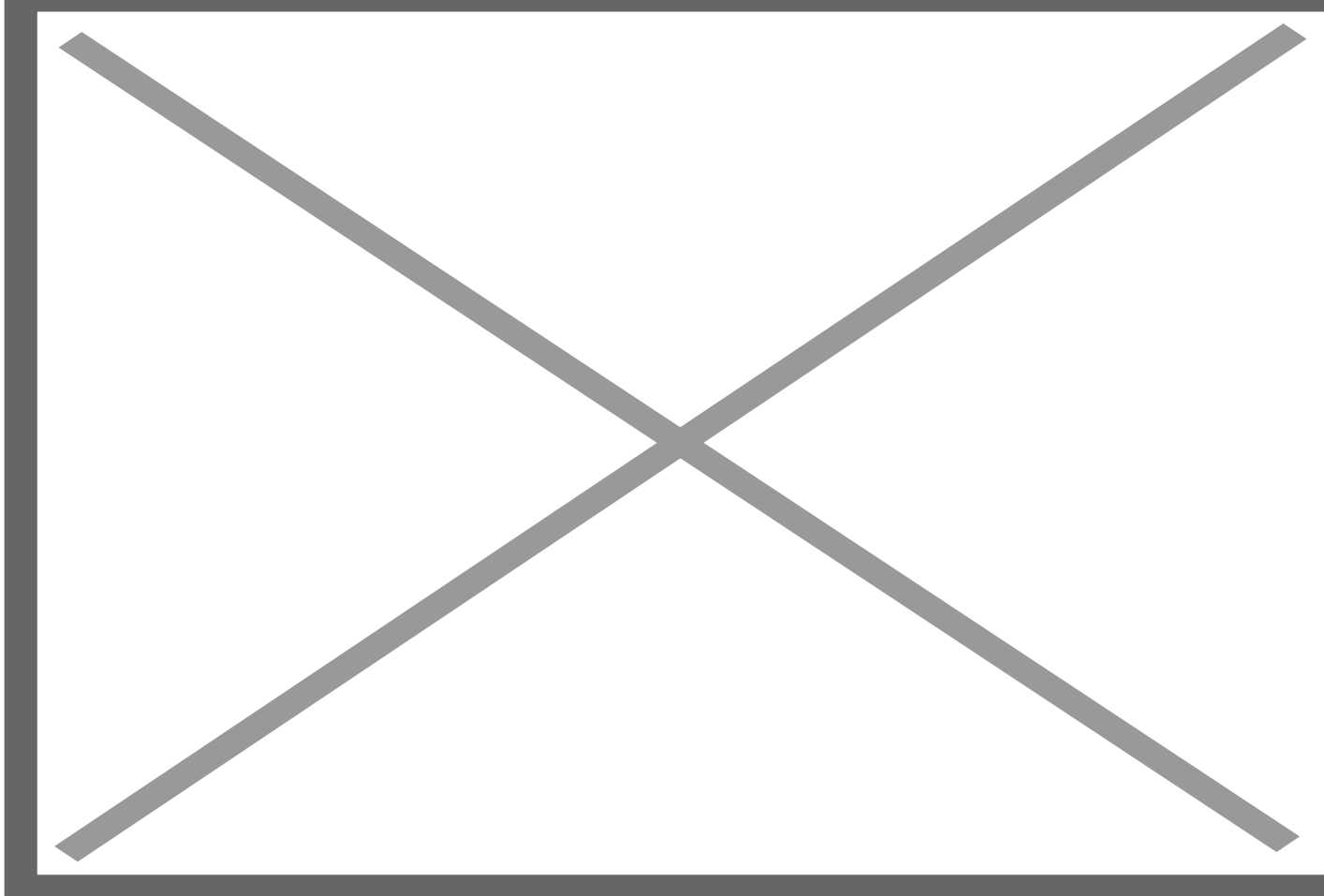
Viewpoint: 'Britain must address the madness of its organic-obsessed, science-denying agricultural system'

When the Ethiopian famine finally ended in 1985, with a million people dead, nobody expected it to be the last great famine for more than three decades. In defiance of almost all predictions, mass famine has almost entirely vanished from the face of the earth as a cause of death, North Korea excepted. In the 1960s famine killed 100 times as many people, per head, as in the past decade.

Though hunger persists among the world's poorest, the world is better fed than ever before, despite the human population doubling since the 1960s. Even more remarkably, this has been achieved without ploughing extra land. Leaving aside the increasing amount of land devoted to the nonsense of growing biofuels, then there is less land farmed today than 50 years ago.

If we tried to feed today's nearly eight billion people on the average agricultural yields of 1960, when most farming was organic, then instead of farming less than 35 per cent of global land we would need to farm over 85 per cent. Cut down the whole of the Amazon rainforest, drain every marsh, clear Siberia of trees, irrigate much of the Sahara – we still could not do it.

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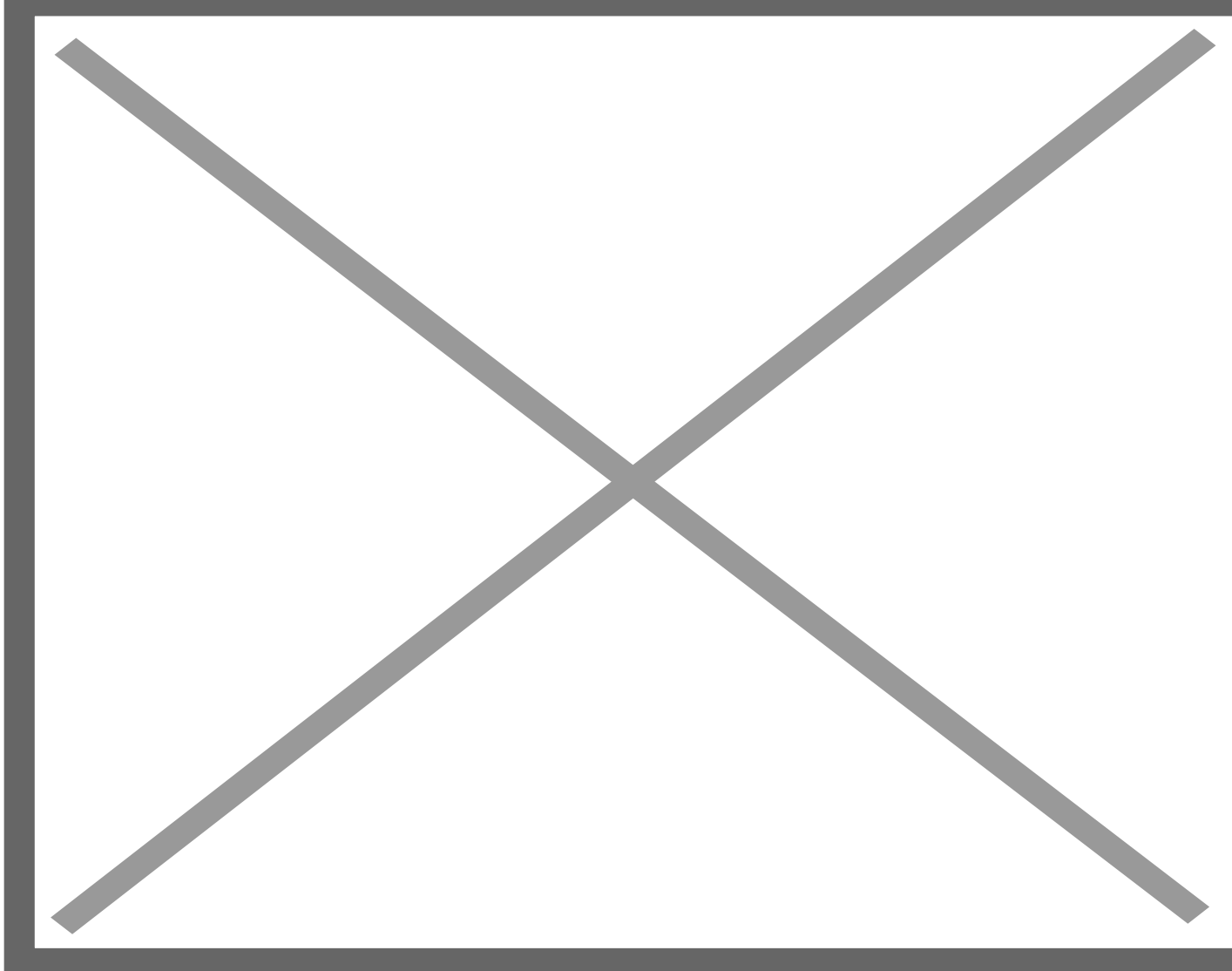
This isn't enough land to feed the growing population securely. Credit: MAAP

Feeding the world was made possible by synthetic fertiliser and genetic science. Half the nitrogen atoms in your body came via ammonium factories, many of them in Russia. So successful has it been that we have grown complacent, thinking we can return to older, less productive ways and turn up our noses at the latest advances in genetic science.

The Government's recent agriculture bill said little about food security while the EU's Farm to Fork strategy was all about producing less food, not more. Influenced by the mystical warblings of Vandana Shiva, the Sri Lankan government recently forced organic practice on all its farmers. The result is a collapse of yields, a financial crisis, hunger and a political and humanitarian crisis.

The Russian blockade of Odesa and Mariupol, cutting off the plentiful wheat that usually flows from the rich, black earth of Ukraine, threatens the greatest food crisis in decades. When supplies run out, North Africa, heavily dependent on Ukraine's exports, will be a political powder keg. With food prices rising fast, northern England may be not that much different.

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Ukraine's productivity has been dramatically affected by the war. Credit: USDA

Had we adopted genetically modified crops 25 years ago, today European farmers would be getting higher yields, with lower emissions, less use of chemical pesticides and greater biodiversity in their fields. We know this because that is the experience of farmers who did adopt those crops elsewhere.

The food our farmers produced would be safer, more nutritious and healthier because that is what the scientists are making elsewhere and were on the brink of doing to the varieties we grow here before the rug was pulled out from under them. That technophobic lurch was based on entirely false fears. "Science has not evidenced any harm from use of GM crops," concludes an authoritative recent study by Spanish scientists.

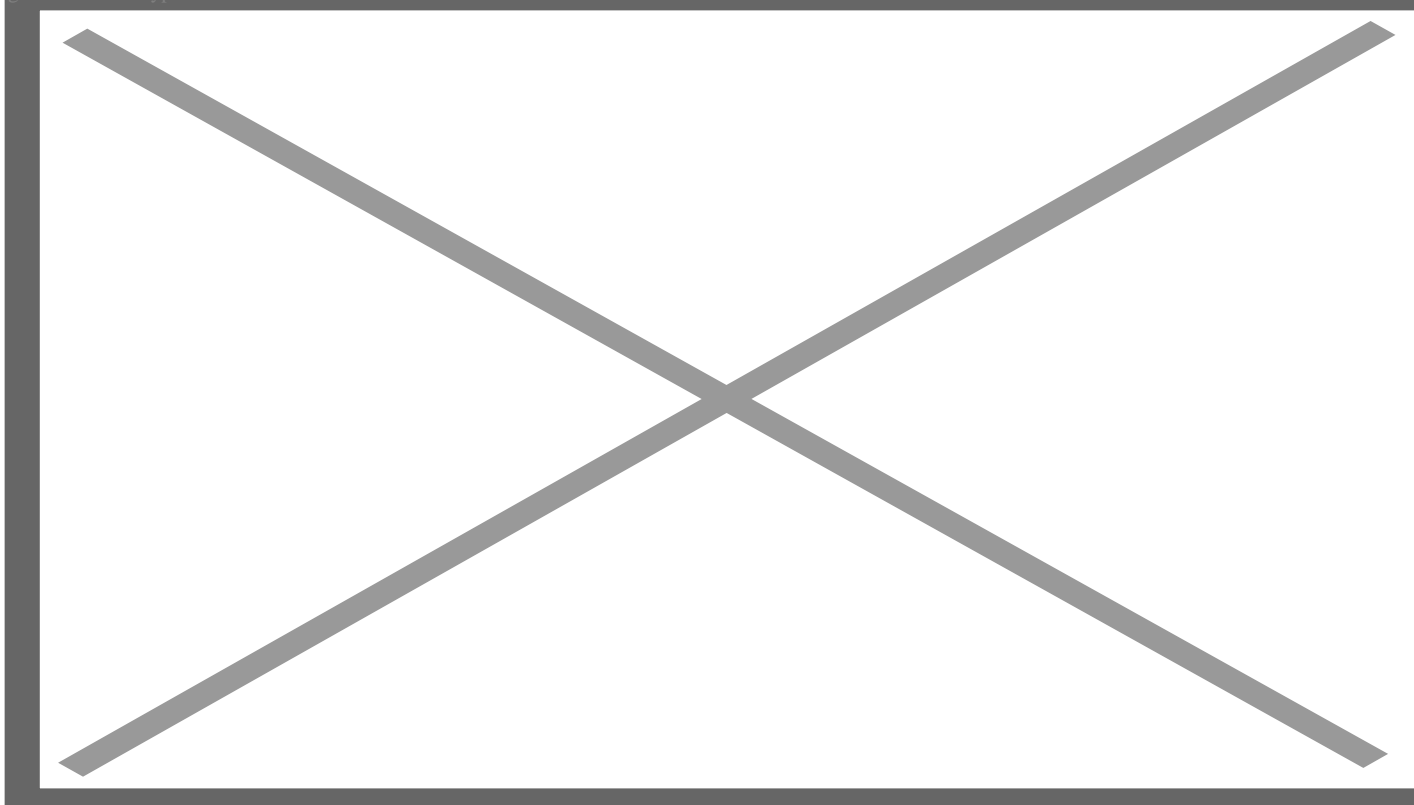
The British Government is taking a welcome step to reverse this madness, by allowing trials of gene-edited plants, with the power to extend this to animals in the future. This means that instead of – as now – generating random mutations in crops with gamma rays, then hoping to find better varieties among

the mutants, geneticists will be allowed to use so-called Crispr enzymes, adapted from bacteria, to tweak the genetic codes of plants in precise and predictable ways.

It would be logical next to ease the path for genetically modified, or “transgenic” plants, given the abundant evidence of their safety. This would allow farmers to drastically reduce the fungicides sprayed on potatoes and cut emissions from ploughing: to be genuinely “organic”, in short. The public is now mostly on side for GM crops, but politicians and officials are still wary of a few diehard activists fighting the last war.

We are not just lagging behind America, Argentina, Australia and China in applying a green technology, much of which was invented in Britain – but parts of Africa, too. Nigeria, Ghana and Kenya are moving to adopt GM crops and seeing great results when they do. Insect-resistant cowpea, for example, has four times the average yield of conventional varieties.

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The rest of the world is passing the UK in gene-editing because of the regulatory environment. Credit: CSIRO

In a world facing potential mass starvation, farmers have not just an incentive but something approaching a duty to be productive. If you watch the BBC you would probably get the impression that much of British farming is “organic”: ie, without synthetic fertiliser. In fact, less than three per cent of UK farmland caters to the worried wealthy in this way, but there is constant pressure on farmers to go down that route. Yet farming with synthetic fertiliser is not only economically wise, it’s ecologically good too. Studies by Professor Andrew Balmford of Cambridge University show that per unit of food, productive farming spares more land for nature, thereby increasing biodiversity, and generates fewer emissions.

The urgent need for technology and innovation to support productive farming is why this week I have joined a group of politicians, scientists and environmentalists to set up Science for Sustainable Agriculture, which will warn against a policy drift towards lower-yield farming, while pressing the Government to put science at the heart of Britain’s food policies.

**Matt Ridley, a former member of the House of Lords, is a journalist, author and farmer known for Euroskeptic and anti-authoritarian views. Visit Matt Ridley’s Twitter [@mattwridley](#)**

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