

We have a broken global food system that is ravaging both the planet and our health. But technology can help us to change our ways

A food supply crisis lies behind the headlines this summer of record high temperatures, wild fires and water shortages. Farmers in the UK are seeing two-thirds of the rainfall they normally would in the driest summer since 1976 and Europe is baking. The way we currently feed ourselves isn't just killing the planet, it's killing us too and we only have ourselves to blame.

We've spent decades building and fuelling a hugely damaging food supply system, almost with reckless abandon. We've turned swathes of land into pasture for greenhouse gas-producing cows. We fell rainforests to grow soy to feed those cows. We give them drugs that end up polluting water tables. Farmers grow crops that consume huge volumes of water in areas with limited

resources. They spray pesticides which damage soil health and entire ecosystems, and we transport food over vast distances.

We've caused such devastation that a major new UN report has found that food systems account for 80% of the planet's deforestation, 29% of greenhouse gas emissions, and the largest proportion of biodiversity loss.

What's more, we've created a nutrition-related health catastrophe worldwide. Most of the food our ravaging supply system produces is processed and bad for us. The odds are currently stacked against anyone who is trying to lead a healthy life. Meat comes laced with antibiotics, while most packaged foods contain heaps of added sugar. This has directly led to epidemics of diabetes, heart disease, and much more.

Yet just as we caused this mess, there are glimmers of hope that we, as a society, can get ourselves out of it. We just need to look beyond the obvious to do so. Many young people love using Ecosia, a search engine and rival to Google that plants trees with every search.

Beyond the obvious

Infarm, an agritech company Balderton backed in 2018, may not have been an obvious choice for a tech-focused VC. At face value, a company growing salad hardly looks like a game changer yet in just four years, it's become Europe's first vertical farming unicorn. This is because of its wider mission to bring growing closer to the consumer. In doing so, it reduces land coverage, optimises nutritional impact, and saves on water. Longer-term, Infarm has the potential to produce on a mass-market scale, offering eco-friendly greens, fruits and more to families at an affordable price, all grown close to the point of consumption.

Looking forward

Looking forward, the most impactful investments will be those that address both the climate and nutritional crises in one fell swoop. Thus creating a win-win situation where we can look after ourselves in a better way and look after the planet at the same time. Again, we may not find these companies in the most obvious places. Companies like Too Good To Go, a marketplace for food waste, which allows restaurants, bakeries and supermarkets to sell excess food (often the healthier non-processed food items) at a discounted price by the end of the day instead of throwing it away. One third of food produced globally is wasted, and it happens in all steps of the value chain – from the farm to our own fridge. Too Good To Go's mission is to fight that, while giving consumers access to high quality produce at a lower price point.

People are not going to stop eating meat, despite its impact on the planet, so it's critical that we find solutions that meet this need while improving nutrition and reducing its damage to the planet. The obvious answer, being given by many startups, is cultivated meat which startups like Higher Steaks are working hard to develop. It has the potential to slow down antibiotic resistance and decrease the environmental impact of the meat industry, while improving animal welfare on a large scale. However, it's not yet ready for the mainstream. It will require new, scalable research methodologies that will allow for larger quantities at more reasonable price points to break through. In this way, investments in the technologies deep behind these methodologies, or even the regulations surrounding it could prove to be the non-obvious choices. All while being the most impactful.

One note of caution is that we have more capital flowing into software 'platforms' – including diversity impact startups – than into companies that are actually solving the underlying environmental problems. But software doesn't move or feed people, neither does it capture Co2. We need both, and with more efficient financing structures, we could see more vertically integrated models become successful.

It takes a village to raise a child

The venture sector is good at rapidly deploying money into areas with huge potential and upside, yet often the sources of this potential can be hidden, or appear less obvious. Investors need to find ways to put more money into tech that will have a beneficial impact on the planet and help us get closer to Net Zero. They need to demonstrate their commitment – as larger asset allocators are – to playing a part in tackling the climate crisis and helping create the change that our planet urgently needs. Only in this way can we truly be the drivers of change, and can we attempt to reverse the damage we have done.

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