A crisis of our own making

Hunger and food insecurity are on the rise worldwide, fueled by conflict and inefficient practices. But will the push for greater sustainability in agriculture end up taking the rap? Ben Payton investigates

ecent years have seen a growing recognition of the need for change in how the world's food is produced. The big agrifood conglomerates have been lining up to highlight their commitment to 'regenerative' agriculture, and more and more capital is now being directed towards supporting smallholders in developing countries and avoiding the pitfalls of monoculture production.

However, policies that seek to reduce emissions and mitigate other environmental and social impacts from agriculture have received ferocious pushback over the past few months, especially in Europe. In March, for instance, as farmers blockaded roads and sprayed manure across the streets of Brussels, EU leaders agreed to backtrack on key parts of their proposed Green Deal.

After all, the mainstream focus on sustainability has come at a time when food insecurity is an escalating threat. Warnings of famine in Gaza may have dominated the headlines, but hunger is actually a growing concern all around the world. The UN's Food and Agriculture Organization (FAO) says that some 280 million people experienced hunger on a daily basis last year.

It is easy to see why regenerative agriculture might be considered a dangerous distraction from farmers' core mission: feeding the world, especially given a rising global population.

Darren Rabenou, global head of food and agriculture in UBS Asset Management's real estate and private markets team, says that politicians have sometimes failed to recognise the "unintended consequences" of policies that aim to address sustainability issues in food production. Farming regeneratively, sourcing produce locally and ensuring traceability in supply chains might be good concepts, he notes, but they can have a negative impact on affordability.

And while consumers might say they want their food to be produced more sustainably, adds Rabenou, "what they have not shown is a willingness to pay more for it."

Hunger crisis

So, is it time to pen the obituary for regenerative agriculture? Not quite. While it is easy to assume that rising



food insecurity means that the world requires a headlong rush for higher yields and expanded acreage, the reality is that food crises are almost always tied to political upheaval. The famine in Gaza is, of course, the direct result of conflict. Most other places where food insecurity is currently most acute - including Haiti, Sudan and Yemen - are also racked by armed violence.

As well as conflict, hunger is also worsened by the difficulties in



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Tikehau Capital

transporting and storing food in the poorest countries. And that is before you even consider the effects of climate change - more frequent and severe droughts, especially - which are making it increasingly difficult to meet food needs with local production in many areas. More resilient agricultural practices, then, will almost certainly have to be part of the solution.

"Given the rising threat of food insecurity globally, there is indeed a pressure to maximize food production, sometimes at the expense of other environmental priorities," says Laurent-David Charbit, co-head of Tikehau Capital's private equity regenerative agriculture strategy.

Nevertheless, he still sees a "continuous shift toward regenerative agriculture." Even if some governments considering backsliding sustainable policies, Charbit insists that other factors support the adoption of regenerative practices. For one thing, he says, FMCG companies that procure produce from farmers are often bound by emissions reduction targets that compel them to reduce Scope 3 emissions from their supply chains. Consumer pressure is another key consideration.

"The shift toward regenerative agriculture represents a fundamental and necessary revolution rather than a fleeting trend or niche pursuit," says Charbit. Consumers recognize the tangible benefits that come from regenerative practices, he adds, while farmers themselves "are increasingly cognizant of the detrimental effects of unsustainable soil practices on their assets."

Investing in food infrastructure

One other aspect of this debate is that there is, in fact, no global shortage of food - far from it. Globally, the average person receives almost 3,000 calories a day, according to FAO statistics; in the US, the figure is close to 4,000. This far exceeds the 2,500 calories needed by the average man, and the 2,000 calories required by the average woman.

The global food system is also characterized by colossal wastefulness. Around 30 percent of all food is wasted. And wasted food is responsible for at least 6 percent of all greenhouse gas emissions. If investors want to contribute to food security, then tackling waste and improving storage and distribution capacity are more pressing goals than simply producing more food.

This requires better infrastructure. "Infrastructure, as it relates to food, is critical to everything, because it has a direct correlation with the cost of that food," says Rabenou. "If you have better infrastructure, you have less food waste. If you have less food waste, you have a positive impact on the environment."

UBS AM, for instance, has invested in cold storage facilities in Texas with the aim of reducing wastage in fruit and vegetables imported from Mexico.

Analysis

Improving our ability to freeze fruits and vegetables also has nutritional benefits, Rabenou says.

Many other investors are also looking for different ways to tackle waste. "Food waste occurs across the value chain, which creates opportunities for a variety of investments targeted toward this challenge," says Kevin Schwartz, CEO and managing partner of Paine Schwartz Partners. He agrees that storage and transit are key priorities, adding that "genetic innovation" also has a "significant role to play in combating waste," with improved crop varieties potentially lasting longer and proving more resistant to disease.

Daniëlla Vellinga, investment director at Netherlands-based Rabo Investments, emphasizes that both regenerative practices and high-tech solutions that make production more efficient are needed. To build a more sustainable food system, "holistic practices that integrate efficient food production with sustainable practices that are less emitting and that protect biodiversity will be key," she says.

Boosting resilience

Nevertheless, the pushback against regenerative practices – especially if they lower yields, even temporarily – could well become more intense as the global population continues to rise.

The UN expects the world's population to reach 9.7 billion by 2050 – an increase of almost 20 percent from 2024. How much food is needed to feed these extra mouths will depend partly on the success of efforts to reduce waste. Another key factor will be the ways in which diets change, especially in the fastest-growing countries.

Juan Carlos Mendoza, director for environment, climate, gender and social inclusion at the UN's International Fund for Agricultural Development (IFAD), argues that we need to focus not just on how much food we produce, but on what types of food we eat.

"We have many countries where we go from malnutrition due to low calorie intake, to poor nutrition including obesity – it can happen very quickly," he says. Rather than "expanding the agricultural frontier," Mendoza calls for a focus on more efficient distribution and on the production of a diverse range of nutritious crops.

The IFAD is mandated to support smallholder agriculture, and Mendoza notes that smallholders help to bring more diversification to food systems. In some cases, they are better equipped to respond to shocks, he says, noting that industrial farms have struggled with heightened fertilizer costs arising from the war in Ukraine.

The challenge now is to strengthen Mendoza "publicwhat calls private-producer partnerships," enabling smallholders to access better infrastructure and secure more durable contracts with offtakers. Large-scale investors in the agri and infrastructure sectors have traditionally shied away from working with smallholders. But Mendoza says the IFAD is supporting aggregation and standardization to help address the familiar complaint that small ticket sizes make investment unviable.

One manager that has decided to invest indirectly in smallholder

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agriculture is Hong Kong-based private credit investor ADM Capital. Lisa Genasci, managing director, says the firm launched its Asia Climate-Smart Landscape Fund last year with the aim to "improve sustainability in the small-holder supply chain and decouple agribusiness from deforestation."

She explains that the fund will lend to agri-processing firms that procure crops from smallholders in Indonesia. Loans will be conditional on companies ensuring good environmental and social practices in their supply chains. "Companies approach us because they know they have to transition, but they have no idea how to do that and they need financing," says Genasci.

ADM Capital is aiming to deliver returns of 8-10 percent through the fund, which has a \$200 million fundraising target. The firm aims to "show what we can do with the first few transactions," says Genasci, "then we hope that others will see that actually we can provide a commercial investment vehicle that delivers returns and impact in the agrifood sector."

Time for a rethink

Ultimately, the growth of regenerative agriculture practices, alongside all the other strategies that aim to combat deforestation and support smaller agricultural enterprises in emerging markets, reflects the dysfunction inherent in the status quo.

Indeed, it is hard to spend much time looking at the global food system without concluding that a major course correction is needed. The pushback against efforts to address the negative environmental and social impacts associated with agriculture "completely ignores the fact that our climate is changing, whether we like it or not," says Genasci.

"We live in a world of limits. Our resources are finite. If we continue to deplete them, we won't have those resources anymore. We absolutely need to figure out how to manage our food systems more efficiently, with less land to feed more people."