



Sources	FastCompany		
Date	July 2021		
Potential scale of impact	Certainty of outcome	Impact horizon	
★★★★☆	★★☆☆	H1	H2 H3

Across farms worldwide, there are now [warning signs of a pandemic in food crops](#). More than 600 pest species have developed some form of resistance to pesticides; and climate volatility is intensifying threats to supply chains. With global food supplies vulnerable and food prices at their highest in almost a decade, a plant pandemic could push more people into poverty and cause social unrest. The agricultural industry must harness the urgency with which scientists responded to COVID-19 to get ahead of a full-blown crop pandemic.

The industry can develop solutions now by investing in cutting-edge technologies and prioritising safety in their design. For example, [CRISPR](#) - which could revolutionise human healthcare - will play a key role in crop health. Scientists are already using gene editing to develop more resilient seeds and plants that can sequester more carbon. Other technologies that originated in pharma, like [targeted protein degradation](#), also have promising applications in agriculture, from helping control weeds to addressing how intrusive plants are becoming resistant to current agricultural methods. Tech governance should strike a balance between prioritising safety and supporting these innovations, not dampening them. New technologies designed with safety in mind will meet regulatory standards sooner and get into growers' hands faster.

During the pandemic, unclear communication from health authorities and misinformation led to [widespread distrust](#) of COVID-19 vaccines. The agricultural industry has faced similar challenges. Its lack of transparency with consumers about concepts like organic farming and GMOs have led to misunderstanding and distrust with serious consequences. Some organic farms are causing more environmental harm than good, and the backlash against GMOs has undermined progress toward more resilient crops.

Rebuilding consumers' confidence in its innovations requires the agri industry to trust that the public can handle the facts. That means [sharing more information](#) on the safety and environmental impacts of its practices than regulators require. Companies should also translate complex science into ideas that a layperson will understand and care about. Tools like gene editing and selective chemistry will only work if consumers understand them and the agricultural industry is transparent about their safety and effectiveness.

**LEARNING FROM COVID**  
 Consumers need to understand safety and supply issues if they are to be effective. And it's urgent that they do