

Precision agriculture, satellites and drones critical to feed 800 million food-insecure people

The Covid-19 pandemic has highlighted the fragilities in our agri-food systems and the inequalities in our societies, driving further increases in world hunger and severe food insecurity. Up to 828 million people were affected by hunger in 2021, an increase of 150 million from 2019.

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The world needs to produce more with less, with more quantity, higher quality and more food diversity, but with less inputs and less impacts on the environment. The only solution is science and innovation, enabling policies and increased investment.

We are witnessing a revolution in science and technology that is moving at an incredible speed. For example, genetic improvement of crops and livestock, innovations in breeding methods and gene-editing technologies offer significant potential to develop crop tolerance to biotic and abiotic stresses, and resistance to pests and disease.

Precision agriculture covers a range of technologies that generate and analyse data to help farmers understand how much water and fertiliser they need and when. Using algorithms that combine information from satellite imagery, drone footage, weather forecasts and data from sensors in the soil, farmers can understand day by day and field by field how their crops are doing and what inputs they need and when.

[**This is an excerpt. Read the original post here**](#)