

## China's DJI Agriculture uncovers emerging global industry centered on agricultural drones

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The new findings from DJI Agriculture, revealed a maturing global industry built around agricultural drones that's poised for the next phase of growth. Increasingly, regional aviation authorities are implementing friendlier policies to accelerate precision farming and smarter crop protection technologies worldwide. The studies suggests that, standardization for pilot training has also driven an influx of young people and women. At the end of 2024, 400,000 DJI Agriculture drones were estimated to be in use globally, up 90% from 2020. The report indicates that, adoption of drone technology has saved approximately 222 million tons of water and reduced 30.87 tons of carbon emissions. DJI, the world leader in civilian drones and creative camera technology, presented its fourth annual Agricultural Drone Industry Insight Report at Brazil's Agrishow 2025 in São Paulo.

"Agricultural drones have become essential farm equipment around the world. Thanks to research-based policies and a clearer process for operator training, adoption among young people and women has grown significantly," stated Yuan Zhang, Head of Global Sales at DJI Agriculture.

### Research-based policies accelerating adoption

Agricultural drone usage continued to expand throughout 2024. Some countries are transitioning from limited testing to formal application, while others are expanding from single-crop applications to broader applications across various crops. This is

largely thanks to smarter rules by local aviation authorities. For example, Argentina reduced restrictions for drone deployment in agricultural areas, while Spain simplified the approval process for using agricultural drones. At the same time, some countries, like Brazil, have further standardized the process for pilot training, thereby making it easier for people to operate spray drones legally.

### **DJI Agriculture advances anti-drift features and design for spray drones**

Limiting drifting continues to be a challenge for pesticide application across all methods: spray drones, traditional aircraft, and ground-based equipment. However, DJI Agriculture has optimized its drone's nozzle design and airflow dynamics following extensive drifting tests conducted in collaboration with various global partners from 2021 to 2024. The company has also shared best practices for minimizing drift, including recommended low wind speed conditions, appropriate flight altitudes, and droplet sizes based on different pesticides and field conditions.

### **Case studies for spraying, spreading, and orchard management**

DJI's Agricultural Drone Industry Insight Report features several new case studies for spraying and spreading applications for corn, coffee beans, canola, sunflowers, rice, bananas, and vineyards.

- **Growing Coffee in Brazil with Drones:** Using the DJI Agras T40 and Agras T50 drones to apply pesticides, fungicides, and foliar fertilizers, operational costs for coffee bean growers were reduced by 70% compared to manual spraying and 50% compared to tractor spraying.
- **Best Practices Rice Spreading with Drones:** Working with rice farmers around the globe, DJI has documented several considerations for spreading rice. This includes adjusting flight altitude and the spreading disk speed based on route spacing, using a tractor to level and measure a terrain's height variations, and ensuring pre-germinated rice seeds do not exceed 3 mm.
- **Transforming Vineyard Management in Romania:** With the DJI Agras T50, an elderly vineyard owner reduced his chemical usage by half, from 241.64 liters to 111.94 liters. Instead of spending 3-4 days spraying, he only needed 2.5 hours. He could more effectively treat the crops on his sloped terrain with a spray drone, even after rain, than with a traditional tractor.

DJI Agriculture was established by DJI in 2015 with the mission to bring innovative drone technology to farming, making it more sustainable, efficient, and safer. DJI began investing in research and development for the advancement of spray drones in 2012, before it created a dedicated business unit for agriculture drones. Today, an estimated 400,000 agricultural drones are in use worldwide to treat more than 300 types of crops in more than 100 countries.