

Smart Farming

for optimizing the entire value chain players by leveraging AI and data analytics

CropScope



Challenge

The agricultural industry faces significant challenges in optimizing yield, managing resources efficiently, and mitigating risks. Traditional farming methods often rely on intuition and experience, leading to inconsistencies and vulnerabilities to environmental factors. Farmers struggle to access real-time data and insights to make informed decisions throughout the entire food and agriculture value chain.

A drive towards greater sustainability

- 01 Environmental Conservation**
Optimizing water use with data-driven irrigation and leak detection.
- 02 Waste Reduction**
Minimizing waste through precise nutrient application and targeted pest/weed control.
- 03 Soil Health Improvement and Productivity Enhancement**
Promoting carbon sequestration by recommending cover crops and tracking soil health.

Solution

NEC's CropScope cuts through agricultural challenges with AI and data. Empowering farmers across 11 countries for 14 crops, it delivers:

- **Real-time problem sharing:** Farmers pinpoint issues in large fields with location-specific alerts.
- **Data-driven decisions:** Remote sensing, satellite imagery, and field data generate suggestions for irrigation, pest control, and nutrient application.
- **Field-to-field comparison:** By comparing planting dates, varieties, and yield across fields, CropScope identifies areas for improvement.
- **Advanced crop disease treatment:** Predict disease outbreaks, receive suggested treatment plans, and get support for crop treatment tasks.

Benefits

With CropScope, farmers see:

- **Increased crop yields:** By leveraging data-driven insights for informed decision-making, farmers have seen significant improvements in crop yield, leading to greater profitability.
- **Enhanced resource management:** CropScope's data analytics optimize resource utilization, such as water and fertilizer, promoting sustainable farming practices.
- **Reduced risk and improved resilience:** Early detection of potential problems empowers farmers to take preventative measures, minimizing crop loss and ensuring a more resilient agricultural ecosystem.
- **Streamlined communication:** The platform facilitates real-time problem sharing and collaboration between farmers, fostering knowledge exchange and best practices across geographies.

More info

<https://www.nec.com/en/global/solutions/agri/index.html>

