

Smart Harvest Market Size & Share Analysis - Growth Trends and Forecast (2025 - 2030)

> ****Industry:**** AgTech, Precision Farming & Irrigation (Agriculture & Agribusiness)

> ****Source:**** <https://www.mordorintelligence.com/industry-reports/smart-harvest-market>

> ****Scraped Date:**** 2026-09-17

Executive Market Summary

Market Metric	Details
Base Market Size	USD 21.40 billion
Projected Forecast (2031)	USD 21.40 billion
Growth Rate (CAGR)	11.40 %
Largest Market Region	N/A
Fastest-Growing Region	N/A

Market Visualizations & Infographics

! [Major players in Smart Harvest industry](images/chart_2.png)

! [Smart Harvest Market (2025 - 2030)](images/chart_3.png)

! [Smart Harvest Market: Market Share by Component](images/chart_4.png)

! [Smart Harvest Market: Market Share by Crop Type](images/chart_5.png)

! [Smart Harvest Market CAGR (%), Growth Rate by Region](images/chart_6.png)

! [Market Concentration](images/chart_7.png)

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Comprehensive Research Analysis

Overview Points List Flex 49 Share Feature End

Market Overview

Study Period	2020 - 2030
Market Size (2025)	USD 21.40 Billion
Market Size (2030)	USD 36.70 Billion
Growth Rate (2025 - 2030)	11.40 %
Fastest Growing Market	Asia Pacific
Largest Market	Europe
Market Concentration	Medium

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Market Overview

Smart Harvest Market Analysis by Mordor IntelligenceThe smart harvest market size is estimated at USD 21.40 billion in 2025 and is projected to reach USD 36.70 billion by 2030, at a CAGR of 11.40% during the forecast period (2025-2030). Sustained momentum stems from growers embracing harvesting robots, machine vision, and edge AI analytics to counter labor scarcity, lower input waste, and meet retailer demands for pesticide-free produce. Hardware vendors dominate revenue as agricultural enterprises initially choose tangible robotic systems, then layer on software and services once proof of return is clear. Component costs are easing because imaging sensors and on-device processing chips now follow steep semiconductor learning curves, pushing per-unit prices down even while performance climbs. Competitive intensity is rising as traditional farm-equipment majors integrate automation platforms while pure-play robotics start-ups accelerate niche breakthroughs. Policy support from Europe’s Common Agricultural Policy, digital incentives to Asia-Pacific subsidy schemes, further underpins scale-up opportunities across both intensive greenhouse and increasingly challenging open-field environments.

Key Report Takeaways

- * By component, hardware led with 62.1% revenue share in 2024; software is on track for the fastest 15.1% CAGR through 2030.
- * By technology, robotic automation systems captured 48.3% of the smart harvest market share in 2024, whereas edge cloud and edge data analytics is projected to race ahead at an 18.3% CAGR to 2030.
- * By crop type, fruits accounted for 54.5% of the smart harvest market size in 2024, while nuts recorded the strongest 14.2% CAGR outlook to 2030.
- * By farm environment, greenhouse deployments commanded 58.2% of 2024 revenue, yet open-field systems are growing briskly at a 12.6% CAGR.
- * By geography, Europe retained 33.5% revenue leadership in 2024; Asia-Pacific is forecast to expand at a 14.2% CAGR through 2030.
- * Deere and Company, Trimble, Robert Bosch, CNH Industrial, and Agrobot jointly controlled 51% market share in 2024.

Key Market Trends

Global Smart Harvest Market Trends and InsightsDrivers Impact Analysis*

Driver	I (~) % Impact on CAGR Forecast	I Geographic Relevance	I Impact Timeline
Labor-shortage-led automation push	+3.2%	North America and Europe	Medium term (2-4 years)
Government subsidies for farm robotics	+2.8%	Europe, North America, Asia-Pacific	Short term (≤ 2 years)
Declining sensor costs and IoT penetration	+2.1%	Global developed markets	Long term (≥ 4 years)
Rising demand for quality produce	+1.9%	North America, Europe, and urban centers in Asia-Pacific	Medium term (2-4 years)
Carbon-credit programs rewarding low-waste harvesting	+1.1%	Europe and California	Long term (≥ 4 years)
Edge-AI on-device processing reduces connectivity needs	+1.5%	Rural zones worldwide	Medium term (2-4 years)

Source: Mordor Intelligence

Competitive Landscape

Competitive Landscape

The smart harvest market shows moderate concentration, with the five largest vendors together controlling 51% of global revenue in 2024. Traditional agricultural-equipment manufacturers still anchor the field, but pure-play robotics specialists are scaling rapidly and diluting legacy dominance. Competitive intensity is rising as platform economics shift from one-off machine sales to data-driven recurring revenue. Vendor differentiation increasingly depends on integrating hardware, edge AI, and cloud analytics into seamless end-to-end offerings.

Incumbents expand their portfolios through heavy Research and Development and targeted acquisitions. Deere and Company committed USD 20 billion to autonomy programs and now embeds machine-vision modules across its harvesting line. Trimble broadened its guidance ecosystem by adding LiDAR-based fruit-picking software, while Bosch introduced a modular sensor suite that retrofits to third-party robots. CNH Industrial partnered with Bluewhite to deploy driverless orchard tractors in California, and Yamaha Motor’s 2025 purchase of Robotics Plus marked its formal entry into ground robotics after years in agricultural drones.

Specialist start-ups focus on narrow high-value applications to outmaneuver slower incumbents. Agrobot’s soft-grip strawberry picker runs robotics-as-a-service contracts that lower customer CAPEX, and Harvest CROO Robotics pilots swarm lettuce harvesters that reduce field time by 40%. Patent filings on end-effector design exceeded 200 in 2024, signaling rising entry barriers for newcomers without deep IP. Standards groups such as the Agricultural Industry Electronics Foundation push interoperability, yet most vendors still guard proprietary data formats. Overall, the landscape earns a concentration score of 6, reflecting solid yet not overwhelming control by the leading suppliers.

Smart Harvest Industry Leaders* Deere & Company

- * Trimble Inc.
- * Robert Bosch GmbH
- * Agrobot
- * Harvest CROO Robotics LLC.

* *Disclaimer: Major Players sorted in no particular order
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Component Component 3 Scope Of The Report Bottom

Global Smart Harvest Market Report Scope	By Component	Hardware Harvesting Robots
		Imaging and Sensor Suites
		GPS and Guidance Controllers
	Software	
	Services	

Segmentation Accordion Item

By Geography	North America United States
	Canada
	Rest of North America
	South America Brazil
	Argentina
	Rest of South America
	Europe Germany
	France

- | United Kingdom |
- | Italy |
- | Spain |
- | Russia |
- | Rest of Europe |
- Asia-Pacific | China |
- | Japan |
- | India |
- | Australia |
- | South Korea |
- | Rest of Asia-Pacific |
- Middle East | Saudi Arabia |
- | United Arab Emirates |
- | Rest of Middle East |
- Africa | South Africa |
- | Egypt |
- | Rest of Africa |

Frequently Asked Questions

What is the current value of the smart harvest market?

The smart harvest market size is USD 21.4 billion in 2025.

How fast is the smart harvest market anticipated to grow?

It is projected to register an 11.4% CAGR and achieve USD 36.7 billion by 2030.

Which component segment leads revenue generation?

Hardware dominates with 62.1% share, reflecting widespread adoption of physical robotic systems.

Which region is growing the fastest in smart harvesting?

Asia-Pacific shows the highest growth, expanding at a 14.2% CAGR through 2030.