

AI in Agriculture: Global Markets

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Abstracts

The global market for AI in agriculture is estimated to grow from \$2.8 billion in 2025 to reach \$8.5 billion by the end of 2030, at a compound annual growth rate (CAGR) of 25.1% from 2025 through 2030.

The agriculture industry is experiencing a major revolution due to widespread AI adoption along its entire value chain. AI has shifted from a futurist concept to a crucial strategic tool, impacting areas such as weather forecasting, crop monitoring, pest detection, drone pest control, food sorting and livestock monitoring. Beyond R&D, AI improves farming efficiency through predictive analytics and quality checks, revolutionizes crop management, boosts yield with precision farming, supports data-driven decisions, cuts costs for pest and disease control and labor, and promotes more sustainable farming methods. Although challenges like data integration, regulations and skilled workforce shortages persist, clear benefits and a growing number of applications highlight a trend where AI is becoming essential for innovation and gaining a competitive edge in agriculture.

The global market for AI in agriculture was valued at REDACTED billion in 2024 and is expected to reach \$REDACTED billion by the end of 2030, at a compound annual growth rate (CAGR) of REDACTED% for the forecast period.

Report Scope

This report presents qualitative and quantitative data on the current market dynamics and trends in the global market for AI in agriculture. The report also assesses recent technological developments and software performance. Analyses of the most popular software, new product approvals and emerging technologies are also included. The market prospects for four regions—North America, Europe, Asia-Pacific, the Middle East and Africa, and South America—are discussed. The report also includes profiles of

leading companies and their strategies.

This in-depth analysis of the global AI in agriculture market, emphasizing the major driving forces and emerging technologies shaping this rapidly evolving field, explores how AI transforms agriculture through enhanced technologies, such as drone-based and predictive analytics and crop monitoring. It also examines AI disruption across industry verticals and value chain stages, while presenting market spending patterns, investment forecasts, expenditures of major companies and venture capital funding in AI-driven technologies. The market is divided based on components, applications, technology and region. Based on components, the market is segmented into software, hardware and services. Based on technology, the market is segmented into natural language processing, machine learning, computer vision and predictive analysis. Based on applications, the market is segmented into precision farming, drone analytics, agricultural robots, livestock monitoring and others. For market estimates, data has been provided for 2024 as the base year, with estimates for 2025 and forecasts for 2025 through 2030.

Report Includes

42 data tables and 54 additional tables

Overview and an analysis of the global market for AI in the agriculture sector

Analyses of the global market trends, with revenue data for 2024, estimates for 2025, and projections of compound annual growth rates (CAGRs) through 2030

Estimates of the market's size and revenue growth prospects, accompanied by a market share analysis by components, technology, application and region

Facts and figures pertaining to market dynamics, opportunities and deterrents, technological advances, regulations, innovations and standards and the impacts of macroeconomic variables

Impact analysis of U.S. tariff laws on the industry

Insights derived from Porter's Five Forces model, as well as a global supply chain analysis

Case studies on AI implementation to improve processes and business

operations in the sector

Overview of sustainability trends and ESG developments, with emphasis on consumer attitudes, as well as the ESG risk ratings and practices of leading companies

Analysis of the industry structure, including companies' market shares and rankings, strategic initiatives, M&A activity and a venture funding outlook

Profiles of the leading companies, including Microsoft, IBM Corp., Deere & Co., Syngenta AG and Bayer CropScience

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AEROBOTICS PTY. LTD.

BAYER AG

CROPIN TECHNOLOGY SOLUTIONS PVT. LTD.

CROPX INC.

DEERE & CO.

EAGLENXT

ECOROBOTIX

GAMAYA

IBM CORP.

INTELLIAS

MICROSOFT

N-IX LLC.

SYNGENTA AG

TARANIS

TRIMBLE INC.

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