

Hydroponics Market Size & Share Analysis - Growth Trends and Forecast (2026 - 2031)

> **Industry:** Indoor Farming & Farm Mechanization (Agriculture & Agribusiness)

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

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

Executive Market Summary

Market Metric	Details
Base Market Size	USD 6.80 billion
Projected Forecast (2031)	USD 6.80 billion
Growth Rate (CAGR)	10.30 %
Largest Market Region	N/A
Fastest-Growing Region	N/A

Market Visualizations & Infographics

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

! [Hydroponics Market (2026 - 2031)](images/chart_3.png)

! [Hydroponics Market: Market Share by Production System Type](images/chart_4.png)

! [Hydroponics Market: Market Share by Equipment](images/chart_5.png)

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

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

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Comprehensive Research Analysis

Overview Points List Flex 49 Share Feature End

Market OverviewStudy Period | 2021 - 2031 |
Market Size (2026) | USD 6.80 Billion |
Market Size (2031) | USD 11.10 Billion |
Growth Rate (2026 - 2031) | 10.30 % |
Fastest Growing Market | Asia Pacific |
Largest Market | Europe |
Market Concentration | Low |
Major Players*Disclaimer: Major Players sorted in no particular order

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Market Overview

Hydroponics Market Analysis by Mordor Intelligence The hydroponics market size is estimated to be USD 6.80 billion in 2026 and is projected to reach USD 11.10 billion by 2031, supported by a 10.30% CAGR through the forecast period. Structural pressure on land availability, climate volatility, and rising water costs underpin demand as growers pivot from soil cultivation to closed-loop systems. While the greenhouse hydroponics dominate value creation, the indoor vertical farms segment is accelerating in response to an urban food security agenda that prioritizes year-round supply and short delivery radii. Government research grants, notably the United States Department of Agriculture (USDA) program, which allocates USD 10 million annually to controlled-environment studies, position hydroponic technologies as a mainstream food-security lever rather than an experimental niche [1] Source: U.S. Department of Agriculture National Institute of Food and Agriculture, "7 USC 5925g – Specialty Crop Research Initiative," NIFA.usda.gov. Retailers prefer pesticide-free produce that meets strict traceability standards, thereby bolstering the adoption of leafy greens while biopharma buyers pull herbs into a higher-margin trajectory. Competitive fragmentation persists because automation specialists and lighting innovators can still enter at different points in the value chain, even as larger operators expand their footprints to secure purchasing power. Carbon-credit monetization for low-emission produce adds a parallel revenue stream for growers who invest in renewable energy, creating additional momentum behind the technology.

Key Report Takeaways* By production system type, greenhouse hydroponics led with 68.3% of the hydroponics market size in 2025, while indoor vertical farms are forecast to expand at a 13.4% CAGR through 2031.

* By crop type, leafy greens captured 47.2% of value in 2025, and herbs and microgreens are projected to advance at a 12.6% CAGR to 2031.

* By production scale, large commercial operations held 55.8% of the hydroponics market share in 2025, whereas small systems are projected to grow at a 13.3% CAGR between 2026 and 2031.

* By equipment, lighting systems accounted for 49.5% of the hydroponics market in 2025, with climate systems projected to register a 12.8% CAGR through 2031.

* By geography, Europe accounted for 34.3% of the 2025 hydroponics market revenue, while the Asia-Pacific region is positioned for the fastest regional expansion at a 12.2% CAGR through 2031.

Key Market Trends

Market Trends and Insights Drivers Impact Analysis of Hydroponics Market | Driver | (~) % Impact on CAGR Forecast | Geographic Relevance | Impact Timeline |
Controlled-environment food-security initiatives | +2.1% | Asia-Pacific, Middle East, and North America | Medium term (2-4 years) |
Declining arable land per capita | +1.8% | Asia-Pacific and Middle East | Long term (≥ 4 years) |
Year-round output advantages | +1.6% | North America, Europe, and Asia-Pacific | Short term (≤ 2 years) |
Carbon-credit revenue stacking | +0.9% | Europe, North America, emerging Asia-Pacific | Long term (≥ 4 years) |
Pharmaceutical-grade ingredient demand | +0.7% | North America, Europe, and Asia-Pacific | Medium term (2-4 years) |
Urban wastewater-reuse regulations | +0.6% | Europe, Middle East, and Asia-Pacific urban centers | Medium term (2-4 years) |
Source: Mordor Intelligence |

Competitive Landscape

Competitive Landscape

The hydroponics market remains fragmented, allowing regional specialists and niche operators to thrive alongside larger players. Village Farms International Inc. leverages its 5.5 million-square-foot greenhouse footprint to lock in high-volume contracts across North America and Europe. Plenty Unlimited Inc. raised its profile through a USD 680 million partnership with Mawarid to build vertical farms across the Middle East. Gotham Greens Inc. and BrightFarms emphasize proximity production and automation to capture freshness premiums while trimming labor overhead.

Strategies in the hydroponics market primarily focus on three areas, including achieving cost leadership through scaled, controlled-environment systems, leveraging urban proximity with water-efficient hydroponic setups, and specializing in high-value crops through precise nutrient control. AeroFarms Inc. exemplifies the third strategy by utilizing hydroponic precision to produce pharmaceutical-grade biomass, adopting an R&D-driven model that positions the company upstream of traditional commodity produce. Equipment providers like Signify are addressing niche opportunities, focusing on the increasing efficiency of hydroponics-specific LED technology. Additionally, stricter regulations on nutrient discharge and carbon reporting are driving the adoption of closed-loop hydroponic systems. This trend is accelerating the integration of IoT sensors, AI-driven climate control, and recirculating water treatment technologies, while simultaneously increasing entry barriers for new players.

In the current hydroponics market, technology adoption has become a fundamental requirement rather than a competitive advantage. Operators failing to meet increasing standards for efficiency, traceability, and regulatory compliance risk losing retailer contracts. Meanwhile, well-capitalized companies are consolidating hydroponic capacity through mergers, joint ventures, and privatization efforts. This trend is exemplified by Village Farms International Inc.'s restructuring plans for 2025, which reflect the ongoing consolidation within the industry.

Hydroponics Industry Leaders* Gotham Greens

- * BrightFarms (COX Enterprises, Inc)

- * Village Farms International Inc.

- * AeroFarms Inc.

- * Plenty Unlimited Inc.

- * *Disclaimer: Major Players sorted in no particular order

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Scope Methodology P Space

The hydroponics market covers the value of soilless crop cultivation systems where plants are grown using nutrient solutions, with or without an inert medium, across commercial and smaller-scale controlled environments.

Scope exclusions: We exclude aquaponics and soil-based greenhouse or open-field cultivation, even if similar crops are produced.

Segmentation Container

- * By Production System* Greenhouse Hydroponics

- * Indoor Vertical Farms

- * Container Farms

- * By Crop Type* Leafy Greens

- * Tomatoes

- * Cucumbers

- * Peppers
- * Herbs and Microgreens
- * By Equipment* Lighting Systems
- * Irrigation Components and Pumps
- * Climate Systems
- * Automation and Control Systems
- * Structural Components
- * By Production Scale* Large
- * Medium
- * Small
- * By Geography* North America* United States
- * Canada
- * Rest of North America
- * South America* Brazil
- * Argentina
- * Rest of South America
- * Europe* Germany
- * Netherlands
- * United Kingdom
- * France
- * Spain
- * Rest of Europe
- * Asia-Pacific* China
- * Japan
- * India
- * Australia
- * Rest of Asia-Pacific
- * Middle East* United Arab Emirates
- * Saudi Arabia
- * Rest of Middle East
- * Africa* South Africa
- * Kenya
- * Rest of Africa

Frequently Asked Questions

How large is the hydroponics market in 2026?

The hydroponics market size is USD 6.80 billion in 2026 and is set to hit USD 11.10 billion by 2031 on a 10.30% CAGR.

Which production system leads revenue?

Greenhouse hydroponics contributes 68.3% of 2025 global sales, though indoor vertical farms are growing faster at a 13.4% CAGR.

Why are herbs and microgreens the fastest-growing crop group?

Pharmaceutical and nutraceutical companies pay premiums for traceable, contaminant-free herbs and microgreens, fueling a 12.6% CAGR to 2031.

Which region will grow the fastest through 2031?

Asia-Pacific leads with a 12.2% CAGR, driven by state investment in smart-agricu

lture programs across China, India, and Japan.