

# US Vertical Farming - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019 - 2029

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#### Report description:

The US Vertical Farming Market size is estimated at USD 3.56 billion in 2024, and is expected to reach USD 5.95 billion by 2029, growing at a CAGR of 10.80% during the forecast period (2024-2029).

Vertical farming is the process of producing crops in layers that are vertically stacked. The crops are produced under a controlled environment, which maximizes plant development, and soilless farming techniques such as hydroponics, aquaponics, and aeroponics are frequently used.

#### **Key Highlights**

-The growth of urbanization and the increased awareness of healthy foods in the country gave rise to vertical farming techniques, which produce crops in a controlled environment. Along with this, the rising popularity of organic foods is increasing the market for vertical-produced crops in the United States. Shrinking per-capita agricultural land, the rapid development of precision farming technologies, and high productivity within a small area are expected to drive market growth. While limitations on the types of crops grown and high initial investments can restrain the growth of the market. Currently, the United States has the highest number of vertical farms in North America.

-Among the crop types, fruits and vegetables accounted for a significant share, followed by herbs and micro-greens in 2021. vertical farming allows producing crops with 70 to 95% less water than required for normal cultivation. Fruits and vegetable crops like tomatoes, lettuce, strawberries, etc., are majorly grown under vertical farms in the United States.

United States (US) Vertical Farming Market Trends

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#### Hydroponics Dominates the Market

The United States is one of North America's largest markets for hydroponic systems, given the rising popularity of greenhouse horticulture and agriculture in the country. North America accounts for about 35% of the vertical farming market, and according to Agri Farming, more than 2,300 farms are growing hydroponics crops in the United States. The future growth of the hydroponics market in the country mainly depends upon the development of production systems that are competitive in cost with open-field agriculture.

Cultivating crops using hydroponics is also seen as a resort during extreme weather conditions. For instance, in the past, grocery stores have turned toward hydroponic farmers to meet their demands during harsh weather conditions. In addition to adverse climatic conditions, the increasing demand for organic produce is expected to boost the segment's growth. For instance, according to the Organic Trade Association, in 2021, organic food sales in the United States amounted to about 57.5 billion USD, which was 50.07 billion USD in 2019. Increased demand for greenhouse tomatoes and the legalization of medicinal plants, like marijuana, is expected to help further the market register rapid growth in the country. Rooftop hydroponic gardens in urban setups are also helping the market grow further.

Growing demand for organic fruits and vegetables

The desire and demand for organic fruits and vegetables in the United States have emerged as a response to a shift toward synthetic pesticides and fertilizers. For instance, according to the Organic Trade Association, the United States organic food sales accounted for approximately 57.5 billion USD in 2021 from 50.07 billion USD in 2019. Tomato is one of the country's primary crops grown through vertical farming systems. Hydroponic techniques have proven to be commercially successful for propagation, seed germination, and the production of tomatoes. Producers in the country have recognized this as an opportunity, thereby increasing the production of fruits and vegetables through vertical farming.

In addition to vegetables, the year-round availability of strawberries is being made possible through integrated agricultural production systems. According to the US Department of Agriculture, in 2021, around 1.34 million tons of strawberries were produced in the United States, which increased from 1.14 million tons in 2019. In order to keep up with the market demand, many farmers in the country have started growing strawberries through hydroponics. Additionally, vertical farms produce 5.45 pounds of lettuce per square foot on average. Based on the factors mentioned above, vertical farming is expected to play a critical role in producing fruits and vegetables in the country.

United States (US) Vertical Farming Industry Overview

The US vertical farming market is highly fragmented. The key players in the market are Aero farms, Plenty Unlimited Inc., Bowery Farming Inc., Green Spirit Farms, and Altius farms. These compete against each other mainly by investing in research to launch new techniques by adopting strategies such as mergers, acquisitions, and partnerships.

#### Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

#### **Table of Contents:**

- 1 INTRODUCTION
- 1.1 Study Assumptions and Market Definition
- 1.2 Scope of the Study

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#### 2 RESEARCH METHODOLOGY

#### **3 EXECUTIVE SUMMARY**

- **4 MARKET DYNAMICS**
- 4.1 Market Overview
- 4.2 Market Drivers
- 4.3 Market Restraints
- 4.4 Porter's Five Forces Analysis
- 4.4.1 Bargaining Power of Suppliers
- 4.4.2 Bargaining Power of Consumers
- 4.4.3 Threat of New Entrants
- 4.4.4 Threat of Substitute Products
- 4.4.5 Competitive Rivalry

#### **5 MARKET SEGMENTATION**

- 5.1 Growth Mechanism
- 5.1.1 Aeroponics
- 5.1.2 Hydroponics
- 5.1.3 Aquaponics
- 5.2 Structure
- 5.2.1 Building-based Vertical Farms
- 5.2.2 Shipping Container Vertical Farms
- 5.3 Crop Type
- 5.3.1 Fruits and Vegetables
- 5.3.2 Herbs and Micro-greens
- 5.3.3 Flowers and Ornamentals
- 5.3.4 Other Crop Types

### 6 COMPETITIVE LANDSCAPE

- 6.1 Most Adopted Strategies
- 6.2 Market Share Analysis
- 6.3 Company Profiles
- 6.3.1 Aero Farms
- 6.3.2 Freight Farms
- 6.3.3 Green Sense Farm Holdings Inc.
- 6.3.4 Green Spirit Farms
- 6.3.5 Plenty Unlimited Inc.
- 6.3.6 Bowery Farming Inc.
- 6.3.7 Altius Farms

## 7 MARKET OPPORTUNITIES AND FUTURE TRENDS

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