+357 96 030922
info@marketpublishers.com

North America Agritecture Market Segmented By Integration (Indoor, Outdoor), By Structure (Retrofitting, Extension, New Building), By Application (Residential, Commercial), By Country, Competition, Forecast & Opportunities, 2018-2028

https://marketpublishers.com/r/N1E950924D47EN.html
Date: October 2023
Pages: 130
Price: US$ 4,000.00 (Single User License)
ID: N1E950924D47EN

Abstracts

North America Agritecture Market has valued at USD 1774.16 million in 2022 and is anticipated to project robust growth in the forecast period with a CAGR of 10.24% through 2028. The North America Agritecture Market represents a dynamic and rapidly evolving sector at the intersection of agriculture, architecture, and technology. This innovative market seeks to revolutionize food production by integrating agriculture into urban environments, buildings, and controlled environments.

The North America Agritecture Market has experienced significant growth in recent years, driven by factors such as increasing urbanization, rising demand for sustainable and locally sourced food, and advancements in agricultural technologies. The market encompasses a wide range of applications, including indoor vertical farming, rooftop gardens, greenhouses, and aquaponics systems.

Key Market Drivers

The Evolution of Agritecture

In the dynamic landscape of the North America Agritecture Market, evolution is the cornerstone of progress. Agritecture, a fusion of agriculture and architecture, has undergone a remarkable transformation over the years. Initially, agritecture was synonymous with traditional farming practices, often limited to rural areas. However, the burgeoning need for sustainable and localized food sources, driven by factors such as

+357 96 030922
info@marketpublishers.com

urbanization, environmental concerns, and the desire for fresh produce, prompted a significant shift. Agritecture today embraces innovative solutions that bring farming into urban spaces. This evolution has given rise to concepts like vertical farming, rooftop gardens, and hydroponics, all designed to maximize space and resources. The objective is to bridge the gap between urban demand and rural supply while minimizing the environmental footprint. From greenhouses perched on skyscrapers to aquaponic systems integrated into city buildings, agritecture has become a symbol of sustainable urban development. Businesses operating in this space capitalize on this evolution by offering scalable and efficient solutions that cater to the demands of a rapidly urbanizing North America.

Sustainability and Environmental Awareness

Sustainability stands as a prominent driver in the North America Agritecture Market. Environmental awareness, coupled with the pressing need to address climate change, has propelled sustainability to the forefront of business strategies. In agritecture, sustainability manifests through various practices:

Sustainable agritecture practices prioritize energy-efficient systems, reducing greenhouse gas emissions associated with traditional agriculture. Efficient Resource Usage: Precise resource management, including water and nutrients, minimizes waste and enhances productivity. Localized Production: The emphasis on local food production reduces the carbon emissions generated by long-distance transportation. Integration of renewable energy sources, smart irrigation systems, and waste recycling further align agritecture with sustainability goals. Sustainability translates into a competitive advantage. Companies that adopt sustainable agritecture practices not only contribute to a greener world but also appeal to environmentally conscious consumers. Moreover, regulatory incentives and consumer preferences favor sustainability, making it a strategic choice for businesses in the North America Agritecture Market.

Technological Advancements

Technological advancements represent another crucial driver of growth in the North America Agritecture Market. The integration of technology into agritecture practices has revolutionized the industry, enhancing efficiency and scalability.

Automated systems for planting, harvesting, and monitoring crop health reduce labor costs and increase precision. Sensors and data analytics provide real-time insights into crop conditions, enabling data-driven decision-making. AI algorithms optimize resource

+357 96 030922
info@marketpublishers.com

allocation, leading to higher yields and resource conservation. Utilizing stacked trays and controlled environments, vertical farming maximizes space and reduces the need for vast agricultural land. Soilless cultivation methods allow for year-round crop production and efficient nutrient delivery. Agritecture businesses that embrace these technologies gain a competitive edge by reducing operational costs, increasing productivity, and staying ahead of market trends.

Food Security and Urbanization

Food security and urbanization are intrinsically linked drivers in the North America Agritecture Market. As cities expand and populations soar, the need for localized and sustainable food sources becomes paramount. The relentless pace of urbanization in North America is a primary reason for the importance of food security and urbanization as a driver in the Agritecture Market. As cities expand, so does their population, increasing the demand for food in urban areas. Traditional rural agriculture struggles to keep up with this growing demand. Urbanization has led to the conversion of fertile agricultural land into urban developments, reducing the available arable land for traditional farming. This shrinking agricultural footprint necessitates innovative solutions that can maximize food production in urban environments. Urban agriculture, facilitated by agritecture, offers a solution to the inefficiencies of traditional long-distance food transportation. Producing food closer to urban centers reduces transportation emissions and energy consumption, contributing to sustainability goals. Urbanization and the demand for consistent food supply throughout the year drive the need for controlled environment agriculture, such as vertical farming and hydroponics. Agritecture systems allow for year-round production of fresh produce, reducing dependency on seasonal harvests. The COVID-19 pandemic highlighted vulnerabilities in global food supply chains. By promoting localized food production, agritecture enhances food security by reducing reliance on distant suppliers and minimizing the impact of supply chain disruptions. Urban agritecture projects often engage communities, fostering a sense of connection to food production. This engagement raises awareness about the importance of food security, leading to increased support for local and sustainable food sources. Agritecture introduces innovative methods like vertical farming, aquaponics, and rooftop gardens, diversifying the food production landscape. This diversification enhances food security by ensuring a variety of food sources.

The North America Agritecture Market is driven by the evolution of agritecture, sustainability and environmental awareness, technological advancements, and food security due to urbanization. These drivers, when viewed through the lens of business English, underscore the industry's potential for competitive advantage, innovation,

+357 96 030922
info@marketpublishers.com

market stability, and investor attraction. As the industry continues to evolve, agritecture remains at the forefront of sustainable and localized food production in urban environments.

Key Market Challenges

Regulatory Hurdles

One significant challenge facing the North America Agritecture Market is regulatory hurdles. The complex web of regulations governing agriculture, land use, and building codes can pose obstacles to the implementation of agritecture solutions.

Many municipalities have zoning laws designed for traditional agriculture or urban development. Agritecture often doesn't fit neatly into these categories, leading to zoning conflicts. Building codes may not account for the unique structures and systems used in agritecture. Compliance with existing codes can be costly and time-consuming. The safety of urban-grown produce is a concern. Agritecture ventures must navigate a complex web of food safety regulations, which can be particularly challenging for startups. The need for compliance with various regulations can increase costs, extend project timelines, and create uncertainty for investors. Addressing these challenges often requires advocacy, dialogue with regulatory bodies, and industry-wide standards to streamline the adoption of agritecture solutions.

High Initial Investment Costs

Another challenge in the North America Agritecture Market is the high initial investment costs associated with setting up and maintaining agritecture systems. While these systems offer long-term benefits, the upfront expenses can be a barrier for many businesses.

Agritecture often involves advanced technology, specialized infrastructure, and automation systems, all of which require significant capital investment. Employing skilled personnel, such as agronomists, engineers, and data analysts, adds to labor costs. Controlled environment agritecture systems require substantial energy for lighting, climate control, and irrigation. While agritecture offers long-term returns, businesses must secure funding, manage cash flow, and demonstrate a clear path to profitability to attract investors and overcome this challenge.

Consumer Education and Acceptance

+357 96 030922
info@marketpublishers.com

Agritecture practices, such as vertical farming and aquaponics, may be unfamiliar to consumers, leading to skepticism or reluctance to embrace these new food sources.

Lack of Awareness: Many consumers may not be aware of the benefits and safety of agritecture-grown produce. Some consumers may question the quality and taste of urban-grown produce compared to traditional farming. Agritecture products may be perceived as more expensive due to their innovative nature. Businesses must invest in marketing, transparency, and product quality to build consumer trust and convey the value of agritecture-grown produce. Building relationships with consumers and educating them about the benefits of these sustainable, locally sourced options is essential to overcoming this challenge.

Key Market Trends

Sustainable Farm-to-Table Initiatives

Consumer Demand for Sustainability: Increasing environmental awareness and concerns about the carbon footprint of food production have led consumers to seek more sustainable and locally sourced options. Agritecture allows for year-round, localized production, reducing transportation emissions. Recent food safety incidents have highlighted the importance of knowing the origin of food products. Agritecture offers transparency and traceability, assuring consumers of safe and responsibly produced food. Restaurants and retailers are increasingly partnering with agritecture ventures to secure a consistent supply of fresh, locally grown produce. This trend aligns with consumer demand for farm-to-table dining experiences.

Integration of AI and Data Analytics

The use of AI and data analytics enables precise monitoring and management of agritecture systems. This leads to optimized resource allocation, reduced waste, and higher crop yields, making agritecture more economically viable. AI-powered predictive maintenance systems help prevent equipment breakdowns, reducing downtime and operational disruptions. This technology lowers maintenance costs and improves system reliability. Agritecture businesses are leveraging data analytics to make informed decisions about crop selection, planting strategies, and resource management. This enhances overall efficiency and profitability.

Vertical Farming and Modular Systems

+357 96 030922
info@marketpublishers.com

Vertical farming and modular systems maximize space utilization, making them ideal for urban environments with limited available land. This trend addresses the challenge of urbanization and the need for localized food production. Modular systems are easily scalable, allowing agritecture ventures to start small and expand as demand grows. This flexibility reduces the financial risk associated with large-scale investments. Vertical farming systems typically use less water and fewer pesticides than traditional agriculture. This aligns with sustainability goals and reduces operating costs.

Segmental Insights

Integration Insights

Based on the category of Integration, the indoor segment emerged as the dominant player in the North America market for Agritecture in 2022. the primary reasons behind the indoor segment's dominance are its ability to offer year-round production. Controlled environments, such as greenhouses and vertical farms, provide a consistent climate and light conditions regardless of external weather. This results in a continuous and predictable supply of fresh produce, which is highly appealing to consumers and businesses alike. Indoor agritecture systems are designed for maximum space utilization. Vertical farming, for instance, stacks trays of crops vertically, allowing for a higher crop density per square foot compared to traditional farming. This space efficiency is crucial, especially in densely populated urban areas where land is scarce and expensive. Indoor agritecture systems are engineered for resource efficiency. They often use less water than traditional farming and can recycle and reuse nutrient-rich water. Additionally, the controlled environments reduce the need for pesticides and herbicides, contributing to sustainability goals. The controlled conditions in indoor agritecture systems enable the cultivation of a wide variety of crops, including those that might not thrive in outdoor environments. Moreover, these systems often produce crops of exceptional quality, appealing to consumers and chefs who demand premium ingredients.

Additionally, Indoor agritecture systems are shielded from external factors such as pests, extreme weather events, and pollutants. This protection results in lower crop losses and ensures a consistent supply, which is especially valuable in regions prone to natural disasters or environmental challenges. Consumers in North America increasingly seek locally grown produce due to concerns about food safety, traceability, and sustainability. Indoor agritecture allows for the production of local, fresh, and safe food, aligning with consumer preferences and fostering trust. Indoor agritecture often

+357 96 030922
info@marketpublishers.com

integrates cutting-edge technologies, such as IoT sensors, data analytics, and automation. These technologies enhance efficiency, reduce operational costs, and enable data-driven decision-making, making indoor systems an attractive investment. These factors are expected to drive the growth of this segment.

Structure Insight

Based on the category of Structure, the new building segment emerged as the dominant player in the North America market for Agritecture in 2022. New building structures can incorporate agritecture solutions from the ground up. Architects and developers can design buildings with integrated features like rooftop gardens, vertical farming systems, or aquaponics setups. This seamless integration ensures that agritecture is an integral part of the building's design and function. New buildings offer the advantage of optimized space utilization. Architects can design spaces specifically tailored to agritecture needs, maximizing the efficiency of crop production. This level of planning is often challenging to achieve in existing structures. New buildings can be designed with energy-efficient features that benefit agritecture systems. For instance, they can incorporate energy-efficient HVAC (heating, ventilation, and air conditioning) systems, LED lighting, and advanced insulation techniques. These energy-saving measures lower operational costs for agritecture ventures. New buildings provide a sturdy and structurally sound environment for agritecture systems. This reduces the risk of structural issues that older buildings may face, ensuring the safety and longevity of the agritecture infrastructure. New buildings can seamlessly integrate advanced technologies like IoT sensors, automation systems, and data analytics. These technologies enhance the precision and efficiency of agritecture operations, making them more productive and cost-effective. These factors are expected to drive the growth of this segment.

Application Insights

Based on the category of Application, the commercial segment emerged as the dominant player in the North America market for Agritecture in 2022 Commercial applications, such as restaurants, supermarkets, and foodservice providers, require a consistent and year-round supply of fresh produce to meet customer needs. Agritecture solutions provide a reliable source of local, fresh produce, which is a significant selling point for these businesses. Commercial businesses demand a steady and predictable supply of fresh produce. Agritecture systems, especially indoor and controlled environment solutions, offer consistent crop yields throughout the year, reducing supply chain disruptions and ensuring a constant flow of ingredients for commercial kitchens

+357 96 030922
info@marketpublishers.com

and retail shelves. Restaurants and retailers place a premium on the quality and safety of the produce they offer to customers. Agritecture systems provide optimal growing conditions, resulting in high-quality, pesticide-free, and contamination-free produce, which is particularly appealing to commercial buyers. Commercial applications often require a compact and efficient use of space. Vertical farming and other agritecture systems are well-suited for this purpose, as they maximize crop production within a limited footprint. This efficient use of space aligns with the needs of commercial establishments. There is a growing trend among commercial businesses to source locally and emphasize sustainability. Agritecture solutions, especially those located within or near urban areas, provide a source of locally grown, sustainable produce that aligns with the values and preferences of consumers. These factors collectively contribute to the growth of this segment.

Regional Insights

United States emerged as the dominant player in the North America Agritecture market in 2022, holding the largest market share in terms of value. There are several reasons for California's leadership in this market. Firstly, its favorable climate allows for year-round outdoor and indoor crop production. Secondly, the state has a long history of agricultural innovation, making it a hub for agritecture research and development. Additionally, California's commitment to sustainability and environmental awareness aligns with the core values of agritecture, attracting businesses and investors seeking eco-friendly solutions. California boasts a well-established agritecture ecosystem that includes startups, research institutions, and established businesses. This ecosystem fosters innovation, collaboration, and the sharing of best practices, making it an attractive destination for agritecture ventures. The state's robust economy and access to venture capital make it easier for agritecture businesses to secure funding for research, development, and expansion. The availability of capital accelerates market growth and innovation. California's population is known for its preference for locally sourced, sustainable, and organic products. This aligns with the principles of agritecture, which places it in a strong position to meet consumer demand for fresh and eco-friendly produce.

According to the National Institute of Health, total dietary supplement sales in the United States reached an estimated USD 55.7 billion in 2020, with USD 21.2 billion attributed to supplements containing vitamins, minerals, or both. Of this total, USD 8.0 billion was spent on multivitamins/minerals and multivitamins. Furthermore, the region's abundant presence of leading market players, growing industrial development and infrastructure, and favorable government initiatives aimed at enhancing the quality of life through

+357 96 030922
info@marketpublishers.com

dietary supplements are expected to further drive regional growth.

The Pacific Northwest region, comprising Washington and Oregon, is poised to witness the fastest market growth in the North America Agritecture Market. The region offers a diverse climate, ranging from coastal areas to inland regions. This diversity allows for a wide variety of crops to be grown year-round, making it an ideal location for agritecture systems. Like California, the Pacific Northwest places a strong emphasis on sustainability and environmental consciousness. This aligns with the principles of agritecture and attracts businesses and consumers seeking eco-friendly solutions. The region is home to several tech hubs, including Seattle and Portland. These hubs are hotbeds of innovation, providing access to advanced technologies and skilled professionals that can enhance agritecture practices. There is a growing trend among businesses and consumers in the Pacific Northwest to prioritize local sourcing. Agritecture systems can provide a consistent supply of fresh, locally grown produce that caters to this demand. The presence of renowned research institutions in the region fosters agritecture research and development, driving innovation and market growth.

Key Market Players

Eden Green Technology

Elevate Farms Inc.

iFarm Corp

OSRAM GmbH

Plenty Unlimited Inc.

Agrilution GmbH

AeroFarms LLC

Sky Greens Inc

Altius Farms Corp

Report Scope:

+357 96 030922
info@marketpublishers.com

In this report, the North America Agritecture Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

Agritecture Market, By Integration:

Indoor

Outdoor

Agritecture Market, By Structure:

Retrofitting

Extension

New Building

Agritecture Market, By Application:

Residential

Commercial

Agritecture Market, By Country:

United States

Canada

Mexico

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the North America Agritecture Market.

Available Customizations:

+357 96 030922
info@marketpublishers.com

North America Agritecture market report with the given market data, Tech Sci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: North America Agritecture Market Segmented By Integration (Indoor, Outdoor), By Structure (Retrofitting, Extension, New Building), By Application (Residential, Commercial), By Country, Competition, Forecast & Opportunities, 2018-2028

Product link: https://marketpublishers.com/r/N1E950924D47EN.html

Price: US$ 4,000.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/N1E950924D47EN.html