

## Trends and opportunities in Asia Pacific Agriculture equipment market in 2024

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The autonomous agriculture equipment market is growing as a result of the surge in sustainable agricultural operations. A focus on improving efficiency and reducing environmental impact has stimulated innovations across the industry as key players develop advanced autonomous machinery, such as multifunctional robots and driverless tractors. Asia Pacific is expected to grow the fastest during the forecast period China, Japan, India, South Korea and Australia leading the market followed by the rest of APAC.

The key challenges are the implementation of standards and achieving interoperability. While machine learning, artificial intelligence, and data analytics present significant opportunities for optimizing farming operations, the report emphasizes other aspects as well.

The Global Autonomous Farm Equipment Market is projected to exceed \$192.1 Billion by 2032, growing at a CAGR of 10.2% from 2022 to 2032 as forecasted by the market analytical firm *Spherical Insights*. The Global Autonomous Farm Equipment Market Size was valued at \$72.3 Billion in 2022. One of the key driving factors of the market is autonomous equipment being used in land cultivation processes like harvesting, seed sowing, fertilizing, and scarifying.

Asia-Pacific has witnessed significant growth in the Agriculture Technology as a Service market, offering significant opportunities for companies in the global ag sector. In the region, there are a number of rapidly growing economies that contribute to this growth. Furthermore, the market in Asia-Pacific is expected to grow rapidly over the next few years, mainly as a result of urbanization and government support for modern agricultural technologies.

In addition to agricultural equipment, horticultural equipment, animal husbandry equipment, and forestry equipment are included in the autonomous farm equipment. Agricultural machinery is modeled and regulated autonomously within a unified framework in autonomous farming. The on-farm sensing and control power of automated farming equipment is used in these technologies for agriculture in order to achieve agronomy-based targets.

With the advent of autonomous farm equipment, the agriculture sector is currently undergoing a transformation by revolutionizing traditional farming practices. The autonomous farm equipment uses advanced technologies such as artificial intelligence (AI), sensors, and GPS to operate independently with minimal human intervention. In addition to the growing global population, the need to increase agricultural productivity, and the shortage of skilled labor in the farming sector are some of the factors driving the market. Farmers are interested in investing in autonomous farm equipment because it offers several benefits, such as reduced labor costs, increased efficiency, and improved crop yields.

### **Asia-Pacific Players**

In order to meet the evolving needs of farmers, companies are investing heavily in R&D to enhance the capabilities of autonomous farm equipment. Leading players operating in the Asia-Pacific Agriculture Technology include Topcon Corporation, Fujitsu Ltd, Microsoft Corporation, Accenture, Agco Corporation, Agrivi Ltd, Airbus SAS, AT&T, Ceres Imaging, CLAAS KGaA mbH, Deere & Company, Hexagon AB, IBM Corporation, Microsoft Corporation, Raven Industries (Acquired by CNH Industrial NV), Topcon Corporation, Trimble Inc.

Asia-Pacific Agriculture Technology is broken down by technology, application, and type. A number of applications are included in the application segment, including yield mapping and monitoring, soil management, crop health management, navigation and positioning, and others. Geo-referenced data and other relevant information about crop productivity are collected as part of yield monitoring and mapping in order to reduce potential threats and boost economic opportunities. Precision agriculture services create maps of yields that help producers make better management decisions based on spatial variation.

### **Key Global Players:**

In addition, global key players in the autonomous farm equipment market include AGCO Corporation, Verdant Robotics, John Deere, CNH Industrial N.V., Kubota Corporation, Bobcat, Autonomous Solutions, Clearpath Robotics, Agrobot, New Holland, Case IH, John Deere, AGCO Corporation, Yanmar, ClaasKGaA GmbH, Iseki & Co., Kubota, Kinze Manufacturing, Energid, Deutz-Fahr and more.

Topcon Corporation, headquartered in Japan, is a producer and supplier of eye care products, as well as positioning and smart infrastructure solutions. The company's eye care products include three three-dimensional (3D) optical coherence tomography system, tonometer, specular microscope, ophthalmic digital image filing, auto refracto/kerato meter, vision tester, lensmeter/analyzer, chart projector, laser photocoagulator, and operation microscope.

The Asia Pacific market for autonomous farm equipment is driven by the increasing adoption of precision agriculture practices and the rising demand for food and agricultural products in the region. China, India, Japan, and Australia are the key markets in Asia Pacific for autonomous farm equipment, focusing on crop cultivation and animal husbandry equipment. Due to government initiatives to promote sustainable agriculture practices and the increasing use of advanced farming technologies by farmers, China is one of the largest markets in the Asian Pacific region for autonomous farm equipment. The country has a large agricultural sector, and farmers will benefit from the adoption of autonomous farm equipment by increasing crop yields and reducing labor costs.

The Asia-Pacific Agriculture Technology has strong potentials in China, Japan, India, South Korea, Indonesia, Thailand, Australia & New Zealand, markets. A variety of incentives, awards, and investments are being made by the Chinese government to promote technological advancements and innovation. China's government has pledged a substantial investment of \$1.4 trillion over five years as part of its 'Made in China 2025' initiative. It will play a crucial role in the widespread deployment of 5G infrastructure, a development that will greatly influence the adoption of agriculture technology as a service (ATaaS).

Additionally, the World Bank Group announced a \$320 million loan in March 2022 to support environmentally friendly agricultural practices in southwest China. Agricultural greenhouse gas emissions will be reduced, biodiversity will be protected, and agricultural plastic pollution will be minimized through this initiative.