+357 96 030922
info@marketpublishers.com

Blockchain Soil Health Market Forecasts to 2032 – Global Analysis By Component (Platform, Services, and Solutions), Deployment Type, Organization Size, Technology, Application, End User and By Geography

https://marketpublishers.com/r/BEED93EA11D3EN.html
Date: September 2025
Pages: 200
Price: US$ 4,150.00 (Single User License)
ID: BEED93EA11D3EN

Abstracts

According to Stratistics MRC, the Global Blockchain Soil Health Market is accounted for $57.24 billion in 2025 and is expected to reach $703.35 billion by 2032 growing at a CAGR of 43.1% during the forecast period.Blockchain Soil Health involves applying blockchain technology to track, assess, and manage soil quality and sustainability practices. It ensures secure, transparent, and immutable recording of data related to soil nutrients, moisture, carbon levels, and overall health. This system allows farmers, researchers, and regulators to access reliable information, improving precision agriculture. By enhancing traceability and accountability, it supports sustainable farming, regulatory compliance, and trust in environmentally responsible food production and supply networks.

Market Dynamics:

Driver:

Rising demand for sustainable farming

The global push toward sustainable agriculture is driving interest in technologies that enhance soil health monitoring and management. Blockchain offers a transparent and immutable way to track soil data, ensuring accountability in farming practices. As consumers and regulators demand more eco-friendly food production, farmers are seeking tools that validate their sustainability claims. Blockchain-based soil health platforms can record inputs, crop rotations, and organic certifications, building trust

+357 96 030922
info@marketpublishers.com

across the supply chain. This demand is further amplified by climate change concerns and the need for regenerative farming techniques. Consequently, blockchain is emerging as a key enabler of data-driven, sustainable agriculture.

Restraint:

Limited technical awareness

Despite its potential, blockchain adoption in agriculture faces hurdles due to limited technical awareness among farmers and stakeholders. Many agricultural communities lack exposure to digital technologies, making blockchain seem complex and inaccessible. The absence of tailored training programs and user-friendly interfaces further compounds this challenge. Without proper understanding, stakeholders may resist integrating blockchain into soil health monitoring systems. This knowledge gap slows down implementation and reduces the perceived value of blockchain solutions.

Opportunity:

Growing adoption of smart contracts

Smart contracts are revolutionizing how agricultural transactions and data exchanges are managed. In the soil health domain, they can automate processes like subsidy disbursement, carbon credit validation, and compliance reporting. These self-executing contracts reduce administrative overhead and ensure timely, transparent operations. As governments and agritech firms explore blockchain for policy enforcement and incentive distribution, smart contracts become increasingly relevant. Their adoption can streamline soil data verification and reward sustainable practices. This trend presents a significant growth opportunity for blockchain platforms tailored to agriculture.

Threat:

Cybersecurity risks

In agricultural applications like soil health monitoring, unauthorized access or data breaches could expose confidential farm information and undermine confidence in digital systems. Weaknesses in smart contracts, susceptibility to phishing, and inadequate management of cryptographic keys are among the primary concerns. As blockchain becomes more integral to decision-making in agriculture, the impact of cyber threats grows increasingly serious. Current regulations surrounding agricultural data

+357 96 030922
info@marketpublishers.com

protection are still developing, which creates vulnerabilities in oversight and enforcement. Without strong security measures in place, these risks could hinder broader adoption of blockchain solutions in the sector.

Covid-19 Impact

The COVID-19 pandemic highlighted the fragility of global food systems and accelerated digital transformation in agriculture. With limited physical access to farms, remote soil monitoring and blockchain-based reporting gained traction. Governments and NGOs began exploring blockchain to track aid distribution and ensure transparency in agricultural support programs. Post-pandemic recovery efforts are now focused on building resilient, tech-enabled farming ecosystems. Blockchain is increasingly viewed as a strategic tool to future-proof soil health management.

The soil quality monitoring segment is expected to be the largest during the forecast period

The soil quality monitoring segment is expected to account for the largest market share during the forecast period, driven by the integration of advanced technologies like IoT sensors, satellite imaging, and AI-based analytics that enable precise soil quality monitoring. Emerging trends include decentralized data sharing and traceable carbon credit systems, enhancing transparency and sustainability. Key developments involve smart contracts automating compliance and reward mechanisms for regenerative practices. As climate resilience becomes a priority, blockchain platforms are increasingly adopted to validate soil data, optimize inputs, and support eco-certification across agricultural supply chains.

The government agencies segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the government agencies segment is predicted to witness the highest growth rate, driven by leveraging technologies like IoT, GIS mapping, and blockchain for transparent soil data management. Emerging trends include digital land registries, traceable fertilizer usage, and blockchain-based subsidy distribution. Key developments involve pilot programs integrating smart contracts to automate compliance and incentivize sustainable farming. These initiatives aim to enhance accountability, reduce fraud, and support climate-smart agriculture. As policy frameworks evolve, governments are positioning blockchain as a cornerstone for modernizing agricultural governance and soil health monitoring.

+357 96 030922
info@marketpublishers.com

Region with largest share:

During the forecast period, the Asia Pacific region is expected to hold the largest market sharedue to rapid adoption of precision agriculture technologies like IoT-enabled soil sensors, drone-based imaging, and AI-driven analytics. Emerging trends include blockchain-powered traceability for organic certification and digital platforms for carbon credit trading. Key developments involve government-backed pilot projects in India, China, and Australia that integrate smart contracts for subsidy distribution and compliance tracking. Rising demand for sustainable farming and food security is propelling blockchain as a transformative tool in soil health management.

Region with highest CAGR:

Over the forecast period, the North America region is anticipated to exhibit the highest CAGR, owing to advanced technologies such as AI-powered soil analytics, IoT-based field sensors, and satellite imaging integrated with blockchain platforms. Emerging trends include carbon credit verification, decentralized farm data networks, and blockchain-enabled traceability for organic produce. Key developments involve USDA-backed pilot programs and private sector initiatives promoting smart contracts for compliance and incentive distribution. With growing emphasis on regenerative agriculture and sustainability, blockchain is becoming central to transparent, data-driven soil health management across the region.

Key players in the market

Some of the key players profiled in the Blockchain Soil Health Market includeIBM, VeChain, AgriDigital, AgUnity, TE-FOOD, CropIn, OriginTrail, Farmobile, Ripe.io, Provenance, Chainvine, Modum, Ambrosus, BlockApps, and GrainChain.

Key Developments:

In July2025, IBM and Elir Group, announce their association to create an “agentic AI & Data Factory” to serve Elior Group's innovation, digital transformation, and improved operational performance.This collaboration represents a major step forward in the innovation and digitization of the Elior Group, a world leader in contract catering and services for businesses and local authorities.

In June2024,The Carbon Trust label is expanding its visibility online by partnering with

+357 96 030922
info@marketpublishers.com

sustainability claims platform Provenance. Through its partnership, the Carbon Trust's 'Carbon Emissions Reductions Achieved' label will be added to Provenance's platform, to support consumers with easy access to credible information regarding the carbon impact of the products they purchase.

ComponentsCovered:

- Platform
- Services
- Solutions

Deployment Types Covered:

- On-Premises
- Cloud-Based
- Hybrid

Organization Sizes Covered:

- Large Enterprises
- Small & Medium-sized Enterprises (SMEs)

Technologies Covered:

- IoT + Blockchain
- AI + Blockchain
- GIS
- Other Technologies

+357 96 030922
info@marketpublishers.com

Applications Covered:

- Soil Quality Monitoring
- Authenticity Verification
- Carbon Sequestration Tracking
- Sustainable Farming Certification
- Other Applications

End Users Covered:

- Farmers & Agribusinesses
- Government Agencies
- Research Institutions
- Food Companies
- Other End Users

Regions Covered:

- North America
  - US
  - Canada
  - Mexico
- Europe

+357 96 030922
info@marketpublishers.com

- Germany
- UK
- Italy
- France
- Spain
- Rest of Europe

Asia Pacific

- Japan
- China
- India
- Australia
- New Zealand
- South Korea
- Rest of Asia Pacific

South America

- Argentina
- Brazil
- Chile
- Rest of South America

+357 96 030922
info@marketpublishers.com

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:
- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2024, 2025, 2026, 2028, and 2032
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as

+357 96 030922
info@marketpublishers.com

per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

11 GLOBAL BLOCKCHAIN SOIL HEALTH MARKET, BY GEOGRAPHY

+357 96 030922
info@marketpublishers.com

12 KEY DEVELOPMENTS

13 COMPANY PROFILING

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Blockchain Soil Health Market Forecasts to 2032 – Global Analysis By Component (Platform, Services, and Solutions), Deployment Type, Organization Size, Technology, Application, End User and By Geography

Product link: https://marketpublishers.com/r/BEED93EA11D3EN.html

Price: US$ 4,150.00 (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/BEED93EA11D3EN.html