

# AI Crop Scouting Devices

ANMD-MRS11-101 · AI & Digital Agriculture Technologies

A Global Sustainability Due Diligence & Market Research Study

History 2020–2024 · Base Year 2025 · Forecast 2025–2032 · Outlooks 2035 / 2040 / 2050 · Currency US\$

## WHY THIS REPORT

AI crop scouting devices are the eyes of the digital farm — the handheld, drone-mounted, ground-robot and fixed-camera systems that use computer vision and multispectral imaging to detect crop stress, disease, nutrient deficiency and pests before they spread. This decision-grade study sizes the global market three ways — value, hectares/acres covered and devices/subscriptions — across device type, imaging technology and application, across seven regions and four scenarios to 2032, with outlooks to 2050.

## SUSTAINABILITY & SDG IMPACT — THE ANMD LENS

Sustainability is this report's backbone, not an afterthought. Beyond detection, AI scouting reduces pesticide and fertiliser use, protects yield and food security, and builds the data trail for sustainable-farming claims.

Mapped Sustainable Development Goals:

<p><b>SDG 2</b> Zero Hunger</p>	<p><b>SDG 8</b> Decent Work &amp; Economic Growth</p>	<p><b>SDG 12</b> Responsible Consumption</p>	<p><b>SDG 13</b> Climate Action</p>	<p><b>SDG 15</b> Life on Land</p>
-------------------------------------	---	--	---	---------------------------------------

Measurable sustainability outcomes assessed:

- Reduced pesticide and fertiliser use
- Protected yield and food security
- Data trail for sustainable-farming claims
- Device e-waste, data ownership and the smallholder digital divide as material risks

**Framework alignment:** Double materiality mapped to GRI, SASB, ISSB, TCFD, TNFD, CSRD and the EU Taxonomy, with greenwashing and SDG-washing screens applied throughout.

## WHAT'S INSIDE AT A GLANCE

<p><b>53</b> Chapters</p>	<p><b>9</b> Report Parts</p>	<p><b>7</b> Regions Covered</p>	<p><b>40+</b> Country Markets</p>
<p><b>2025–32</b> Forecast Horizon</p>	<p><b>4</b> Forward Scenarios</p>	<p><b>25+</b> Companies Profiled</p>	<p><b>5</b> SDGs Mapped</p>

## REPORT COVERAGE

**Geographic scope:** North America, Europe, Asia Pacific, Latin America, Africa, Middle East and Rest of World — with named country intelligence. North America leads adoption and platforms; Europe drives specialty and precision use; Asia Pacific is the fastest-growing region; other regions assessed on their own merits for access and capacity-building.

## MARKET OVERVIEW

### From field walks to continuous monitoring — where edge AI turns imagery into real-time scouting.

AI scouting is moving from early adopters into mainstream agronomy. Demand is driven by input-cost pressure, labour scarcity, and the spread of edge AI and affordable imaging — with the shift from hardware sales toward recurring SaaS and analytics central to value. The market is read three ways — value, hectares/acres covered and devices/subscriptions — and forecast under four scenarios, each region reported separately.

- **North America leads adoption and platforms** — United States and Canada, across large-acre row-crop operations
- **Europe drives specialty and precision use** — United Kingdom and Switzerland, on horticulture and input-reduction agendas
- **Asia Pacific is the fastest-growing region** — India, China and Australia, on smallholder and food-security scale
- **Edge AI is the differentiator** — on-device inference and multispectral sensing turn imagery into real-time, actionable scouting at the point of capture

## REGIONAL OUTLOOK

Across seven reporting regions, the report separates leading markets from high-growth and emerging ones — each profiled in full rather than aggregated into Rest of World.

Region	Stage	Lead Markets & Drivers
North America	Adoption leader	United States, Canada — large-acre row crops
Europe	Precision & specialty	UK, Switzerland — horticulture & input rules
Asia Pacific	Fastest-growing	India, China, Australia — smallholder & food-security scale
Latin America	Emerging	Brazil, Argentina — broadacre digital adoption
Africa	Frontier	South Africa, Kenya — smallholder scouting
Middle East	Emerging	Israel, UAE — arid-ag focus, scouting innovation

## KEY MARKET DRIVERS & RESTRAINTS

Drivers	Restraints
<ul style="list-style-type: none"> <li>• Input-cost &amp; agronomy-labour pressure</li> <li>• Edge-AI &amp; affordable imaging advances</li> <li>• Early stress/disease/pest detection value</li> <li>• Shift to recurring SaaS &amp; analytics</li> <li>• Sustainability &amp; input-reduction goals</li> </ul>	<ul style="list-style-type: none"> <li>• Farmer adoption &amp; digital-skills gap</li> <li>• Connectivity &amp; rural-bandwidth limits</li> <li>• Data ownership &amp; interoperability concerns</li> <li>• ROI proof &amp; seasonal payback</li> <li>• Fragmented smallholder economics</li> </ul>

## SEGMENTATION SNAPSHOT

<b>By Device Type</b>	Handheld devices · drone-mounted systems · ground-robot scouts · smartphone-based · fixed in-field cameras
<b>By Imaging Technology</b>	RGB vision · multispectral · hyperspectral / thermal
<b>By Application</b>	Row crops · specialty / horticulture · livestock
<b>By End User</b>	Farmers · agribusiness · co-operatives · agronomists
<b>By Deployment</b>	On-device edge · cloud-analytics · hybrid
<b>By Business Model</b>	Hardware sales · SaaS subscription · services

## TABLE OF CONTENTS — PARTS & CHAPTERS

The full report is organised into nine parts across 53 chapters, listed below. Detailed sub-headings, country tables and directories are provided in the full report.

### Part I — Report Foundation, Discovery and Strategic Intelligence

- > Chapter 1. Scope, Methodology and Report Architecture
- > Chapter 2. Industry Discovery Summary — AI Crop Scouting Devices
- > Chapter 3. Executive Intelligence and Decision Dashboard
- > Chapter 4. Strategic Findings, Materiality and Investment Verdict Preview

### Part II — Market Intelligence, Sizing, Forecasting and Segmentation

- > Chapter 5. Industry Overview and Market Evolution
- > Chapter 6. Market Dynamics
- > Chapter 7. Global Market Size and Forecast, 2020–2032
- > Chapter 8. Market Segmentation Analysis
- > Chapter 9. End-User and Demand-Side Intelligence
- > Chapter 10. Pricing, Cost and Commercial Model Intelligence

### Part III — Regional and Country Intelligence

- > Chapter 11. Global Regional Intelligence Framework
- > Chapter 12. North America Market Intelligence
- > Chapter 13. Europe Market Intelligence
- > Chapter 14. Asia Pacific Market Intelligence
- > Chapter 15. Latin America Market Intelligence
- > Chapter 16. Africa Market Intelligence
- > Chapter 17. Middle East Market Intelligence
- > Chapter 18. Rest of World Market Intelligence

### Part IV — Technology, Innovation and Category-Specific Intelligence

- > Chapter 19. Technology Landscape and Architecture
- > Chapter 20. Emerging and Next-Generation Technology Intelligence
- > Chapter 21. Category-Specific Intelligence Module
- > Chapter 22. Research, Innovation and Funding Landscape

## Part V — Company, Competition, Patent and Project Intelligence

- › Chapter 23. Competitive Landscape
- › Chapter 24. Company Profiles
- › Chapter 25. Mergers, Acquisitions, Partnerships and Ecosystem Intelligence
- › Chapter 26. Patent Landscape and Intellectual Property Intelligence
- › Chapter 27. Project, Deployment and Case-Study Intelligence

## Part VI — Sustainability, ESG, SDG, Climate and Natural-Capital Intelligence

- › Chapter 28. Sustainability Intelligence Suite
- › Chapter 29. ESG Intelligence and Double Materiality
- › Chapter 30. ESG and Sustainability Framework Alignment
- › Chapter 31. SDG Intelligence
- › Chapter 32. Carbon, Net-Zero and Climate-Mitigation Intelligence
- › Chapter 33. Water, Biodiversity and Natural-Capital Intelligence
- › Chapter 34. Circular Economy and Resource-Security Intelligence
- › Chapter 35. Social Impact, Human Capital and Community Intelligence
- › Chapter 36. Climate Risk, Adaptation and Resilience Intelligence

## Part VII — Supply Chain, Policy, Legal, Economics and Finance

- › Chapter 37. Value Chain, Supply Chain and Geopolitical Intelligence
- › Chapter 38. Policy, Regulation and Incentive Intelligence
- › Chapter 39. Legal, Contracting and Risk-Allocation Intelligence
- › Chapter 40. Unit Economics, CAPEX, OPEX and Return Analysis
- › Chapter 41. Investment, Sustainable Finance and Bankability Intelligence

## Part VIII — Scenario, Future Intelligence and Final Due Diligence Verdict

- › Chapter 42. Scenario Analysis and Future Intelligence
- › Chapter 43. Sustainability Due Diligence Framework and Data-Room Index
- › Chapter 44. Risk Register, RAG Rating and Anti-Greenwashing Screen
- › Chapter 45. Bottom-Line Verdict and Strategic Recommendations
- › Chapter 46. Implementation Roadmap and Stakeholder Playbooks

## Part IX — Annexes, Directories and Reference Material

- › Chapter 47. Methodology Annex
- › Chapter 48. Corporate Directory and Company Intelligence Annex
- › Chapter 49. Patent Directory and Patent Intelligence Annex
- › Chapter 50. Project Intelligence Annex
- › Chapter 51. Forecast Annex
- › Chapter 52. Sustainability KPI Annex
- › Chapter 53. Reference Annexes

## COMPETITIVE & INVESTMENT SNAPSHOT

The competitive field spans ag-machinery majors, input-company digital platforms and scouting-tech specialists. Deal activity — platform acquisitions, OEM partnerships and analytics integration — signals a market consolidating around data platforms that turn scouting into recurring revenue.

### Representative players profiled in the full report:

Deere & Company · Bayer AG (Climate FieldView) · Taranis · Sentera, Inc. · Gamaya SA · Corteva, Inc. · Valmont Industries, Inc. (Prospera) · and 20+ further profiled players across machinery majors and scouting specialists.

**Investment intelligence:** venture, infrastructure, development, climate and blended finance, green bonds and sustainability-linked loans — culminating in a bankability assessment and a conditional investment view.

## KEY QUESTIONS THIS REPORT ANSWERS

- How large is the global AI crop scouting market, and how fast will it grow to 2032?
- Which regions, countries and segments offer the strongest risk-adjusted opportunity?
- How does edge AI change value versus periodic manual scouting?
- Who leads, and where is the competitive and patent white space?
- Is the investment case bankable — and under what conditions?
- How does the category align with the SDGs, input reduction and farmer-equity expectations?

## WHY ANMD — THE DIFFERENCE

*Most market studies stop at units and revenue. This report is built as a sustainability due diligence instrument — fusing market sizing with ESG, SDG, climate, water and natural-capital intelligence and a decision-ready bankability view in a single architecture.*

- **Triangulated sizing** — every market read three ways so value, volume and the physical-unit views reconcile rather than conflict.
- **Region-honest forecasting** — Latin America, Africa and the Middle East reported in full, never hidden inside Rest of World, every forecast resolved to the 2025 base year.
- **Integrated evidence base** — company, patent and project databases linked to the analysis, with published-filing patents and FTO treated as an indicator, not a legal conclusion.
- **No-fabrication discipline** — every estimate carries a data-confidence rating and disclosed sources; gaps are flagged for further diligence, never filled with invented numbers.
- **Anti-greenwashing rigour** — SDG-washing and greenwashing screens plus claim-substantiation checks built into the ESG and project analysis.
- **Decision-first structure** — 9 Parts and 53 Chapters culminating in stakeholder playbooks and a clear, conditional investment view.

## WHO SHOULD BUY THIS REPORT

Investors, growers, agribusiness, co-operatives, OEMs, retailers, lenders and policymakers, and strategic corporate planners and decision-makers.

### Access the Full Report

The complete report delivers all 53 chapters in full, with every sub-heading, country table, company and patent directory, forecast model and due diligence checklist.

Purchase at [www.anewmarketdynamics.com](http://www.anewmarketdynamics.com) · Standard & Premium licences · Single-Site (SSL) and Global-Site (GSL) options at checkout.

### Want the Complete Detailed Table of Contents?

This prospectus lists the nine parts and 53 chapters. The complete detailed table of contents — every sub-heading, country table, exhibit, company and patent directory and annex — is available on request to registered users. To receive it, register with your official company email at [www.anewmarketdynamics.com](http://www.anewmarketdynamics.com). The full detailed table of contents will be sent directly to your registered company email address.