

Biofertilizers

ANMD-MRS21-202 · Industrial & Environmental Biotechnology

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

Biofertilizers are microbial inoculants — nitrogen fixers, phosphate solubilisers and plant-growth-promoting rhizobacteria — that enhance crop nutrient availability and soil health while reducing synthetic-fertiliser dependence. Delivered as carrier-based, liquid and granular formulations, they cut nutrient run-off, restore soil biology and lower the carbon and energy intensity of fertilisation. This decision-grade study sizes the global market in value and volume (with viable cell count as a quality lens), across microbial type, formulation, application and end-user, across seven regions and four scenarios to 2032, with outlooks to 2050.

SUSTAINABILITY & SDG IMPACT — THE ANMD LENS

Sustainability is this report's backbone. Beyond input substitution, biofertilizers deliver measurable synthetic-fertiliser reduction, nutrient run-off avoidance and soil-carbon restoration, strengthening the regenerative-agriculture and natural-capital story.

Mapped Sustainable Development Goals:

SDG 2 Zero Hunger	SDG 13 Climate Action	SDG 15 Life on Land
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Measurable sustainability outcomes assessed:

- Reduced synthetic-fertiliser dependence and nutrient run-off
- Soil-carbon restoration and biodiversity gains
- Yield resilience and stress tolerance
- Strain biosafety, formulation quality and field-claim substantiation 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

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

REPORT COVERAGE

Geographic scope: North America, Europe, Asia Pacific, Latin America, Africa, Middle East and Rest of World — with named country intelligence. Asia Pacific leads volume (India, China) on subsidy support and soil-health programmes; Europe scales on Farm-to-Fork nutrient-reduction targets; North America accelerates on regenerative-agriculture and carbon-market linkage; other regions assessed on their own merits.

MARKET OVERVIEW

From niche organic inputs to mainstream nutrient-management tools.

Biofertilizers are moving from niche organic inputs to mainstream nutrient-management tools. Demand is driven by synthetic-fertiliser price volatility, soil-degradation pressure, and regenerative-agriculture and emissions policy, against field-efficacy variability, shelf-life stability and adoption inertia. The market is read in value and volume — with viable cell count as a quality lens — and forecast under four scenarios, each region reported separately.

- **Asia Pacific leads volume** — India and China, where subsidy support, large farm bases and soil-health programmes drive adoption
- **Europe scales on regulation** — Farm-to-Fork nutrient-reduction targets and organic-area growth pulling microbial inputs
- **North America is accelerating** — regenerative-agriculture commitments, carbon-market linkage and biological-input investment
- **Soil-health economics is the differentiator** — nutrient savings plus yield resilience and carbon credits underpin returns synthetic fertiliser alone cannot match

REGIONAL OUTLOOK

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

Region	Stage	Lead Country Markets & Drivers
Asia Pacific	Volume leader	India, China — subsidies, large farm base, soil-health missions
Europe	Regulated growth	France, Germany, Italy — Farm-to-Fork targets, organic area
North America	Accelerating	United States, Canada — regenerative ag, carbon markets
Latin America	Emerging	Brazil, Argentina — soy and cane inoculants, large acreage
Africa	Frontier	Kenya, Nigeria — smallholder soil fertility, blended finance
Middle East	Frontier	Egypt, UAE — arid-soil restoration, food-security drive

KEY MARKET DRIVERS & RESTRAINTS

Drivers	Restraints
<ul style="list-style-type: none"> • Synthetic-fertiliser price volatility • Soil-degradation & nutrient run-off pressure • Regenerative-agriculture & carbon-market pull • Government subsidy & soil-health programmes • Strain efficacy & formulation shelf-life gains 	<ul style="list-style-type: none"> • Field-efficacy variability across soils & climates • Shelf-life and viable-cell-count stability • Cold-chain and storage logistics • Farmer awareness & adoption inertia • Regulatory registration & quality control

SEGMENTATION SNAPSHOT

By Microbe Type	Rhizobia / N-fixers · phosphate solubilisers · potash mobilisers · mycorrhizae · PGPR
By Formulation	Carrier-based · liquid · granular
By Application	Nitrogen fixation · nutrient solubilisation · growth promotion
By End User	Farmers · agribusiness · cooperatives · distributors
By Business Model	Product sale · custom blend · managed-service · licensing
By Deployment Scale	Smallholder · estate · industrial-broadacre

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 — Biofertilizers
- › 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

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- › Chapter 12. North America Market Intelligence
- › Chapter 13. Europe Market Intelligence
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Part IV — Technology, Innovation and Category-Specific Intelligence

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- › Chapter 22. Research, Innovation and Funding Landscape

Part V — Company, Competition, Patent and Project Intelligence

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- › Chapter 25. Mergers, Acquisitions, Partnerships and Ecosystem Intelligence
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- › Chapter 41. Investment, Sustainable Finance and Bankability Intelligence

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

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- › 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 dedicated biotech specialists, established industrial-biotech majors and integrated producers. Deal activity — M&A, technology acquisition and platform expansion — signals a market consolidating around scalable, bankable, deployment-ready solutions.

Representative players profiled in the full report:

Novonesis A/S (formerly Novozymes A/S) · UPL Limited · Bayer AG · Syngenta AG (Valagro) · Lallemand Plant Care (Lallemand Inc.) · and further profiled biological-input players incl. T.Stanes & Company Limited, IPL Biologicals Limited and Agrinos AS

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

KEY QUESTIONS THIS REPORT ANSWERS

- ? How large is the global biofertilizers market, and how fast will it grow to 2032?
- ? Which regions, microbe types and crops offer the strongest risk-adjusted opportunity?
- ? How do strain efficacy, formulation and carbon-market linkage change soil-health economics?
- ? 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, strain biosafety and field-claim substantiation?

WHY ANMD — THE DIFFERENCE

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

- **Triangulated sizing** — every market read three ways (value (US\$) and volume (tonnes), with viable cell count (CFU/g) as a quality lens) so value, capacity and volume 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, conditions-based investment verdict.

WHO SHOULD BUY THIS REPORT

Investors and venture / PE funds, biological-input producers, agribusiness and cooperatives, distributors and farmers, carbon-programme developers, policymakers, lenders and ESG teams, plus 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 · 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. The full detailed table of contents will be sent directly to your registered company email address.