



Biostimulants

Source: ET

In the **recently held 'Viksit Krishi Sankalp Abhiyan'**, the Union Agriculture Minister emphasized the issue of unregulated sale of **biostimulants** and announced that **only those biostimulants that meet all necessary criteria and are scientifically proven to be beneficial to farmers will be approved.**

- These approvals will be granted solely based on scientific validation.

Biostimulants

- **About:** Biostimulants are **substances or microorganisms** (such as beneficial bacteria, fungi, or plant extracts) that, when applied to seeds, plants, or soil, stimulate natural plant processes.
 - Biostimulants **enhance nutrition efficiency, abiotic stress tolerance, crop quality.**
- **Contribution to Sustainable Agriculture:**
 - Improving **plant tolerance to abiotic stress** on plants, including **drought**, extreme temperatures (cold, frost, and heat), and salinity
 - Enhancing uptake and **efficient use of nutrients**, both applied and existing
 - **Improving soil health** by enhancing beneficial soil microorganisms
 - Enhancing **crop quality** through plant health and vigor
 - **Increasing harvestable yields**

Classification of Biostimulants		
Biostimulants	Description	Examples
Humic and Fulvic Acids	Soil organic matter from plant, animal, and microbial residues.	Peat, leonardite, soft coal
Seaweed Extracts	Derived through different extraction processes.	Soluble powders or liquid extracts
Liquid Manure Composting	Manure mixed with proprietary materials to promote microbial growth.	Liquid biofertilizer from composted manure
Beneficial Bacteria and Fungi	Bacteria and fungi that aid in root growth.	Bacillus, Rhizobium fungi

- **Market Outlook in India:** The biostimulants market in India was valued at approximately USD 355-362 million in 2024 and is projected to reach between USD 1.13 billion and USD 1.2 billion by 2032.
- **Related Provisions:** In India, the biostimulants are regulated via the **Fertiliser (Inorganic, Organic or Mixed) Control Order (FCO), 1985**, amended recently in 2024 and 2025.
 - The Fertilizer (Control) Order, 1985, administered by the Department of Agriculture Cooperation, has been **issued under the Essential Commodities Act, 1955.**

Initiatives Related to Organic Farming

- National Project on Organic Farming (NPOF) - **introduced in 2004**
- **Paramparagat Krishi Vikas Yojana (PKVY)**

- Mission Organic Value Chain Development for Northeastern Region (MOVCDNER)

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