



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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