

India's Bio-Agriculture Global Outreach

Prelims: *Current events of national and international importance | Agriculture*

Why in News?

The Biological Agri Solutions Association of India (BASAI) is collaborating with international stakeholders to enhance cooperation in biological agriculture regulations, research, and technology.

- BASAI is pursuing opportunities for agricultural collaboration with Kenya.



Annual Biocontrol Industry Meeting (ABIM) 2026

- **Venue** - Basel, Switzerland.
- **India's representative** - Vipin Saini, CEO of BASAI.
- **Participation**
 - 65 countries.
 - Over 800 companies and organisations.
- **Key Discussions**
 - The Indian regulatory framework for cell-free microbial products.
 - Safety assessment of biological agricultural products.
 - Risk assessment of complex biological mixtures, including:

- Microbial metabolites.
- Peptides.
- RNA Interference (RNAi).
- The development of science-based regulations to promote innovation while ensuring product safety.

Biological Approaches in Agriculture

- Biological materials and processes are employed to enhance crop protection, promote plant health, and increase agricultural productivity.
- These approaches offer alternatives or supplements to conventional chemical agricultural inputs.
- **Major Types**

Type	Description
Biopesticides	Biological agents used to control pests
Biofertilisers	Microorganisms that improve nutrient availability
Biocontrol agents	Organisms or biological substances used to control pests and diseases
Microbial metabolites	Substances produced by microorganisms that can support crop protection
RNAi-based solutions	Use RNA molecules to suppress specific target genes

India-Kenya Agricultural Cooperation

- BASAI is currently exploring collaborative opportunities with the Kenya Agricultural and Livestock Research Organization (KALRO).
- This initiative was undertaken following an invitation from KALRO Director General Patrick K. Keyeim.
- Potential Areas for Collaboration:
 - Drone technology in agriculture.
 - Information Technology (IT)-based agricultural solutions.
 - Agricultural inputs.
 - Knowledge exchange and agricultural research.

Significance

- **Sustainable Agriculture** - Decreases reliance on conventional chemical inputs.
- **Environmental Protection** - Promotes adoption of environmentally sustainable crop protection practices.
- **Food Safety** - Encourages the use of scientifically evaluated agricultural inputs.
- **Innovation** - Stimulates research and development of biological products.
- **International Cooperation** - Enhances technology transfer and knowledge dissemination.
- **Farmer Welfare** - May improve crop productivity and support long-term agricultural sustainability.

Reference

