

INDIAN PESTICIDE INDUSTRY OUTLOOK

India is 4th largest global producer of pesticides after United States, Japan and China with average application rate of 0.6 kg/ha. At present, 78% of the total cultivated area of the country is under pesticide application, out of which chemical pesticide segment commands 75% of the share, as against 9% share of bio-pesticide segment. The rest of the area is under Integrated pest management (IPM).

Market value & drivers

CAGR ~8% (2020-2025)

~USD 6 billion

- Depletion of Arable land & increase in food demand
- Increase private sector investments
- High market availability & increasing farmer awareness
- Consistent government initiatives in providing credit facilities to farmers

Cultivated area under treatment

(Value in 000'ha)

Year	Chemical pesticide	Bio pesticide	Combination
2016-17	71.6	7.3	25.1
2017-18	82.2	7.7	10.3
2018-19	81.1	7.1	10.6
2019-20	108	14.6	45.2
2020-21	111.3	14	22

Area under bio pesticide displays a significant surge with CAGR of **14%** as against chemicals with CAGR of **9%** over a period of 5 years (2016-2021). While, in case of combinations, there has been a downward trend observed with CAGR of **-8%**, indicating the preference of standalone solutions over combinations (IPM).

Supply-Demand & Major Crops Consumption Pattern

	Chemical Pesticides	Bio Pesticides
Consumption	62,190 MT	8,640 MT
Demand	70,670 MT	11,050 MT

A significant market gap is observed with **12% gap** in supply over demand of chemical pesticide products as against **22% gap** in bio pesticide products availability in market .

■ Chemical pesticide ■ Biopesticide

A prominent surge of **2-4%** witnessed in bio pesticide application across major cereal, pulses and vegetables crops from 2019-21 period.
 (Note- A slight trend deviation in 2020 data due to impact of pandemic on industry)

Competition dashboard

- ◆ Bayer Crop Science Ltd
- ◆ BASF India Ltd
- ◆ P I Industries Ltd
- ◆ Dhanuka Agritech Ltd
- ◆ UPL Ltd
- ◆ Sumitomo Chemical India Ltd.
- ◆ Rallis India Ltd.
- ◆ Geolife Agritech India

Way Forward

1

R&D Focus

To develop sustainable and affordable pest control solutions by strengthening R&D infrastructure.

2

Strategic Partnerships

Increase collaboration and co creation between companies to remain highly competitive in market.

3

Digital Innovation

Use of block chain and ICT technologies to regulate product supply based on real time marked demand data.

4

High Capital Flow

High investments from private sector expected to enhance product offerings, and meet the surge in market demand.

*Data source- Statistical database GoI (<http://ppqs.gov.in/statistical-database>)