India Pesticides Industry Analysis to 2018
- Led by Advent of Technologically Advanced Biopesticides
TABLE OF CONTENTS

1. India Pesticides Market Introduction
2. Value Chain of Pesticides Industry in India
3. India Pesticides Market Size
   3.2. By Consumption in Tonnes, FY’2007-FY’202
   3.3. By Revenue, FY’2007-FY’2013
4. India Pesticides Market Segmentation By Consumption in Value
   4.1. By Types of Pesticides, FY’2007-FY’2013
   4.2. By Generic and Patented Pesticides, FY’2013
   4.3. By Organizational Structure, FY’2013
   4.4. By Crops, FY’2013
6. India Pesticides Market Segmentation By Consumption in Volume
   6.1. By Chemical and Biopesticides, FY’2007-FY’2012
7. India Pesticides Exports and Imports, FY’2007-FY’2013
8. Government Regulations in Pesticides Market in India
   General Overview
   The Insecticides Act, 1968
   Mandatory Registration of Pesticides
   Pesticides Management Bill, 2008
   FDI Policy
9. Government Initiatives in India Pesticides Market
   Plant Quarantine
   Integrated Pest Management
   Central Integrated Pest Management
Seed Treatment Campaign
Regulating Pesticides and their Residues for Food Safety
Strategic Government Plans

10. Key Research Institutes of Pesticides in India
   10.1. Indian Council of Agricultural Research
   Affiliated Research Institutes
   10.2. Tamil Nadu Agricultural University
   10.3. Institute of Pesticides Formulation Technology
   10.4. Crop Protection Research Centre
   10.5. CSIR-Indian Institute of Chemical Technology

11. India Pesticides Market SWOT Analysis
    Strengths
    Weaknesses
    Opportunities
    Threats

12. India Pesticides Market Trends and Developments
    Advent of Eco Friendly Biopesticides
    Increasing Awareness among Farmers
    Inclining Demand for Organic Food
    Increasing Focus on Research and Development
    Growing Horticulture and Floriculture Leading to Increased Demand for Pesticides
    Focus on Contract Manufacturing
    Increasing statewise Pesticides Sales Points in India

13. Revenue of Major Players in India Pesticides Industry, FY’2012-FY’2013

   14.1. By Types of Pesticides, FY’2014-FY’2018
   14.2. Cause and Effect Relationship between Industry Factors and India Pesticides Industry Prospects
15. Company Profiles of Major Players in India Pesticides Market

15.1. United Phosphorus Limited

15.1.1. Company Overview

15.1.2. Business Strategy

   Technological and Operational Excellence
   Focus on Continual Product Updation

15.1.3. Financial Performance, FY’2009-FY’2013

15.2. Bayer CropScience

15.2.1. Company Overview

15.2.2. Business Strategy

   Investing in Production Capacities and Processing Facilities
   Focus on New Product Development and Improvement of the Existing Products
   Renewing R&D portfolio
   Strengthening Local Supply Chain

15.2.3. Key Financials, FY’2013

15.3. Syngenta

15.3.1. Company Overview

15.3.2. Business Strategy

   Focus on New Product Development and Improvement of the Existing Products
   Focus on Improvising Existing Products
   Rural Penetration

15.4. Rallis India

15.4.1. Company Overview

15.4.2. Business Strategy

   Focus on International Business
   Focus on Increasing the Product Portfolio
   Strengthening Farmer Relationship
   Augmenting Agricultural Training
15.4.3. Key Financials, FY’2013

15.5. BASF

15.5.1. Company Overview

15.5.2. Business Strategy

Business Expansion in Emerging Markets

Focus on Innovation

16. India Biopesticides Market Introduction

17. India Biopesticides Market Size, FY’2007-FY’2012


17.2. By Revenue, FY’2007-FY’2013

18. India Biopesticides Market Segmentation, FY’2013

18.1. By Microbial and Botanical Biopesticides, FY’2013

18.1.1. Microbial Biopesticides Market Segmentation by Biofungicides and Bioinsecticides, FY’2013


Trichoderma Viride and Harzianum
Pseudomonas Fluorescens
Bacillus Subtilis/ Pumilus
Ampelomyces Quisqualis
Fusarium Proliferatum
Paecilomyces fumosoroseus

18.1.1.2. India Bioinsecticides Market Segmentation, FY’2013

18.1.1.2.1. By Type of Bioinsecticides, FY’2013

Metarhizium Anisopliae
Beauveria Bassiana
Verticillum Lecanii
Bacillus Thuringensis var. Kurstaki
Pacilomyces Lilacinus
Nuclear Polyhedrosis Virus (NPV) and Bacillus Firmus
18.1.1.2.2. By Target Pests, FY’2013
For Sucking Insects
For Soil Insects
For Caterpillars
For Nematodes

18.2. By Organizational Structure, FY’2013
18.3. By Crops, FY’2013

19. Area under Use of Chemical and Biopesticides in India, 2012
19.1. By Regions and States

20. India Biopesticides Consumption by Regions and States, FY’2012


22. Competitive Landscape of Leading Players in India Biopesticides Market
22.1. Pest Control India
22.1.1. Business Overview
22.2. International Panaacea Limited
22.2.1. Business Overview
22.3. T Stanes
22.3.1. Business Overview
22.4. Biotech International
22.4.1. Business Overview
22.5. PG Margo
22.5.1. Business overview

23. India Biopesticides Market Future Outlook and Projections, FY’2014-FY’2018
23.1. Cause and Effect Relationship between Industry Factors and India Biopesticides Industry Prospects

24. Macro Economic Factors of India Pesticides Market
24.1. Total Area under Cultivation, FY’2007-FY’2018
24.2. Flow of Institutional Credit to Agriculture, FY’2007-FY’2018
24.3. Foodgrain Production in India, FY’2007-FY’2018

24.4. GDP from Agriculture and Allied Sector, FY’2007-FY’2018

24.5. Population, 2007-2018


25. Appendix

25.1. Market Definitions

25.2. Abbreviations

25.3. Research Methodology

Data Collection Methods

Approach

Variables (Dependent and Independent)

Multi Factor Based Sensitivity Model

Final Conclusion

25.4. Disclaimer
LIST OF FIGURES

Figure 1: Average Consumption of Pesticides in India Compared with Other Countries across the Globe, 2012

Figure 2: Agrochemicals Distribution Network in India

Figure 3: Process of Developing a Molecule into Pesticide

Figure 4: India Pesticides Market Size by Production in Tonnes, FY’2007-FY’2012

Figure 5: India Pesticides Market Size by Consumption in Tonnes, FY’2007-FY’2012

Figure 6: India Pesticides Market Size on the Basis of Revenue in INR Million, FY’2007-FY’2013

Figure 7: India Pesticides Market Segmentation by Generic and Patented on the Basis of Revenue in Percentage (%), FY’2013

Figure 8: India Pesticides Market Segmentation by Organized and Unorganized Market on the Basis of Revenue in Percentage (%), FY’2013

Figure 9: India Pesticides Market Segmentation by Crops on the Basis of Consumption in Percentage (%), FY’13

Figure 10: List of Crops and Pests Attacking the Crops

Figure 11: India Pesticides Market Segmentation by Chemical and Biopesticides on the Basis of Consumption in Percentage (%), FY’2007-FY’2012

Figure 12: India Pesticides Market Segmentation by North, South, West, East and North East Regions on the Basis of Consumption in Percentage (%), FY’2007-FY’2012

Figure 13: India Pesticides Exports Segmentation by Insecticides, Herbicides, Fungicides, PGRs, Biopesticides and Rodenticides on the Basis of Revenue in Percentage (%), FY’2013

Figure 14: India Pesticides Imports Segmentation by Insecticides, Herbicides, Fungicides, Biopesticides, Rodenticides and PGRs on the Basis of Revenue in Percentage (%), FY’2013

Figure 15: India State-wise Number of Pesticides Testing Laboratories and Target Capacity of Analysis Per Annum

Figure 16: Production Trend of Horticulture Crops in India, FY’2007-FY’2011

Figure 17: India Pesticides Market Future Projections on the Basis of Revenue in INR Million, FY’2014-FY’2018
Figure 18: India Pesticides Market Future Projections by Insecticides, Herbicides, Fungicides, Biopesticides, PGR and Rodenticides on the Basis of Revenue in Percentage (%), FY’2014-FY’2018

Figure 19: UPL Domestic Revenue from Pesticides in India in INR Million, FY’2009-FY’2013

Figure 20: Bayer Crop Science Revenue Break-Up by Segments on the Basis of Revenue in Percentage (%), FY’2013

Figure 21: Rallis India Limited Business Portfolio, FY’2013

Figure 22: Rallis India Revenue Break-Up by Segments on the Basis of Revenue in Percentage (%), FY’2013

Figure 23: India Biopesticides Market Size on the Basis of Consumption in Tonnes, FY’2007-FY’2012

Figure 24: India Biopesticides Market Size on the Basis of Revenue in INR Million, FY’2007-FY’2013

Figure 25: India Biopesticides Market Segmentation by Microbial and Botanical Biopesticides on the Basis of Revenue in Percentage, FY’2013

Figure 26: India Microbial Biopesticides Market Segmentation by Biofungicides and Bioinsecticides on the Basis of Revenue in Percentage, FY’2013

Figure 27: India Bioinsecticides Market Segmentation by Types of Bioinsecticides on the Basis of Revenue in Percentage (%), FY’2013

Figure 28: Bioinsecticides Segmentation by Types on the Basis of Contribution in Revenue in Percentage (%), FY’2013

Figure 29: Bioinsecticides Segmentation by Target Pests on the Basis of in Percentage (%), FY’2013

Figure 30: India Biopesticides Market Segmentation by Unorganized and Organized Market on the Basis of Contribution in Percentage (%), FY’2013

Figure 31: India Biopesticides Market Segmentation by Crops on the Basis of Consumption Value of Biopesticides in Percentage (%), FY’2013

Figure 32: India Pesticides Consumption by West, South, North, East and North-East Regions on the Basis of Contribution in Percentage (%), FY’2012

Figure 33: Market Share of Major Players in India Biopesticides Market in Percentage (%), FY’2013
Figure 34: India Biopesticides Market Future Projections on the Basis of Revenue in INR Million, FY’2014-FY’2018

Figure 35: India Total Area under Cultivation of Food Grains and Crops, FY’2007-FY’2018

Figure 36: India Flow of Institutional Credit to Agricultural Sector in INR Million, FY’2007-FY’2018

Figure 37: Food Grain Production in India in Million Tonnes, FY’2007-FY’2018

Figure 38: India GDP from Agriculture and Allied Sector in INR Million, FY’2007-FY’2018

Figure 39: India Population in Million, 2007-2018

Figure 40: India Gross Sown Area for Agricultural Inputs in Million Hectares, FY’2007-FY’2018
LIST OF TABLES

Table 1: Pesticides Registered in India under section 9 (3) of the Insecticides Act, 1968

Table 2: Wholesale Price Index (WPI) of Pesticides in India, FY’2007-FY’2012

Table 3: India Pesticides Market Segmentation by Insecticides, Herbicides, Fungicides, Biopesticides, PGRs and Rodenticides on the Basis of Revenue in Percentage (%), FY’2007-FY’2013

Table 4: India Pesticides Market Segmentation By Insecticides, Herbicides, Fungicides, Biopesticides, PGRs and Rodenticides on the Basis of Revenue in INR Million, FY’2007-FY’2013

Table 5: India Pesticides Market Segmentation by Generic and Patented on the Basis of Revenue in INR Million, FY’2013

Table 6: India Pesticides Market Segmentation by Organized and Unorganized Market on the Basis of Revenue in INR Million, FY’2013

Table 7: List of Major Mergers and Acquisitions (M&A) in India Pesticides Industry, 2009-2013

Table 8: Top 15 Indigenous Pesticides Consumed in India in Tonnes, FY’2011-FY’2012

Table 9: Top 15 Imported Pesticides Consumed in India in Tonnes, FY’2011-FY’2012

Table 10: India Pesticides Market Segmentation by Chemical and Biopesticides on the Basis of Consumption in Tonnes, FY’2007-FY’2012

Table 11: India Pesticides Market Segmentation by North, South, West, East and North East Regions on the Basis of Consumption in Tonnes, FY’2007-FY’2012

Table 12: India Pesticides Market Segmentation by States on the Basis of Consumption in Tonnes, FY’2007-FY’2012

Table 13: India State-wise Pest Attacks and Agricultural Highlights and Pesticides Infrastructure, FY’2012

Table 14: India Pesticides Exports and Imports Market on the Basis of Revenue in INR Million, FY’2007-FY’2013

Table 15: Pesticides Restricted in India and Details of Restriction

Table 16: List of Pesticides and Formulations Banned for Manufacture, Import and Use in India and Pesticides Refused Registration
Table 17: Pesticides Formulation Banned for Import, Manufacture and Use, Pesticides/Pesticides Formulations Banned For Use but Continued to Manufacture For Export and Pesticides Withdrawn

Table 18: Government Strategies in the Indian Pesticides Market

Table 19: Biopesticides Categories by Researched Products, Research Areas and Leading Researchers in India

Table 20: State-Wise Number of Pesticides Sale Points in India in Units, 2008-2012

Table 21: Dhanuka Key Product Portfolio

Table 22: Dhanuka Agritech Distribution Network, FY’2007 and FY’2013

Table 23: Dhanuka New Product Launches in FY’2012 and FY’2013

Table 24: Competitive Landscape of Major Players in India Pesticides Market on the Basis of Domestic Revenue from Agrochemicals in INR Million, FY’2012 and FY’2013

Table 25: Competitive Landscape of Other Players in India Pesticides Market on the Basis of Domestic Revenue from Agrochemicals in INR Million, FY’2012 and FY’2013

Table 26: List of Major Players in Indian Agrochemicals Industry by Technical Manufacturers, Formulators and companies with Balanced Portfolio

Table 27: India Pesticides Market Future Projections by Insecticides, Herbicides, Fungicides, Biopesticides, PGR and Rodenticides on the Basis of Revenue in INR Million, FY’2014-FY’2018

Table 28: New Pesticide Registrations in India by Insecticides, Fungicides and Herbicides with Registration Type and Company as Approved by Central Insecticides Board and Registration Committee in August, 2013

Table 29: New Pesticide Registrations in India by Insecticides, Fungicides and Herbicides with Registration Type and Company as Approved by Central Insecticides Board and Registration Committee in September, 2013

Table 30: Cause and Effect Relationship between Industry Factors and India Pesticides Industry Prospects

Table 31: UPL Agrochemical Product Portfolio

Table 32: Key Product Profile of UPL

Table 33: Major Pesticides Brands of UPL

Table 34: List of Crop Protection Products Offered by Buyers Crop Sciences India
Table 35: Bayer Crop Science Revenue Break-Up by Major Brands of Pesticides on the Basis of Revenue in Percentage (%), FY’2013

Table 36: Major Pesticides Brands of Syngenta

Table 37: List of Agro-chemical Brands Offered by Rallis India

Table 38: Rallis India Limited Product Portfolio

Table 39: Rallis India Revenue Break-Up by Major Brands of Pesticides on the Basis of Revenue in Percentage (%), FY’2013

Table 40: List of Agro-chemicals Offered by BASF

Table 41: Biopesticides Categories on the Basis of Application on Major Pests and Major Crops

Table 42: Biopesticides Registered for Use in India under Section 9(3) and Section 9(3B) of the Insecticides Act

Table 43: India Biopesticides Market Segmentation by Microbial and Botanical Biopesticides on the Basis of Contribution in Revenue in INR Million, FY’2013

Table 44: India Microbial Biopesticides Market Segmentation by Biofungicides and Bioinsecticidesc on the Basis of Revenue in INR Million, FY’2013

Table 45: Bioinsecticides Segmentation by Types on the Basis of Revenue in INR Million, FY’2013

Table 46: Bioinsecticides Segmentation by Types on the Basis of Contribution in Revenue in INR Million, FY’2013

Table 47: Bioinsecticides Segmentation by Target Pests on the Basis of in INR Million, FY’2013

Table 48: India Biopesticides Market Segmentation by Unorganized and Organized Market on the Basis of Revenue in INR Million, FY’2013

Table 49: Total Area under Cultivation and Area of Chemical and Biopesticides and Area Not Under Use of Pesticides by Regions in India in Thousand Hectares, 2012

Table 50: Total Area under Cultivation and Area of Chemical and Biopesticides and Area Not Under Use of Pesticides by States in India in Thousand Hectares, 2012

Table 51: India Bio Pesticides Consumption by West South, East, North-East and North Regions in Tonnes, FY’2012

Table 52: India Biopesticides Consumption by States in Tonnes, FY’ 2012

Table 53: List of Bio Fungicides and Bio Pesticide Brands Offered by International Panaacea limited
Table 54: List of Pest Management Bio-pesticides Products Offered by T Stanes and their Specifications

Table 55: List of Bio-Pesticides Offered by Biotech International:

Table 56: List of Bio-Pesticides Offered by PG Margo

Table 57: Upcoming Biopesticides and Active Research Institutes in India

Table 58: Cause and Effect Relationship between Industry Factors and India Biopesticides Industry Prospects

Table 59: Correlation Matrix of India Pesticides Industry

Table 60: Regression Coefficients Output of India Pesticides Market
Crop protection assumes an important place in the Indian agricultural economy owing to the existence factors such as high population growth, declining arable land …

The Indian pesticides industry has witnessed remarkable growth in terms of volume of pesticides produced over the last seven years. India was observed as the 4th largest producer of pesticides in the world after the …

The total production of pesticides in FY’2012 was ~ tonnes, thus declining by ~% over the previous year. It was observed that the pesticides production in India in FY’2012 and in FY’2013 was adversely affected due to unfavorable weather conditions resulting …

Figure: India Pesticides Market Size by Production in Tonnes, FY’2007-FY’2012
India is the second largest populous country in the world with nearly 16% of the global population. India pesticides industry is an effervescent market in the world, valued at INR ~ million as witnessed in FY’2013. Over the last six years from FY’2007-FY-2013, the industry has observed an average annual growth of 10.2% in value terms.

During 2007, the Indian agrochemicals market benefited from the rain pattern and the industry witnessed increasing farmer preference towards high-value and high-quality products and rapid adoption of new technologies…

It was noticed that the domestic market recorded low growth of 4.6% for 2012-13 because of an erratic monsoon and prolonged drought in various parts of the country. The Kharif season was delayed by over three weeks in western, central and the south central part of India and hence, cotton and paddy sowing were severely impacted in these areas.

**Figure: India Pesticides Market Size on the Basis of Revenue in INR Million, FY’2007-FY’2013**
Pesticides industry in India has been broadly segmented into six categories including insecticides, herbicides, fungicides, biopesticides, plant growth regulators and rodenticides. Of the aforementioned, insecticides commanded the highest share of ~% in the overall pesticides market revenue, resulting aggregating sales worth INR ~ million during FY’2013. In spite of leading the market, the segment’s market share has observed a steady decline over the period of the last few years. This fall in the market share has been primarily witnessed …

Currently constituting a small segment, biopesticides market in India has a huge potential for growth in the years ahead primarily owing to government support and increasing awareness about use of non-toxic, environment friendly pesticides in the country. The contribution of biopesticides in the overall pesticides market has increased from ~% in FY’2007 to ~% in FY’2013. The most commonly used biopesticides in the country include …

Table: India Pesticides Market Segmentation by Insecticides, Herbicides, Fungicides, Biopesticides, PGRs and Rodenticides on the Basis of Revenue in Percentage (%), FY’2007-FY’2013

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Table: India Pesticides Market Segmentation By Insecticides, Herbicides, Fungicides, Biopesticides, PGRs and Rodenticides on the Basis of Revenue in INR Million, FY’2007- FY’2013

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BY GENERIC AND PATENTED PESTICIDES, FY’2013

India is one of the most dynamic and largest generic manufacturers of agrochemicals in the world. The country is equipped with more than 75 technical grade manufactures’ and nearly 600 formulators. The technical grade manufacturers are engaged in selling high …

India pesticides market is majorly held by the generic products accounting for a share of ~% of the industry revenue whereas only ~% of the market is held by patented products as of FY’2013. The generic and patented market of pesticides was valued at INR ~ million and INR ~ million in FY’2013. Off patent products generally include those pesticides products which have …
The competition in the industry is with a major portion of the industry revenue generated by the organized players and significant share of fake or substandard pesticides by the unorganized sector. The organized sector in the pesticides industry revenue in India was estimated at INR ~ million in FY’2013, thus contributing ~% to the total market revenue and that of unorganized sector was around ~%, thereby amounting to INR ~ million in the same year…

The leading market players in pesticides include …
The overall pesticides market in India has been largely dominated by the share of chemical pesticides while bio-pesticides form only a small portion of the market. Chemical pesticides are used in order to guard against the …

The contribution of bio pesticides in the overall pesticides market exists is substantially lower in comparison to the chemical pesticides. In spite of the low share, this market has been witnessing huge …

The India bio-pesticides market has witnessed growth at an extraordinary CAGR of ~% from FY’2007 to FY’2012. Western and Southern region of India have been the major regions where biopesticides are consumed, these two regions together accounted for ~% of the total consumption of biopesticides as of FY’2012. The total consumption of biopesticides in the country stood at ~ tonnes in FY’2012 up from ~ tonnes as registered in FY’2007.
BY REGIONS AND STATE WISE CONSUMPTION, FY’2007-FY’2012

In FY’2012, the northern region of the country commanded a considerable share of ~% in the overall pesticides consumption, reaching the total ~ tonnes. This high consumption can be attributed to fact that the northern region …

Some major agrarian states including Haryana, Himachal Pradesh, Punjab, Uttar Pradesh and Jammu & Kashmir formed substantial portion of the total consumption of agrochemicals in the northern region of India with Uttar Pradesh leading the list. In FY’2012, Uttar Pradesh (UP) consumed a total of ~ tonnes of pesticides. Majority of the population in UP depends …
Western region of the country closely follows the southern region of the country comprising states such as Chhattisgarh, Goa, Gujarat, Madhya Pradesh, Maharashtra and others. The region composed of ~% share of the overall consumption during FY’2012 consuming ~ tonnes of pesticides in FY’2012. Maharashtra is the leading consumer in the region holding ~% of the total consumption in the region in FY’2012, followed by Rajasthan which consumed ~ tonnes of pesticides during the same year.

The east and the north eastern region constituted the lowest share in the overall pesticides market measured in terms of the consumption. The eastern region of the country commanded the market share of ~% followed by the north-eastern region which made a meager ~% of the market as witnessed during FY’2012. The combined sales of both Eastern and north eastern region accounted for an aggregate of …

**Figure: India Pesticides Market Segmentation by North, South, West, East and North East Regions on the Basis of Consumption in Percentage (%), FY’2007-FY’2012**
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<td>Andaman &amp; Nicobar</td>
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<td>Nagaland</td>
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The Indian exports of pesticides have been witnessing healthy traction in terms of growth as observed over the past few years. India continues to maintain its position as the net exporter of pesticides in the country. The major export destination markets for Indian pesticides include the US, France...

The total export value of crop protection chemicals in FY’2012 was INR ~ million and imports were valued at INR ~ million during the year. The exports market for pesticides in the country is estimated to be risen to approximately INR ~ million in FY’2013.

Table: India Pesticides Exports and Imports Market on the Basis of Revenue in INR Million, FY’2007-FY’2013

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<td>Import</td>
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<td>73,570</td>
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<td>Total</td>
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Figure: India Pesticides Exports Segmentation by Insecticides, Herbicides, Fungicides, PGRs, Biopesticides and Rodenticides on the Basis of Revenue in Percentage (%), FY’2013

- Insecticides: 1.9%
- Herbicides
- Fungicides
- PGR
- Biopesticides
- Rodenticides

Figure: India Pesticides Imports Segmentation by Insecticides, Herbicides, Fungicides, Biopesticides, Rodenticides and PGRs on the Basis of Revenue in Percentage (%), FY’2013

- Insecticides: 4.8%
- Herbicides
- Fungicides
- Biopesticides
- Rodenticides
- PGR
Indian crop protection industry is capital intensive and highly regulated industry. The industry has been mainly composed of technical grade manufacturers and formulators. The technical grade producers usually sell premium quality chemicals in the bulk to the formulators, who then prepare formulations by mixing the carriers, solvents, surface active agents and other relevant compounds. There are nearly 125 technical grade manufacturers, about 800 formulators and more than 145,000 distributors involved in the chain.

UPL was observed to be the leading player in the country’s business of agro-chemicals in FY’2013. During the financial year 2013, the company generated revenues worth INR ~ million. The company’s rich portfolio includes products such as Lancer Gold, Ulala, Saaf, Saathi, Lagaam and other. About ~% of the company’s revenue is generated through the sale of pesticide products…

Bayer Crop Science is the second largest player in the crop protection market in India. The company has led an important role towards driving innovation in the market to improve agrarian productivity…Bayer Cropscience recorded a significant market share in the overall pesticides market in India, accounting for total revenues worth INR ~ million in FY’2013 as compared to INR ~ million in FY’2012.

Table: Competitive Landscape of Major Players in India Pesticides Market on the Basis of Domestic Revenue from Agrochemicals in INR Million, FY’2012 and FY’2013

<table>
<thead>
<tr>
<th>Leading Players</th>
<th>Revenue in FY’2012</th>
<th>Revenue in FY’2013</th>
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<tbody>
<tr>
<td>United Phosphorus Limited</td>
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<tr>
<td>Bayer Crop science India</td>
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<tr>
<td>Syngenta India Limited</td>
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<td>Rallis India Limited</td>
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<td>BASF</td>
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<td>Indofil</td>
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<td>Dhanuka Agritech</td>
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<td>DuPont</td>
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<td>PI Industries</td>
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<td>Makhteshim Agan</td>
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</table>
Table 2: Competitive Landscape of Other Players in India Pesticides Market on the Basis of Domestic Revenue from Agrochemicals in INR Million, FY’2012 and FY’2013

<table>
<thead>
<tr>
<th>Other Agrochemical Players</th>
<th>Revenue in FY’2012</th>
<th>Revenue in FY’2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biostadt</td>
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<tr>
<td>Sulphur Mills</td>
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<td>Atul Ltd.</td>
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<tr>
<td>Meghami Organics</td>
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<tr>
<td>Bhargirada Chemicals and Industries</td>
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<tr>
<td>Aimco Pesticides</td>
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INDIA PESTICIDES MARKET FUTURE OUTLOOK AND PROJECTIONS, FY’2014-FY’2018

Indian pesticides industry has grown remarkably over the past years. Some important factors such as augmenting level of population, growing food demand coupled with the declining farmland have provided a major thrust to the need for improving the agrarian yield and avoiding the pests resulting loss in crop.

The Indian Agrochemical industry has witnessed healthy growth at a CAGR of 10.2% from FY’2007 to FY’2013, with exports constituting a significant proportion of the industry earnings. The low consumption of agro chemical products in India accounting for only ~ kg/hectare.
relative to the world average of ~ kg/hectare indicates immense growth potential for the pesticides business in India in the coming years. The Indian pesticides market presently dominated by the significant share of insecticides is likely to be preceded by …

Furthermore, the presence of inexpensive labor and low cost of processing has continued to remain important factors driving the attention of multi-nationals into the country’s pesticides arena. Additionally, the growth has been predicted on account of …

**Figure: India Pesticides Market Future Projections on the Basis of Revenue in INR Million, FY’2014-FY’2018**

BY TYPES OF PESTICIDES, FY’2014-FY’2018

The future prospects for crop protection companies in India seem to be positive in the next five years. Insecticides will continue to dominate the Indian pesticides market; however, a significant decline is anticipated in its market share. The share of insecticides in the overall pesticides market is likely to fall to 40.2% by FY’2018 from ~% in FY’2013. This decline in the share has been significantly projected on account of increasing …
The bio-pesticides segment of the agro-chemical industry in India has registered growth at a remarkable CAGR of ~% in terms of consumption from FY’2007-FY’2012. The highest growth in the bio-pesticides consumption was observed during FY’2010, the year witnessed growth in the consumption volume at a massive ~% over the previous year, reaching a total consumption of ~ tonnes from ~ tonnes in FY’2009. This high growth has been witnessed on account of significant gains in …
The potential benefits of using biopesticides in agriculture and public health programmes are considerable. This has tremendously escalated the consumption for biopesticides in the country over the years. Biopesticides do not have residue problem which is a matter of …
Indian agriculture faces damage caused by numerous pests such as fungi, weeds and insects which leads to a considerable loss of crop yields. Chemical pesticides reduced the loss to a great extent but over dependency and their uninhibited usage has pointed towards …

Bio-pesticides are basically the environment friendly alternative to chemical pesticides for the purpose of pest management. The growth in the bio-pesticides market revenues has been immensely attributed to …

The revenue contribution of biopesticides has witnessed growth at a relatively high CAGR of 26.4% as compared to 10.2% growth recorded for the entire pesticides market during the same period. The biopesticides market recorded sales growth, reaching from INR ~ million in FY’2007 to INR 5,568.0 million as observed during FY’2013. The sales are further anticipated to amplify in the coming years clocking CAGR of around 30.9% from FY’2014 to FY’2018.
The biopesticides market has been significantly bifurcated in terms of microbial and botanical bio-pesticides. During FY’2013, microbial pesticides constituted the majority of the company revenues. The contribution of these pesticides was observed to be considerably higher at ~%, commanding the total sales worth INR ~ million. Microbial biopesticides are basically eco-friendly pests’ management solutions obtained from scientifically treating several …

The microbial biopesticides are further segmented between bio-fungicides and bio-insecticides. The share of bio-fungicides is the highest in microbial biopesticides market value, clocking nearly ~% of the overall microbial pesticides market, and generating revenue worth INR ~ million as observed in FY’2013. The share of bio-insecticides was observed second highest at ~% of the microbial pesticides market.
Botanical pesticides, on the other hand are the form of bio-pesticides derived from the treatment of some parts or active ingredients of plants mainly including neem …

**Figure: India Biopesticides Market Segmentation by Microbial and Botanical Biopesticides on the Basis of Revenue in Percentage, FY’2013**

The Indian microbial bio-pesticides market has been mainly segregated into 2 categories namely bio-fungicide and bio-insecticides, with bio-fungicides witnessing majority of the share in the total segmental revenues …

These are more effective in comparison to the bio-insecticides whose performance is dependent on the stream of factors. In FY’2013, the bio-fungicides contributed a total of ~ million to overall microbial pesticides market registering a significant share of ~% of the market.

Bio-insecticides, on the contrary are used as the eco-friendly and advanced alternatives to the chemical insecticides for controlling the incidence of insect pests resulting in the …

The share of bio-insecticides was registered relatively lower at ~% commanding total revenues worth INR ~ million during FY’2013, thereby indicating low preference relative to the bio-fungicides.
BIO-FUNGICIDES MARKET SEGMENTATION, FY’2013

TRICHODERMA VIRIDE AND HARZIANUM

The market share of Trichoderma viride and harzianum in biofungicides market revenue in the country was observed to be ~% and ~% respectively as of FY’2013, constituting combined revenue of INR ~million.

BACILLUS SUBTILIS/ PUMILUS

Bacillus subtilis / pumilus is a spore forming bacteria which, when applied to the seeds or plants, colonize the developing root system of the plants. The bacteria thereby suppress plant disease fungal organisms such as...

The share of Bacillus subtilis / pumilus, however, was relatively low and was recorded at around ~% of the biofungicides market revenue in FY’2013.
Figure: Bioinsecticides Segmentation by Types on the Basis of Revenue in Percentage (%), FY’2013

Table: Bioinsecticides Segmentation by Types on the Basis of Revenue in INR Million, FY’2013

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Revenue (INR Million)</th>
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<tbody>
<tr>
<td>Trichoderma Viride</td>
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<td>Pseudomonas Fluorescens</td>
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<tr>
<td>Trichoderma Harzianum</td>
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<tr>
<td>Bacillus Subtilis/Pumilus</td>
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<tr>
<td>Fusarium Proliferatum</td>
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<tr>
<td>Ampelomyces Quisqualis</td>
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<tr>
<td>Paecilomyces Fumosoreseus</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>4.6%</strong></td>
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</table>
BY ORGANIZATIONAL STRUCTURE, FY’2013

The India pesticides industry is highly dominated by the prevalence of unorganized sector, with the majority of the pesticides sold in the market space being non-branded. The country’s biopesticides market is highly fragmented with several number of small scale players operating in the space. Also within the unorganized sector, there exists a huge market for spurious pesticides... During FY’2013, the unorganized sector constituted a significant share of ~% in the overall bio-pesticides market in the country.

The organized sector, on the other hand, is composed of only few players constituting a total of ~% of the total market, clocking aggregate sales worth INR ~ million in FY’2013. Pest Control India, International Panaacea Limited … are some of the prominent players concentrating upon this evolving market. The low market share commanded by the organized sector of biopesticides in India has been due to increased prices, low …

**Figure: India Biopesticides Market Segmentation by Unorganized and Organized Market on the Basis of Contribution in Percentage (%), FY’2013**

BY CROPS, FY’2013

The use of bio-pesticides in the country has been witnessing a significant level of over the last few years. This incline has been registered in the backdrop of increasing farmers consciousness...
in terms of detrimental effects followed by the use of chemical pesticides including soil quality degradation, underground water pollution…

The application of bio-pesticides is spread across several crops in the agriculture. However the share of cotton was recorded the highest, commanding nearly ~% of the overall bio-pesticide consumption in India during FY’2013.

Paddy constituted the second highest share in the country’s overall consumption value of bio-pesticides and accounted for ~% share in FY’2013, closely followed by groundnut farming contributing around ~% of the consumption pie. Pulses also held significant share of ~% followed by wheat which accounted for ‘% of the biopesticides consumption in India as recorded in FY’2013. Fruits and vegetables constituted ~% of the market revenue as observed during FY’2013. Sugarcane is another important crop which holds around ~% of the …

**Figure: India Biopesticides Market Segmentation by Crops on the Basis of Consumption Value of Biopesticides in Percentage (%), FY’2013**

INDIA BIOPESTICIDES MARKET FUTURE OUTLOOK AND PROJECTIONS, FY’2014-FY’2018

The domestic biopesticides market has showcased remarkable traction over the past few years in the industry of agro-chemicals in India. Further being an emerging trend in the country’s pesticides industry, these have ... The market for biopesticides has recorded growth at a healthy
CAGR of ~% from FY’2007 to FY’2013 thereby out-performing the overall pesticides market that has registered growth at a relatively low CAGR of ~% over the same period. This growth has been largely impelled by increased …

The bio-pesticides market has been significantly projected to grow in the next five years, reaching revenue worth INR 21,379.3 million by FY’2018 as compared to INR ~ million as observed in FY’2013. This growth performance has been primarily anticipated on account of …

Another important factor that is likely to influence the market for bio-pesticides in the future is the growing incidence of organic farming in the country, which is likely to be impelled attributing to the …

The share bio-pesticides accounts for mere ~% of the total pesticides market in India as of FY’2013 and it is projected to reach ~% by FY’2018, thereby showcasing extreme potential for growth in the coming years. The future market for biopesticides is anticipated to witness growth at a CAGR of 30.9% as biopesticides will gain more importance as an agricultural input for managing pests in Indian agriculture.

**Figure: India Biopesticides Market Future Projections on the Basis of Revenue in INR Million, FY’2014-FY’2018**
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