



भारतीय कृषि एवं खाद्य परिषद्
INDIAN COUNCIL OF FOOD AND AGRICULTURE

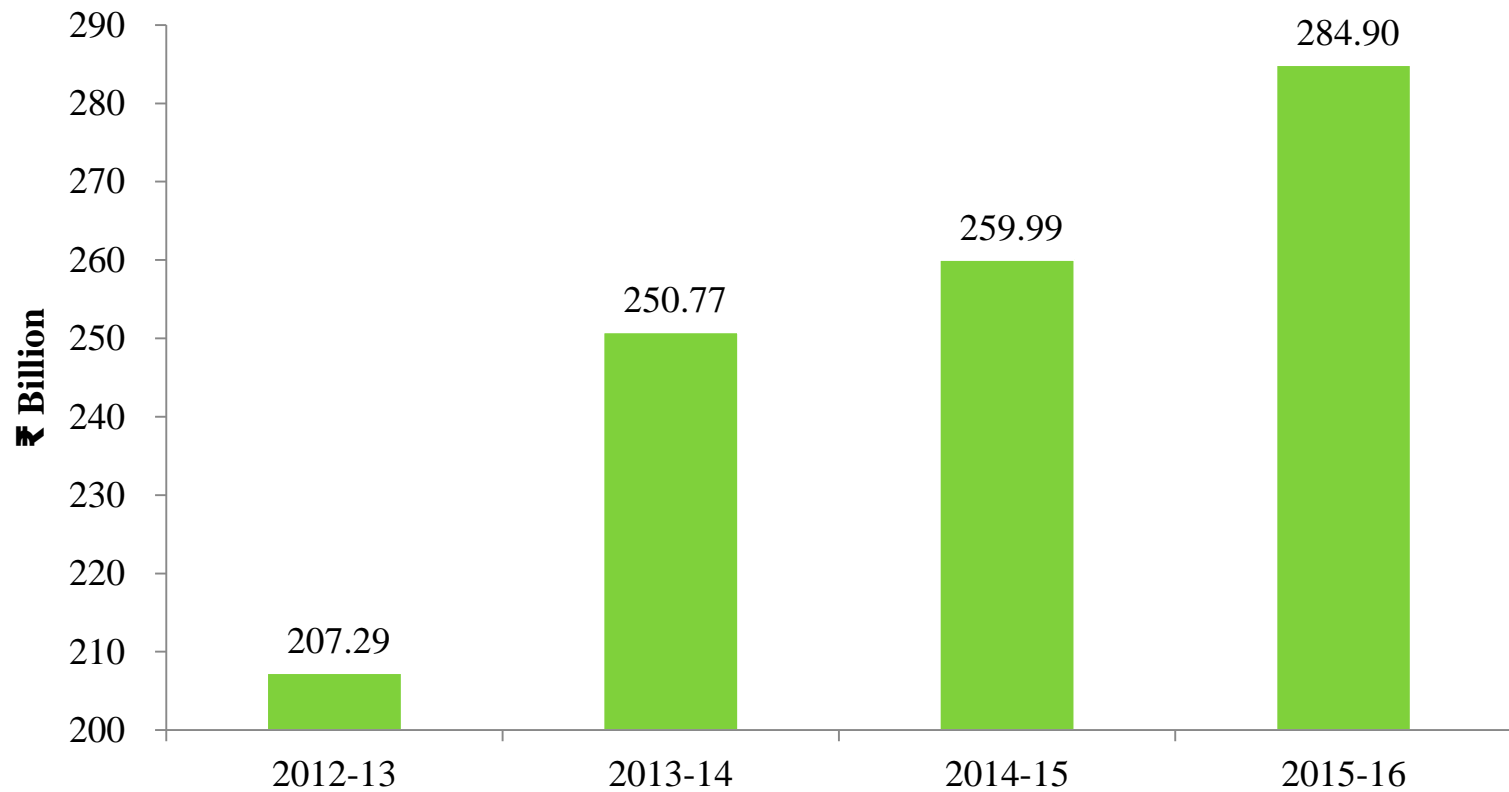


PLANT PROTECTION

MARKET UPDATE

Indian Plant Protection Market

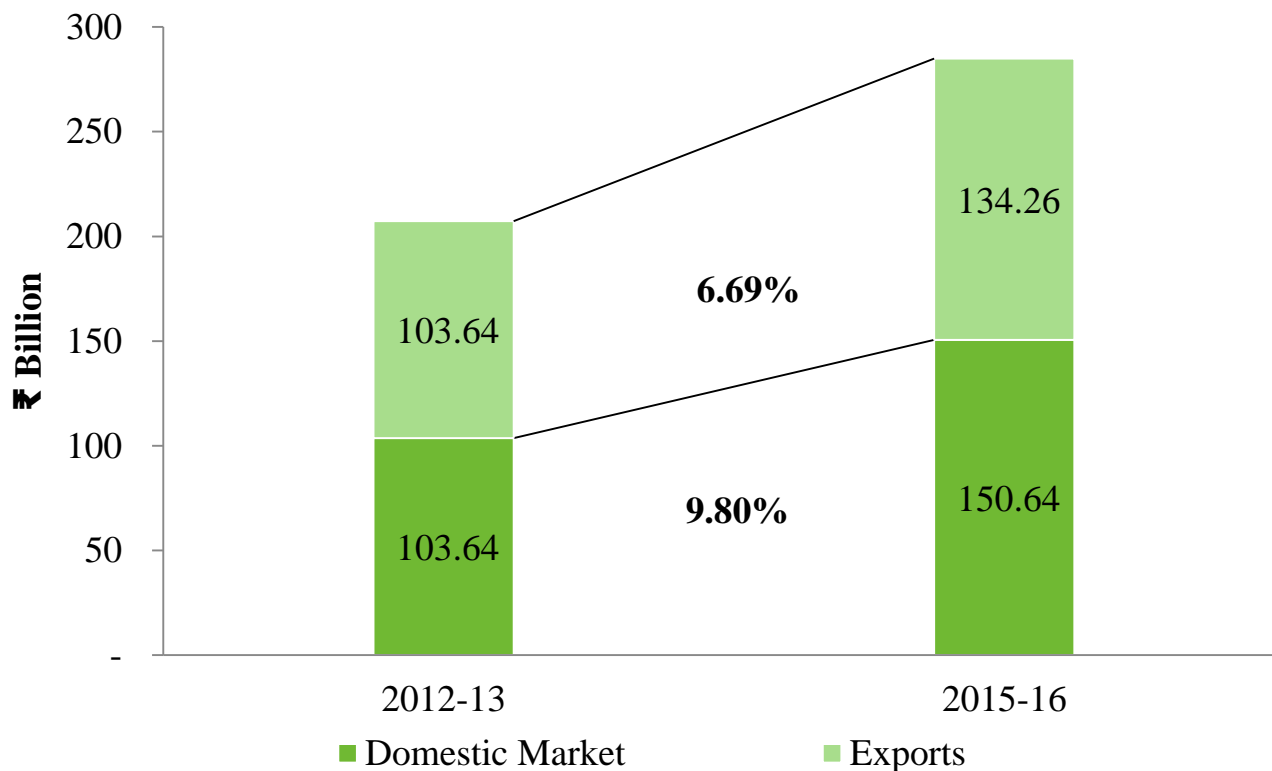
Indian Plant Protection Market by Value; 2012-16



Source: FICCI, Tata Strategic Management Consultants and ICFA

Indian Plant Protection Market

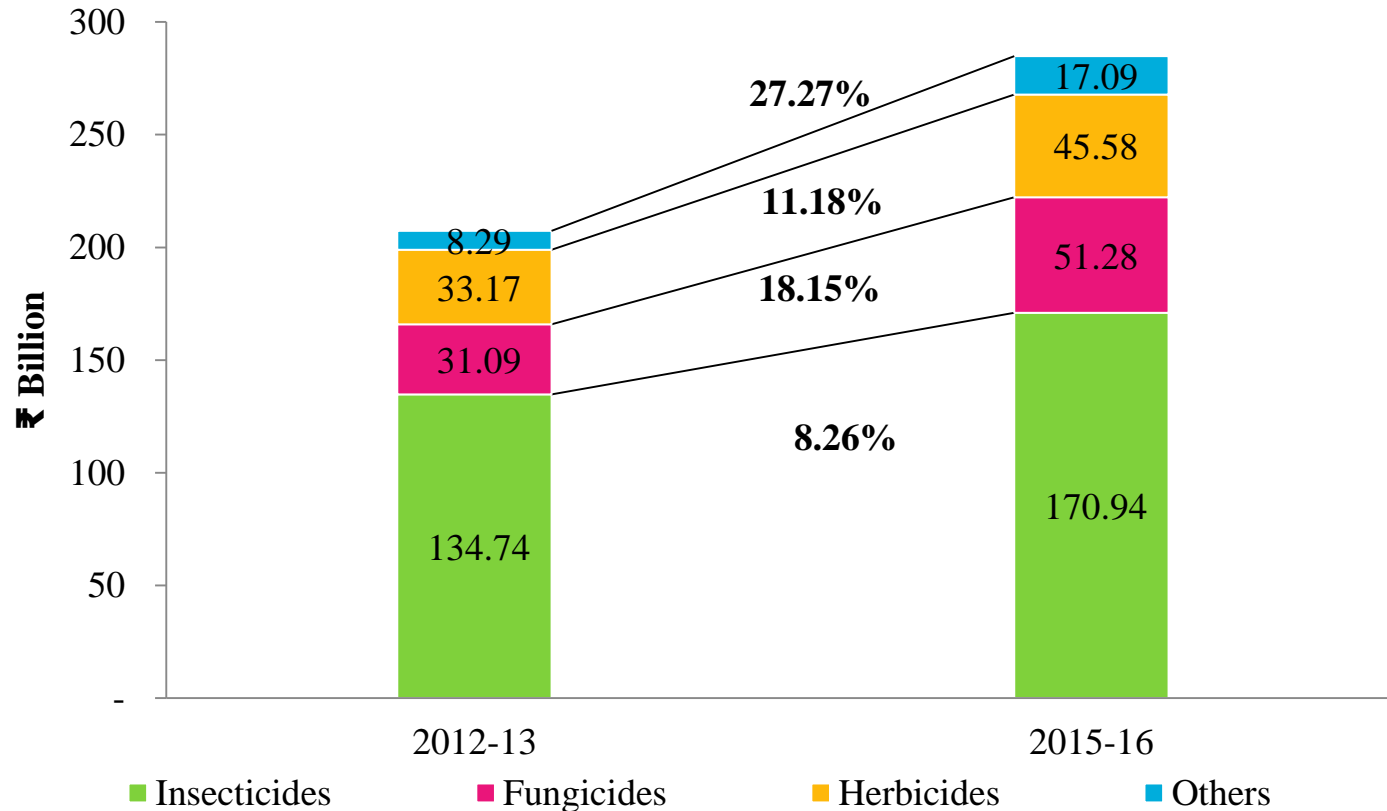
Indian Plant Protection Market by Consumption Pattern; 2012-16



Source: FICCI and Tata Strategic Management Consultants

Indian Plant Protection Market

Indian Plant Protection Market by Segments; 2012-16



Source: FICCI and Tata Strategic Management Consultants

Indian Plant Protection Market Players

COMPANY	INSECTICIDES	HERBICIDES	FUNGICIDES	OTHERS
BASF India	√	-	√	Seed Treatment
Bayer Crop Science Ltd.	√	√	√	Seed Treatment, Plant Growth Regulators
Dhanuka Agritech Ltd.	√	√	√	PGRs, Surfactants
Dow AgroSciences India Pvt. Ltd.	√	√	√	Plant Growth Regulators
DuPont	√	√	√	Growth Enhancer
Excel Crop Care Ltd.	√	√	√	Seed Treatment, Home & Garden
Gharda Chemicals Ltd.	√	√	√	Plant Growth Regulators
Mrghmani Organics Ltd.	√	√	√	Pesticide Intermediaries
Monsanto India Ltd.	-	√	-	Maize Seeds
Nagarjuna Agrichem Ltd.	√	√	√	Fertilizers, Micro Nutrients, Liquid Fertilizers
PI Industries Ltd.	√	√	√	Speciality Products
Rallis India	√	√	√	Rodenticides, Seed Treatment
Syngenta India	√	√	√	Seed Treatment
United Phosphorus Ltd.	√	√	√	Fumigants, Rodenticides

Source: Tata Strategic Management Consultants and Company Reports

Market Drivers and Opportunities

- **Generic Products:** Large proportion of the agrochemical market is expected to go off-patent by 2020. This provides significant export opportunities for Indian companies which have expertise in generic segment.
- **Low Pesticides Consumption:** The per hectare consumption of pesticides in India is amongst the lowest in the world. In order to increase yield and ensure food security for its enormous population agrochemicals penetration in India is bound to go up.
- **Growth in Herbicides and Fungicides:** Labor shortage, rising labor costs and technological interventions has led to growth in the use of herbicides. On the other hand the fungicide industry in India has grown due to the growth in Indian horticulture industry.

Challenges

- **Non-Genuine Products:** There is a significant share of non-genuine pesticides, which include counterfeit, spurious, adulterated or sub-standard products. They also result in by-products which may significantly harm the soil and environment.
- **Low Focus on R&D by Domestic Manufacturers:** Indian Companies spend only 1-2% of their revenues in Research and Development as against the global MNCs which invest about 8-10% of their revenues. This makes Indian manufacturers uncompetitive globally in specialty molecules.
- **Lack of Education and Awareness among Farmers:** The main point of contact between the farmers and the manufacturers are the retailers who don't have adequate technical expertise and are thus unable to impart proper product understanding to the farmers.
- **Need for Efficient Distribution Systems:** The industry has been plagued by problems arising out of supply chain inefficiencies and inadequate infrastructure which result in postharvest losses.

Recommendations

- Promoting judicious use of pesticides and integrating cultural, agronomical, mechanical and biological methods through Integrated Pest Management (IPM) to manage pests rather than trying to control them is a pre-requisite for quality food production as well as for Integrated Resistance Management (IRM) and Integrated Crop Management (ICM).
- In order to sensitize farmers, awareness campaign for farmers needs to be initiated with demonstrations for practical exposure to farmers regarding various practices and methods of managing pest.
- A public system led pest surveillance and early warning system should be set up on localized basis across geographies to support farmer's decision to protect his crops.
- The system of molecules registration needs to be streamlined with an aim to restrict flooding of markets by 'Me-too products' on one hand and speedy registration of new molecules on the other hand.

Recommendations

- Government of India needs to create a special R&D fund for indigenously developing newer plant protection molecules under public private partnership.
- It is suggested to relook into the registration process of pesticides and is required to be completely revamped.
- An awareness campaign must be run for the general public to be aware of the advantages of protecting crops and the regulatory processes to change the perception about the use of pesticides, in particular the safe molecules.
- Crop Grouping system which is already understood to be under review in India needs to be standardized and put in place at the earliest.
- The procedure of export registration needs to be expedited so that exports of plant protection products make rapid strides.

Thank You