

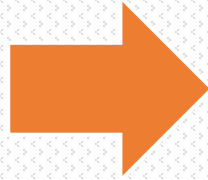
PESTICIDES

SECTOR OVERVIEW



PRODUCTION PROCESS

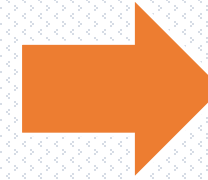
STEP 1:
Formation of Active Ingredients/technical material such as Methanol and Xylene



STEP 2:
Adding and Mixing Solvents, Emulsifiers, and active ingredients.



STEP 3:
Sampling, Lab Tests and Results.



STEP 4:
Packing.

This process is not carried out in Pakistan and all active ingredients are imported, majorly from China

Pesticides can be grouped as Emulsifiable Concentrate (EC) or Suspension Concentrate (SC). Both can be in liquid form, powder or granules. Both groups are differentiated based on their method of mixing.

MARKET INSIGHT

The domestic pesticides industry witnessed a reduced growth rate owing to the demand for bio-pesticides, adoption of herbicide resistant crops by farmers and increased prices of imported raw materials.

Size of crop protection market is estimated around PKR~60-75bln.

Pakistan pesticide market is import dependent, with 20% - 30% of the pesticide cost component (active ingredients/technical material) being imported to the country, majorly from China (above 90%).

MARKET DYNAMICS

Growth Factors: Factors that drive crop protection chemicals market in Pakistan are: (i) growing food demand (ii) low agricultural productivity and (iii) government initiatives for agricultural development in the country.

Constraints: Restraints limiting the market growth include (i) high prices of pesticides and (ii) increase in the area under BT cotton (genetically modified pest resistant crop).

Opportunities: Future opportunities for market growth lie in the inclination towards the adoption of new technologies and use of sustainable and integrated pest management techniques in farming practices.

KEY POINTS

Pesticides can be classified based on their chemical types, application types, and pattern of consumption in the country. According to chemical types, crop protection market can be segmented into:

- (i) Insecticides
- (ii) Herbicides
- (iii) Fungicides

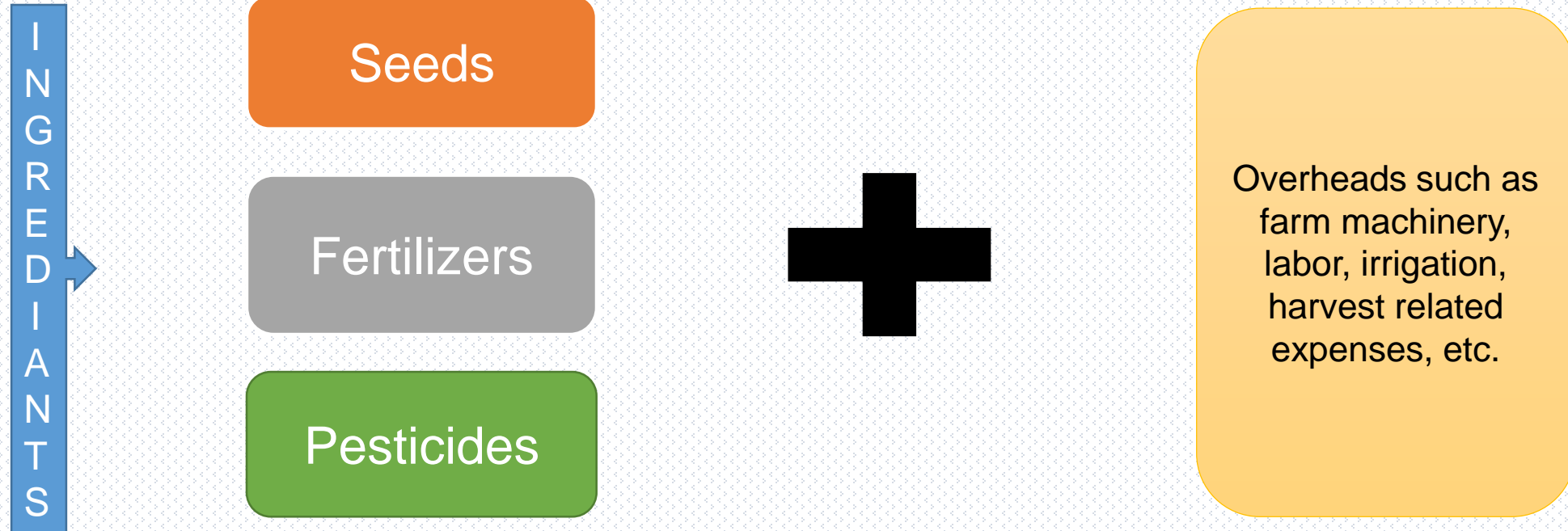
Insecticides have the largest market share by value and volume.

- By consumption, Insecticides account for ~80% of the total pesticides consumed in the country.
- Herbicides range from 10% - 12%.
- Fungicides make up 8% to 10% of the consumption. Fungicides are majorly applied on potato crops with some portion needed for rice and vegetables.

Major crops in Pakistan include wheat, cotton, rice, sugarcane, maize, fruits and vegetables.

CROPS | KEY INPUTS

Crop Key Inputs can be broadly divided into the following categories:



Application: Traditionally, pesticides procurement is planned a quarter before the sowing period of a crop. Pesticide procurement and production for cotton crop therefore begins around March. Cotton accounts for 60% - 65% pesticide market in the country.

COTTON | KEY INPUTS

Cotton and potato are the most pesticide hungry crops grown in the country.

In cotton crop, around ~35% of the total input cost attributes to pesticides application, followed by fertilizer expense which varies from 25% to 30%. Seed cost ranges within 10% of the total input cost for cotton. Average cotton input cost per acre varies between PKR 30,000 – 33,000.

During the sowing season of cotton cycle, usage of pesticide is at peak. However, use of pesticides continues before, during and after sowing till the product is ready.

- 1) In Sindh, sowing season starts from mid of May till mid of June.
- 2) In Punjab, sowing season starts from early May till end of May.



PESTICIDES | APPLICATION

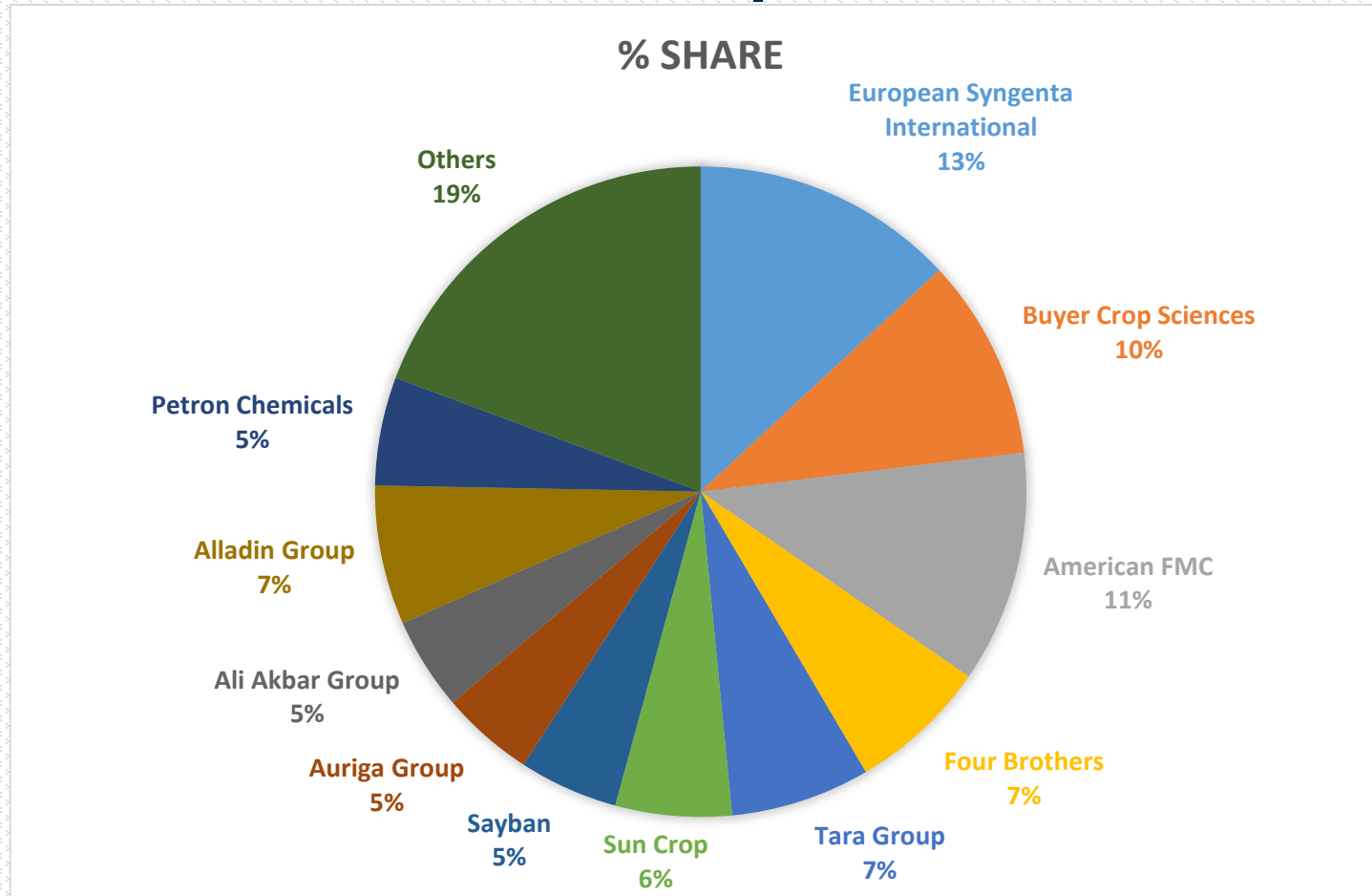
Pesticides are applied in the following forms:

- (i) Liquid
- (ii) Powder
- (iii) Granular.

- Around 70 – 75 percent of the pesticides are applied to the crops in liquid form.
- 10 – 20 percent are used in powder form mixed with other solvents.
- Granular pesticides are applied only to maize, rice and sugarcane crops (in addition to liquid form) and account for 10 – 20 percent of pesticide application.



PESTICIDES | Market Share



- Pesticide market value is estimated around PKR~60-70bln.
- Market comprises MNCs and local Companies. MNCs include European Syngenta International, Buyer Crop Sciences and American FMC.
- Major players (11) make up ~81% of the total pesticide market.



Bibliography

1. Pakistan Economic Survey
2. <https://www.mordorintelligence.com/industry-reports/pakistan-crop-protection-chemicals-market>
3. PACRA In-house Research

Analyst	Saniya Tauseef Supervising Senior - Ratings +92 42 3586 9504 saniya.tauseef@pacra.com	Jhangeer Hanif Unit Head – Ratings +92 42 3586 9504 jhangeer@pacra.com
---------	--	---

DISCLAIMER

PACRA has used due care in preparation of this document. Our information has been obtained from sources we consider to be reliable but its accuracy or completeness is not guaranteed. The information in this document may be copied or otherwise reproduced, in whole or in part, provided the source is duly acknowledged. The presentation should not be relied upon as professional advice.