

Indian Agriculture and Crop protection Industry

India is developing day by day and its economy is considered as one of the fastest developing economies of the world. India is ranked on number 7 by area and on number 2 by population. By keeping these statistics in mind one can easily assume the role and importance of agriculture in the Indian economy. The GDP part of India added by agriculture is about 17% and in Indian exports, agriculture is contributing about 10%. On the other hand, India has to feed a population of around 1.2 billion peoples to need their food security needs.

India has about 157 million hectares of arable land and ranked on number 2 as compared to other countries. Although India has a great edge in terms of arable area but still yields are very low as compared to other developed countries. The main factors which are responsible for low yields are the inadequate water supply and the poor rural infrastructure. Out of total area, India has 41% arable land available for cultivation which is mostly dependent on Monsoon rain season.

In India, Cultivation is done in two seasons that is Rabi and Kharif. Kharif crops mainly include cotton, rice, maize, and sugarcane while Rabi includes oilseed crops like rape and mustard, and cereals.

In the Table there is short overview about the agriculture facts and Main crops of India reviewed by [World bank](#) and [FAO](#) stats.

Index	Figure
GDP growth	7.3%
Agricultural growth	1%
Agriculture, value added (% of GDP)	18%
Arable land	157 Million HA
Population	1.295 Million
Rural vs. urban Population Share	68% vs. 32%
Agricultural land	180 Million HA
Agricultural irrigated land (% of total agricultural land)	36%

Source: World Bank Data 2014

Major Crops	Area (HA)	Production (tonnes)	Global Ranking (value)
Wheat	29.650.000	93.510.000	2 nd
Cottonseed	11.700.000	12.293.100	2 nd
Rice	43.950.000	159.200.000	2 nd
Maize	9.430.000	23.290.000	6 th
Sugarcane	5.060.000	341.200.000	2 nd
Onions	1.217.000	19.299.000	2 nd
Tomatoes	880.000	18.227.000	2 nd
Chillies and Peppers	792.000	1.376.000	1 st
Potatoes	1.992.200	45.343.600	2 nd
Mangoes, mangosteens, guavas	2.500.000	18.002.000	1 st

Source: FAOSTAT 2013

India is second largest rice producer in the world. Rice is considered to be the most important crop in the Indian agriculture because it is contributing almost 35-40% for agrochemical manufacturers and the crop protection industry.

The use of insecticides, fungicides, and herbicides to get more yield, is very low in India as compared to other developed countries.

Cultivation by using hybrid seeds is also getting popularity in India.

According to some studies, the current use of hybrid seeds in rice cultivation is about 3% as compared to China where 53-58% cultivation is done by using hybrid seeds and China is also the largest producer of rice.

Cotton is the second most important crop in Indian agriculture. The trend of BT cotton is making its place as the agrochemical manufacturers and agrochemical companies are introducing different hybrid seeds for cotton cultivation. India holds its position on number 4 in the 15 biotech mega countries, and in 2011 produced a record amount of BT cotton covering 10.06 million hectare which is almost 80% of total cotton cultivated.

With quite interesting facts cereals is the third most important crop in Indian agriculture. Despite of low yield as compared to developed countries, India is the leading producer of millet and sorghum and the second largest producer for wheat. Despite the decrease of cultivation area for cereals still it is very important for Agro chemical manufacturers due to herbicides and fungicides.

Besides these crops, other crops like vegetables and fruits, which are very important for exports, are also trending in Indian agriculture and the agrochemical manufacturers and crop protection are going towards a good direction. India is the largest producer in the world for fruits like mango, banana, papaya, guava, lemons, and vegetables like okra and chickpea. The outlook for India in the future, in terms of agriculture growth, is very positive. Due to the potential efforts of agrochemical manufacturers and agrochemical companies, genetically modified seeds are trending and new varieties are getting their importance in private and public sectors as well. There is still a lot of space available for the improvement and need huge efforts by agrochemical manufacturers knowing the current situation of Indian agriculture and the news trends in agriculture in the World.

In India the current consumption of agrochemicals is only limited to 25% of the total arable land. The reason is the lack of cognizance among the farmers about the benefits and use of agrochemicals in farming.

Generally this Issue can be easily resolved by a little governmental support and by providing good infrastructure. By addressing these issues, hope so in near future India will be the largest supplier of top food commodities and will lead the market in agrochemicals manufacturing. India has a lot of potential but there is a great need of using this potential correctly both by private and public sector.