

Indian Agriculture Sector:

Investment, Growth and Future Prospects

The GDP of India's agricultural sector amounts to an impressive US\$ 262 billion. The industry remains the single largest contributor to the Indian economy, although its share of GDP fell from more than 30 percent in FY 91 to almost 14.5 percent in FY 11. In order to promote the participation of the private sector, the Indian government allowed 100% foreign direct investment (FDI) in several segments of the agricultural industry. These include fertilizers, agricultural machinery, horticulture, seed development, livestock farming, fish farming, and F&V segment. The outpour of these private sector investments will benefit Indian farmers considerably, as most of them engage in small-scale enterprises and struggle to achieve profitability. These investments can be used to promote agricultural research and development and protect the environment, which could contribute to the overall increase in agricultural productivity. As a result of the 100% FDI allowance, the agricultural services sector saw foreign investments of US\$ 1.5 billion over 2000–2012. *Source: Union FDI Policy*



Santosh Nair
Founder & MD
Miklens Bio Pvt. Ltd.

About the Author

Santosh Nair is a graduate from Mumbai University in 1991 with a specialization in Chemistry. He chose Finance as his mainstream while obtaining his Master's degree in management from the reputed NMIMS in 1998 and has an Executive Degree from IIM-A. With his experience and keen understanding of the world of business and finance, he is involved in making the presence of Miklens Bio felt over wider regions of India and across the globe. His passion for clean agriculture makes him the perfect advocate for Residue-Free Cultivation.

a major game changes, the green revolution in the 70s actually played a pivotal role in making the nation self-sufficient. This was tagged with the usage of chemical-based Agri-inputs which made the farmers pay a hefty price over the coming year. The haphazard use of chemical made the soil infertile, led to the loss of productivity, environmental degradation, and lower yields eventually. Consumption of chemical fertilizers increased from 151 kg/hectare in FY10 to 166 kg/hectare in FY12. This has not only caused an increase in yields but also led to the disruption of the ecological balance which the nation is trying to reverse by going chemical free. Several states have adopted the organic route and many are in pipeline.

Considering the present agricultural scenario and the growth plan to be envisioned, we need to work on the below pointers to understand and develop the channel for the rise of agriculture in India:

- Supply stress due to resource scarcity
- Scope to improve yield
- Opportunity to reduce losses in the food chain
- Technological disruption directly to farmers
- Agricultural credit
- Soil nutrient management
- Research / technology-based crops

Also, the government initiatives and investments, along with various schemes for the Agri community have proved to be a turning point in the way agriculture will be carried out. Some major investments and developments in agriculture are as follows:

- The first mega food park in

Rajasthan was inaugurated in March 2018.

- In 2017, the agriculture sector in India witnessed 18 M&A deals worth US\$ 251 million.
- A loan agreement of US\$ 318 million was signed between the Government of India, Government of Tamil Nadu and the World Bank in December 2017 for the 'Tamil Nadu Irrigated Agriculture Modernization Project' through which is expected to benefit around 500,000 farmers in the state

Not just the organic way or government initiatives, the Public-Private partnership would garner better results in the agriculture space for supporting future innovation and capacity building. India is expected to achieve the ambitious objective of doubling farmer's agricultural revenue by 2022. In the coming years, India is expected to be self-sufficient in pulses due to the concerted efforts of scientists to obtain early maturation varieties of pulses and the increase in the minimum support price. The Government of India aims to increase a farmer's average household income to Rs. 219,724/- by 2022-23 from Rs. 96,703/- in 2015-16 at present prices. The Government of India has implemented a number of projects to support the agriculture sector. They are:

Pradhanmantri Gram Sinchai

Yojana: The aim of the scheme is to irrigate the farmers' fields and improve the efficiency of water use to achieve the motto 'Per Drop More Crop'. The scheme overall ensures better access to irrigation. About 285 new irrigation projects for 18.8 million hectares of land will be undertaken in 2018. Under the Union Budget for 2018- 19, US\$

CXO Standpoint

401.6 million was allocated to the scheme.

Paramparagat Krishi Vikas Yojana (PKVY): The scheme aims to motivate groups of farmers to take up organic farming.

India currently occupies a prominent position among 172 countries that are active in organic farming worldwide. More than 6,50,000 organic producers, 699 processors, 669 exporters, and 7,20,000 hectares are currently in cultivation in the country. However, with only 0.4% of the total agricultural land for organic farming, it is clear that this industry still has a long way to go in terms of growth. The farmers even now have an option for chemical-free farming using Agri Microbial Technology (AMT) based bio Agri inputs which are a perfect replacement to chemical-based inputs and help in residue free farming. These bio Agri inputs eliminate the risks associated with chemical-based farming and significantly enhance yields. The use of chemical pesticides over a prolonged period causes the development of resistance. Such products are highly target-specific and employ multiple modes of action. This prevents the development of resistance and maintains a balance in the natural ecosystem. Residue Free Cultivation based on Agri Microbial Technology (AMT) can bring about a transformation in the sector by increasing yields, reducing costs and environmental impact, and thereby increasing farmer's profit margins. The future will be technologically driven and research oriented. This would open up more avenues for growth, investment and eventually development of the sector and nation as a whole. 