



AgriTech and Agri-Startups

This editorial is based on [“Unlocking the Potential of Agri-Tech”](#) which was published in The Hindu BusinessLine. It talks about the significance of agri-startups and the challenges faced by them.

For Prelims: Agri-Startups, Priority Sector Lending, NABARD, Initial Public Offering (IPO), APEDA, IFAD

For Mains: Agri-startups - role in agricultural sector, challenges to their success

The [Covid-19 pandemic](#) and the [war in Ukraine](#) has massively disrupted the global food system, putting huge **pressure on agriculture-focussed countries like India** to provide more sustainable options.

However, considering the complexity of Indian agriculture, **a single policy or technology cannot reform the agricultural sector.**

Consistent digital transformation efforts along with government incentives and intervention can strengthen the agricultural model in India. The combination of an influx of investments, [AgriTech startups](#) and innovation have the potential of changing the dynamics of Indian agriculture and paving the way for a futuristic model.

What Role have the Agri-Startups been Playing in Agriculture?

- **Increasing Income:** The state of small and marginal farmers in India has been dismal, struggling with low incomes, mounting debts and **dependency on mono-crop culture, informal lenders and fluctuating output prices.**
 - Farmers who seek to venture into [aquaculture](#) or animal husbandry don't have appropriate investments, marketing channels and knowledge.
 - With the **advent of AgriTech startups and digital tools**, many Indian **farmers are supplementing their income with farm diversification.**
- **Farm Diversification:** The AgriTech Startups are **empowering farmers to integrate livestock rearing and aquaculture** into their existing operations with **micro-farm installation** requiring minimum space and labour.
 - Non-crop diversification is helping farmers increase and earn round-the-year income, improve productivity and profitability and **adopt sustainable farming systems.**
- **Awareness Creation:** AgriTech startups with the ever-increasing internet are increasing **awareness among the farming communities** and **connecting them to a network of traders, retailers and exporters** willing to buy their produce at higher prices.
- **Technological Advances:** Technological advances in supply chain platforms have also resulted in the **supply of high-quality live input materials** to farmers engaged in livestock rearing and aquaculture.
- **Reforms in Lending Culture:** With the emergence of **Fintech and AgriTech startups**, the

lending landscape of the country is changing.

- Previously underserved small and marginal **farmers can now secure loans from formal institutions** at low-interest rates.
- A plethora of **easy financing options** and government initiatives have **alleviated the burden of interest** on farmers.

What are Initiatives Launched for Agri-Startups?

- In 2020, the [Reserve Bank of India](#) directed banks to treat **loans up to ₹50 crore to agri-startups** under [priority sector lending](#).
- In the Budget 2022, the Finance Minister of India also announced a fund for agri-startups and rural enterprises. The exclusive fund will be **launched through NABARD** in order to give a **fillip to the farm produce value chain**.
- The International Crops Research Institute for Semi-Arid Tropics (ICRISAT) has called for **applications from agritech start-ups** under the **NIDHI-Seed Support Scheme (NIDHI-SSS)**.
 - The selected start-ups will receive **funding up to ₹50 lakh**. The seed fund will enable them to accelerate their commercialisation activities.

What are Issues regarding Agri-Startups?

- According to the [latest Economic Survey](#), 75 startups/new age companies mobilised ₹89,066 crore in April-November 2021 through the [initial public offering \(IPO\) route](#), the highest in a decade. However, the **share of agri-startups in this is negligible**.
 - The **startup ecosystem in India is skewed in favour of services** — Big Data, Edtech, fintech, logistics and supply chain activities — **rather than agriculture and manufacturing**.
- While startups have several options to mobilise funds, their early stage break-through funding normally comes from angel investors (private equity and venture capital) and the government (seed capital).
 - While venture capitalists are keen on investing in startups based on their disruptive business model, high growth potential and their ability to make quick profits, **agri-startups have been lagging in attracting funds**.
- India has 650 plus start-ups that offer agri-tech innovations in partnership with industries and financial institutions, however, they **lack scale due to the very high costs of serving** smallholding farmers and building their own distribution system.
 - While start-ups have good expertise in emerging technologies, they often **lack the application-level domain expertise**.

What Steps can be taken to Boost Agri-Entrepreneurship?

- **Seed Capital from Banks: Seed capital from the banks and hand-holding of agri-startups by institutions such as NABARD**, by extending credit plus services, will go a long way in helping Agri-Startups establish their position in India's startup ecosystem.
 - The government should also **ensure 'ease of funding' for agri- entrepreneurs** to attain the intended objectives.
- **A SEBI for Agriculture:** A dedicated exchange for agri-startups may be established just like a stock exchange for small and medium enterprises.
 - The [Securities and Exchange Board of India \(SEBI\)](#) may stipulate liberal regulatory norms for listing of agri-startups on the bourses.
 - This will pave the way for **raising much needed risk capital for scaling up** agri-startups and rural enterprises.
- **Collaboration with Field Experts:** Entrepreneurs would be successful in mobilising capital from the market if they team up with **agricultural researchers, financial experts, and technology wizards**.
 - Agri-startups will flourish in India if they are **associated with industry associations like APEDA**, Indian Chamber of Food & Agriculture, NASSCOM, etc., especially for **testing/validation of prototypes before their launch**.
- **Financial Literacy:** The Agri-entrepreneurs should be imparted with financial literacy and

education as the startup world is full of domain professionals and engineers, who hardly know anything about finance and investors.

- Moreover, international agencies such as the [World Bank](#) and [International Fund for Agricultural Development](#) are willing to assist agri-startups in the context of achieving [SDGs](#) in general, climate action (SDG 13) in particular.
 - Agri-startups with a vision of **focussing on climate change and disaster management** are more likely to flourish in the near future.
- **Role of Government:** The government should create an **investor-friendly regime to attract funds** in the agri-startup sector.
 - Angel investors, venture capitalists and private equity holders may be given **tax incentives on capital gains** apart from providing [ease of doing business](#) at the time of their exit from the agri-startups.

Conclusion

With a burgeoning population, climate change and a looming food security crisis, the need for Indian agriculture to transition from the traditional industrial model into a new futuristic and sustainable model has never been more pressing. Small but consistent changes in the agricultural sector can propel India's farming community to the next level. **Greater support for AgriTech firms, digital infrastructure and innovative technologies** can usher in a digital and green agricultural model.

Drishti Mains Question

“Concerted efforts should be made for promotion of agri-startups in order to implement climate-smart agricultural practices in rural India, thereby ensuring food and nutritional security of the nation”. Discuss.