NEW ERA AGRICULTURE MAGAZINE

# Agri- Tech startups: The Ray of Hope in Indian Agriculture

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**Introduction:**

- Startups Launched in 16 January 2016

A startup is a company, a partnership or temporary organization designed to search for a repeatable and scalable business model.

New ideas are brought to the market and transformed in economically sustainable enterprises.


It comes down to three things:

a) **Precedent**
b) **Momentum**
c) **Processes**

**Agritech Startups**


- .Agritech startups are companies or individuals that use technology to improve agriculture
- They can develop solutions to improve productivity, reduce costs, and increase farmer income.
- Agritech startups can also help create employment opportunities and improve the livelihoods of people in the agricultural sector.

**India startups scenario**

- India emerged as the third largest ecosystem in the world.
- Mumbai stand 1st in global startup ecosystem ranking among top 100 startup ecosystem of the world.
- Bengaluru is 23rd global startup ecosystem ranking.
- Delhi is 36th global startup ecosystem ranking.
- Hyderabad is 61st global startup ecosystem ranking.

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| Status of states according to no. of Startups | | |
|---|---|---|
| **S. No.** | State | **Startups** |
| **1** | Maharashtra | **2587** |
| **2** | Karnataka | **1973** |
| **3** | Delhi | **1833** |
| **4** | Uttar Pradesh | **1129** |
| **5** | Telangana | **748** |
| **6** | Gujarat | **712** |
| **7** | Haryana | **710** |
| **8** | Tamilnadu | **709** |
| **9** | Kerala | **461** |
| **10** | Westbengal | **417** |
| **11** | Madhya Pradesh | **384** |

**Focus area of Agri-Startups**

- Farming as a service
- Better access to the input
- Processing and packing
- Market linkage
- IoT for farming

**Challenges of agri-startups**

1. **Innovation and Technology:**
   - Resistance to technology adoption due to lack of awareness or trust in new systems.
   - Lack of technical support and maintenance services for modern agricultural technologies.
   - High upfront costs of new technologies.
2. **Public-Private Partnerships:**
   - Policy uncertainty may deter investment and innovation in the agri-tech sector.
   - Compliance costs with varying regulations can be burdensome for startups.
3. **Access to New Markets:**
   - Challenges in establishing market linkages for new agri-tech products.
   - Meeting quality standards and certifications can be challenging, impacting market access.
   - Integrating with existing agricultural supply chains can be complex and requires collaboration with various stakeholders.

4. **Sustainable Agriculture:**
   - Weather uncertainties affecting agricultural output and adoption of sustainable practices.
5. **Education and Awareness:**
   - Insufficient education on how to use new technologies effectively.
   - Lack of awareness about the benefits of new technologies and sustainable practices.
   - Sustainable Agriculture.
   - Supply Chain Optimization.

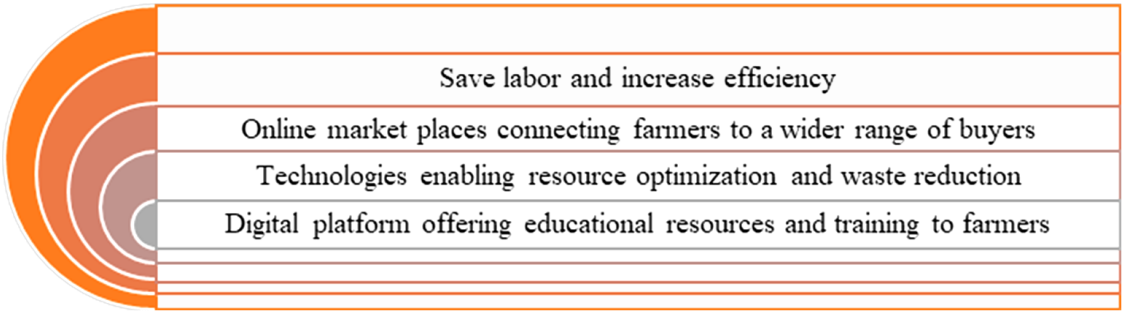
**Agritech stakeholder ecosystem**

**Other incubators and accelerators focused on Agritech**

**Key Incubators and accelerators-**

- IIM Ahmadabad has launched India`s first food and agri- business accelerator for startups in food.
- ICRISAT launched innovation hub to

**Opportunity of agri-startups**




**Strategies to promote agri startups**

- Webinars and Online Events.
- Online Directories.
- Awards and Recognition.
- Media Coverage.
- Farmer Engagement.
- Digital Marketplaces.
- Farm-to-Table.


support agricultural tech entrepreneurs, scientist and technology experts.

- NAARM launched a- IDEA which is a technology business incubator, NAARM also launched Agri Udaan.

**Related Research findings/Case study**

**Ninjacart**

- **Founded In** 2015
- **Product Name** Ninjacart Mobile App
- **Technology Used** Mobile platform
- **Objective** To provide more income to farmers and less price to retailers by creating an efficient supply chain.

**Mode of action**


**How it works**


**Active Regions:** Bengaluru, Chennai, Delhi, Pune, Mumbai, Ahmedabad and Hyderabad

**Impact:**

- 20,000 farmers, serves over 70,000 customers every month.
- 1400 tonnes of perishables from farms to businesses, every day in less than 12 hours.

**AgriCx Lab**

- **Founded In** 2016
- **Product Name** Agricx Certification Software
- **Technology Used** AI and Software as a service
- **Objective** To remove subjectivity and make it reliable and easy- to-use, in order to enable a standardized and fair value (grades, price etc.) to different kinds of produces.
- **Active Regions** North India (UP, Delhi- NCR, Agra, Gujarat, Mohali etc.) & Karnataka.
- **Impact** Clients such as McCain India, Mahindra, and over 10 cold storages in the country an also have already certified over 2 million Kgs of Potato in India.

**VDrone**


- **Founded In** 2017
- **Product Name** Agricultural Aerial Mapping
- **Technology Used** Aerial Robotics and Mapping Technology

- **Objective** To provide farmers with actionable data through mapping technology.

**Mode of action:**

1. Scan farm
2. Actionable data

**Active Regions -** Karnataka

**Impact-**3000 farmers have used the service in Karnataka.

**Benefits:**

1. Increased Efficiency.
2. Improved Accuracy.
3. Enhanced Decision.

**Bharat Agri Startup**

**Founded In** 2017

**Objective**: Empower every farmer & Digitalise every farm

**Services offered by Bharat Agri-**

- Weather-based Advisory
- Smart Krushi Book
- Chat with Expert
- Personalized Crop Calendar

**Bharat Agri App Feature**


**Active region:** India

**Impact:** 15 Lakh farmers use this app

**Research Finding**

**Topic:** Role of Agri-Tech Startups in India's Agricultural Landscape.

**Author:** Anjali, Jyoti Yadav, Priya

**Methodology:** A review of extensive academic literature, research articles and government publications have been used to analyze the historical and current role of agritech startups in India.

**Findings:** Growth and trend of Agritech startups through "Venture

Funding" Some of the top fund raisers in the Agritech sector include Way Cool, Agro Star, Ninja Cart, Bijak, Stellapps. These startups have been leveraging data analytics, machine learning, software as a service for addressing challenges in the supply chain, storage, payments, credit, packaging, advisory.

**Findings-**

- The data provided shows the total venture funding by agritech startups from 2018 to 2022, representing the consistent growth in venture funding

interest and confidence in this sector is increasing.

- The significant rise in funding 2021 and 2022 could be due to various factors such as technological advancements, favorable government policies, increased demand for Agri solutions.

**Conclusion**

Government is also playing its part in boosting innovation and entrepreneurship. Several incubators and accelerators are actively increasing their footprints. Agri graduates and youth should be encouraged more towards agri startups.

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