



INSTITUTE OF AGRICULTURAL SCIENCES

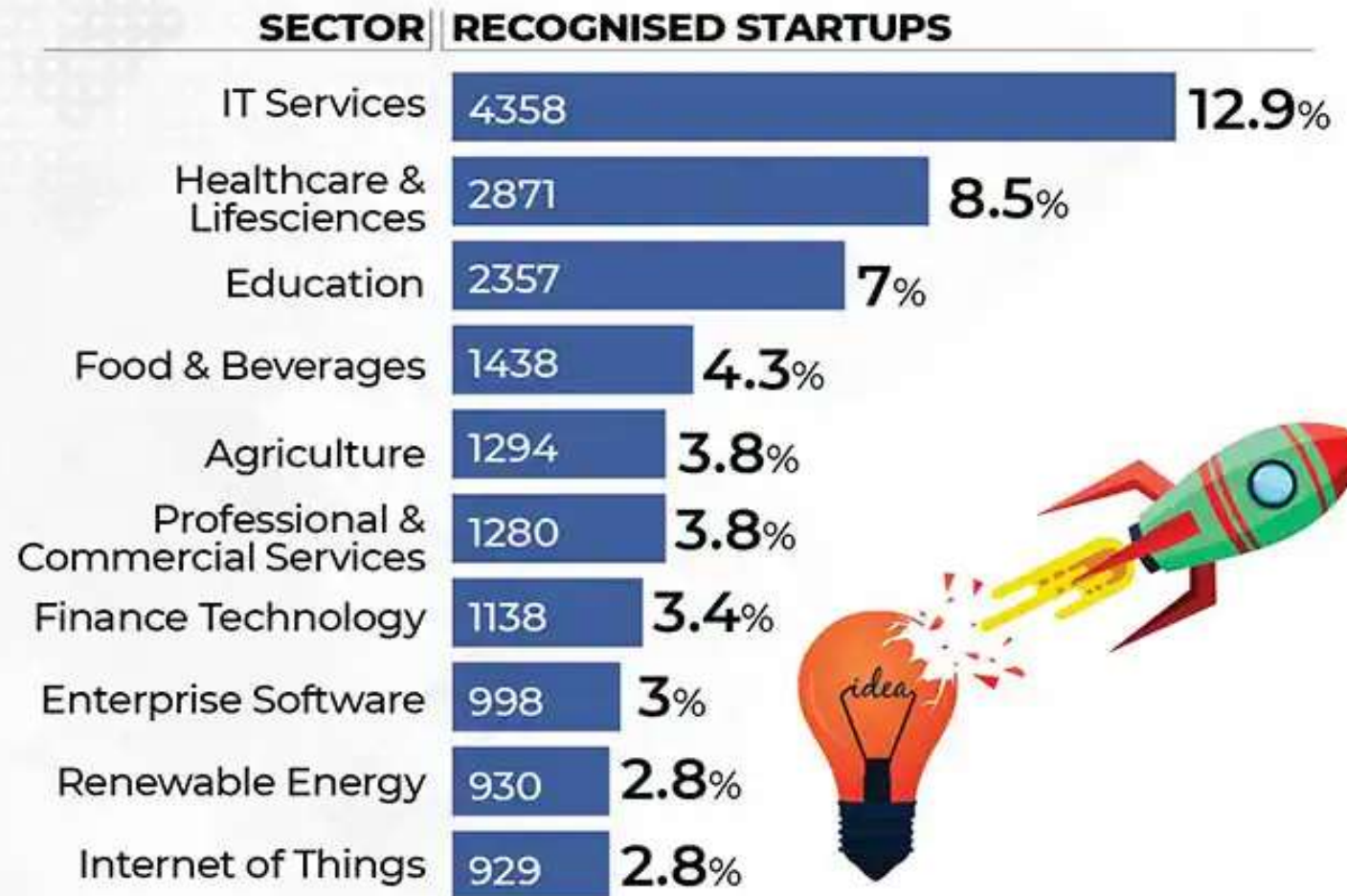
# MOOCS on Entrepreneurship Development

## ICTs and Agribusiness

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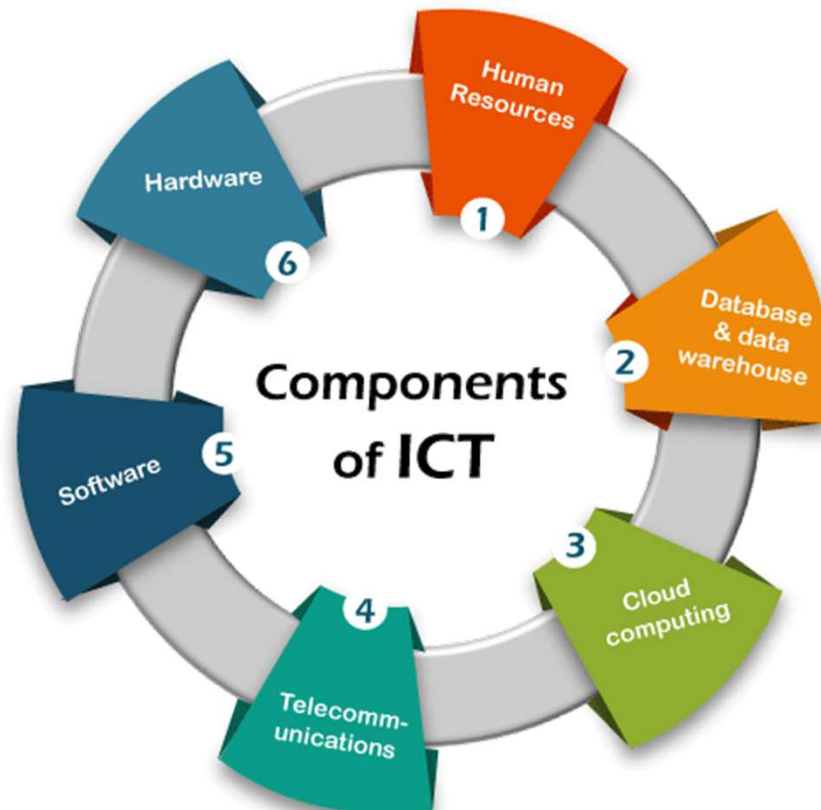
# MAJOR INDUSTRY WISE RECOGNISED STARTUPS



Figures on Startup India are updated real-time as startups are registered and recognised. The Startup India portal (here) showed 33,747 recognised startups as on September 30, 2020 at 12 pm. On the home page it showed more than 37,000 recognised startups. While the tally resulted to be 33,688 recognised startups when industry wise startups were analysed on the page (here). Hence the calculation in the story is based on the tally that resulted during our analysis.

# Information Communication Technology

- ❖ ICT is an umbrella term that includes any communication device, encompassing radio, television, cell phones, computer and network hardware, satellite systems, and so on, as well as the various services and appliances with them such as video conferencing and distance learning.
- ❖ There are mainly three components of ICT viz, computer technology, communication technology, and information management technology.



# Application of ICT in Agribusiness

## ICT for Production Systems Management

- ❖ **Short-term productivity:** Information such as weather updates which need to be provided in timely manner in low cost.
  - e-Dairy project in Sri Lanka in which milk yields were improved by informing dairy farmers about the most opportune times for artificial insemination.
- ❖ **Crisis management:** Help prevent losses (rather than raising productivity). Often these services serve as an alert system enabling farmers to react quickly before an oncoming event (often weather- or disease-based).
  - (RANET) project in Kenya uses FrontlineSMS technology to collect weather data from local farmers and push out warnings to them of potential weather-related risks. In India one of the example is mKRISHI of TATA group.

## Application of ICT in Agribusiness

- ❖ **Long-term productivity:** Cover topics that take longer to learn and are often offered with other technologies and channels, such as face-to-face training or extension agent support.
- ❖ **Risk management:** Long-term in scope, but as with crisis management, they help farmers avoid losses rather than increasing productivity. Take a longer time to absorb and implement, and the benefits are realized much later.
- (ICRISAT) in India created its Virtual Academy to train local women through Internet-based video conferences so they could act as extension agents and help women farmers change their cultivation and harvesting techniques to reduce long-term risks.

### ICT for Market Access

- ❖ **Pricing:** Most common ICT intervention for the agricultural value chain, in which commodity price information is pushed out to customers on a regular basis.
  - Advantages to such services are price transparency and improved negotiating leverage for the often disempowered seller (farmer).
  - **AGMARKNET portal in India.**
  - **Virtual trading floors:** Electronic market places where buyers and sellers connect through an electronic network.
    - Buyers and sellers on a VTF do not have to be physically in the same location to make an exchange
  - **e-NAM in India.**

## Application of ICT in Agribusiness

- ❖ **Holistic trading services:** Essentially provide the same services as pricing information services and VTFs, with additional assistance beyond the simple transactions of purchasing and buying agricultural products.
  - Not only link suppliers and buyers but can also connect parties for logistics, transportation, processing and storage needs.
  - Often, holistic trading providers also offer access to financial services (payments, credit, etc.).
  - e-choupal in India.

### ICT for Financial Inclusion

- ❖ **Transfers and payments:** Money transfers through ICT solutions, notably through mobile phones, have become a much-discussed solution.
- **Success of UPI in India.**
- ❖ **Credit:** ICT integration in credit transfer resulted in higher efficiency, improved (credit) risk monitoring, and better delivery to farmer and institutional customers.
- ❖ **Savings:** Rural poor need financial services that are convenient, flexible and secure, for savings.



## Application of ICT in Agribusiness

- ❖ **Insurance:** ICT is a significant contributor to improvements in the adoption and administration of insurance
  - Policy renewals are historically very poor (potential solution: short message service [SMS] reminders)
  - Trust between customers and insurance companies is generally low (potential solution: improved claim processing times)
  - The level of data for appropriate pricing of policies and monitoring of potential risk events is inadequate (potential solution: put in place remote rainfall sensors connected to a database via a satellite connection)

Source: e-Krishi Shiksha, ICAR

## Application of ICT in Agribusiness

- ❖ **ICT has become a vital component for efficient business operations and marketing.**
- ❖ **From a marketing perspective, ICT has increased price share of farm producer through its ability to deliver information timely information.**
- ❖ **From a production perspective, ICT has allowed farm producer more flexibility in terms of what and how they produce.**
- ❖ **From a service perspective, ICT provides new ways for people to interact with each other thus opening up new opportunity for farm entrepreneurs.**

