

01/22 Discuss the various strategies that are required to boost  
5-3 nascent deep tech ecosystem

Deep technology is the disruptive innovation deriving from STEM Science, tech, engineering and maths to solve hard challenges such as cancer cure, quantum tech, etc among others.

### Deep tech - really deep?

India's deep tech startups attracted \$2.7 billion venture funding in 2021. Deep tech startups constitute 12% of overall startups.

The technological giants such as Google, Tesla, SpaceX were once deep tech startups that could be expanded. The deep tech could form a near panacea to the human challenges.

### Challenges to deep tech in India

① long gestation time - deep techs require at least 5 to 8 years to manifest a concept whereas regular startups take 1-3 years.

② Diversified inputs is essential such as constant funding, tech expert and easy government regulations

③ Industries concentrate on already developed technology rather than new tech. Ex: Use of GPS in food delivery.

### Strategies needed.

① Commercialize the academic research for greater outreach. Programs similar to

I-Corps of USA can be modelled.

② Incubator support mandatorily to the universities and startups involving in translational research by the government.

③ I-nubate of IIT - matrix developed more than 120 deep tech startups. It can be done at all elite institutions.

④ Using CSR-funds and tax benefits to high net worth people to fund deep tech.

Deep tech has grown 53% in last decade. Customised discovery exercise and development programs can leap frog the nascent ecosystem.