

1. Essential for India to develop an Innovation Ecosystem that can Generate Multi-Million-Dollar Businesses

Context:

- With India's sights on reaching \$5 trillion by 2025 and \$10 trillion by 2030, **developing an innovation ecosystem that can generate multiple multi-million dollar businesses** is essential.

Why Innovation Ecosystem is Important?

- How a country invests in **scientific and technological development is a critical driver of its socio-economic growth**. The US, China and other major economies have demonstrated this.
- India has been on a fantastic growth trajectory since economic liberalisation in 1991. In India, start-ups and innovators productising new research are driving the next wave of innovation. The role of innovation hubs that bring together entrepreneurship, industry, capital, and research have never been more essential.
- **Large economies** all have **exceptional innovation ecosystems** like the San Francisco Bay Area and **China's High-Tech Development Zones**.
- They are an amalgamation of highly specialised talent, research from top-tier universities, large pools of investable capital, access to market leaders, an incentive system for entrepreneurs, and a promising market to capture.

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- India must actively construct and nurture its own hubs to prime such ecosystems for itself.
- Government announced that it endeavoured to facilitate the establishment of **50,000 new start-ups by 2024, creation of 100 innovation zones, and 500 incubator/accelerators**. The government can crank the flywheel by accelerating its well-established innovation hubs and enhancing their capabilities.
- In the field of life sciences, Department of Biotechnology-BIRAC has already set up the first hubs to support early-stage bio-entrepreneurship. One such hub, which has validated this approach, is the Centre for Cellular and Molecular Platforms (C-CAMP) in Bengaluru.
- Since its inception in 2009, they are growing very fast and expanding rapidly into domestic as well as global markets. Further, what is the best investment we can make today that will continue generating world-class innovation out of India in the decades to come?

Expansion is Key:

- Centres like C-CAMP have already amassed state-of-the-art research facilities, technical know-how, and expertise under one roof. Several Government ministries have worked hard with these centres for a decade to perfect this strategy. The time is ripe for further expansion.
1. **Critical mass of specialised talent:** India must not let down its top innovation talent for want of capacity.
 2. One of the most significant resources for deep science innovation is a critical mass of intelligent scientists who help each other solve problems with converging skill sets. This is Silicon Valley's prime driver.
 3. **Academic-entrepreneurs:** Innovation hubs sit in a critical junction to support academicians, making a move into productization.
 4. Today, many promising researchers go abroad in search of well-facilitated ecosystems. Instead, they can be incentivised to conduct and productise their research at world-class innovation hubs in India itself.
 5. **Scale-up space:** As successful start-ups scale into production and high-volume manufacturing, they need space to expand their operations. Scale-up space around the centres will enable proven winners to grow faster.
 6. **Global partnerships:** A key strategy of innovation hubs has been global partnerships. Innovation hubs serve as valuable conduits for global innovators to collaborate with Indians and vice-versa, opening up access to new markets and strategies.
 7. **Focus on quality and quantity:** With all the advantages existing innovation hubs bring to the table, policymakers must approach investment in innovation hubs at two levels:
 - a) Building the proposed 500 new hubs in phases, based on assessment and requirement
 - b) Deepening the capacity of well-established centres with proven track-record and potential to be global-impact hubs

Conclusion:

- Undoubtedly, innovation is an influential contributor to economic growth. We already see the tremendous impact our start-ups have on the economy.
- With India's sights on reaching \$5 trillion by 2025 and \$10 trillion by 2030, developing an innovation ecosystem that can generate multiple multi-million dollar businesses is essential.