

The Ecosystem of Entrepreneurship Education in India: Current Methods and Proposed Structure

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Abstract

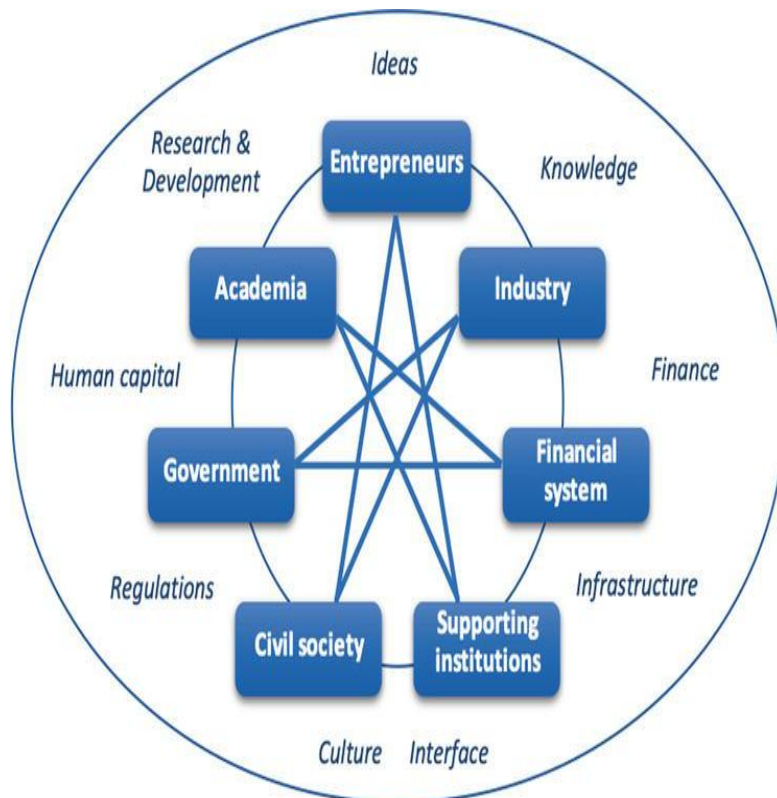
Entrepreneurship education has emerged as a pivotal element in India's journey toward fostering innovation, job creation, and sustainable economic growth. With the country's demographic dividend and rapidly evolving knowledge economy, entrepreneurship education is no longer confined to business schools but is increasingly integrated into universities, technical institutes, and even secondary education. The current ecosystem of entrepreneurship education in India is characterized by diverse methods such as experiential learning, incubation centres mentorship programs, start-up accelerators, and industry-academia collaborations. Government initiatives like Startup India, Atal Innovation Mission, and the establishment of innovation labs have significantly contributed to strengthening the entrepreneurial culture across the nation. Despite these efforts, challenges such as fragmented curricula, limited access to practical training, lack of uniform pedagogy, and insufficient industry linkages continue to restrict the effectiveness of these programs. To overcome these limitations, a proposed structure for entrepreneurship education emphasizes a holistic and interdisciplinary approach. This structure should include experiential pedagogy, integration of digital technologies, strong mentorship networks, financial literacy modules, and sustained support through incubation and funding mechanisms. Moreover, localized models adapted to India's socio-economic diversity and regional needs can create more inclusive opportunities. By aligning educational institutions, government policies, and private sector initiatives under a unified framework, India can develop a robust entrepreneurship education ecosystem that not only equips youth with entrepreneurial skills but also fosters innovation-driven enterprises. Such a structure has the potential to transform India from a job-seeking to a job-creating economy, contributing significantly to national development.

Keywords: Entrepreneurship Education, Startup Ecosystem, Experiential Learning, Innovation, Incubation Centres Government Initiatives, Atal Innovation Mission, Startup India, Industry-Academia Collaboration, Digital Entrepreneurship, Entrepreneurial Skills, Job Creation, Economic Development, India

INTRODUCTION

The assumption that entrepreneurs are born, not made, is no longer relevant. Entrepreneurship education has received international recognition and is now available in both developed and developing countries, despite the fact that many argue that an entrepreneurial spirit is intrinsic and cannot be taught as a topic in order to inculcate entrepreneurial skills in others. In "Special Report: A Global Perspective on Entrepreneurship Education and Training," GEM (2008) defines entrepreneurship education broadly as "the development of knowledge and skills for the purpose of entrepreneurship, generally as part of recognised education programs at primary, secondary, or tertiary-level educational institutions."

'Soft' skills like perseverance, networking, problem-solving, teamwork, communication, leadership, decision-making, and self-assurance are examples of entrepreneurial skills. On the other hand, 'enabling' skills include technical and managerial abilities, financial literacy, business planning, and basic business knowledge. Any economy that wants to foster entrepreneurial skills in its citizens must have an effective entrepreneurship education policy. This policy's larger goal is to foster an entrepreneurial culture, which can aid in achieving a country's socioeconomic goals, in addition to increasing the number of people launching their own businesses.



Figar No-01

LITERATURE REVIEW

Scholars contend that many governments worldwide prioritise the promotion of entrepreneurship (Hannon, 2006; and Minniti and Levesque, 2008). Additionally, it has been asserted that policymakers acknowledge the value of entrepreneurship training and education as "an effective mechanism for fostering the entrepreneurial activities" (Martinez et al., 2010). Numerous programs in entrepreneurship in various forms are now available worldwide because to this favourable policy climate (Atherton, 2004; Fayolle, 2004; Hytti and O'Gorman, 2004; and Klapper, 2004).

The impact of entrepreneurship education on entrepreneurial results was examined by Matlay (2008). He recruited 64 recent graduates who had completed entrepreneurial education programs from eight UK higher education institutions. In order to evaluate these students' transition from graduation to their entrepreneurial adventure, the researcher conducted semi-structured interviews between 1997 and 2006. The findings indicate a discrepancy between the real learning outcomes in terms of entrepreneurial skills, knowledge, and attitudes and the demands for entrepreneurship education. These graduating entrepreneurs, however, have been shown to be generally happy with the outcomes of their entrepreneurship education.

Developing entrepreneurial abilities and encouraging entrepreneurship are the main goals of entrepreneurship education (Verheul et al., 2001). Robinson and Sexton (2002) investigated how education affected people's decision to pursue entrepreneurship. General education has been shown to have a significant influence on successful entrepreneurship. The association between general education, particular forms of entrepreneurship education, and entrepreneurial activity was examined by Dickson et al. (2008). Several metrics of entrepreneurial performance are shown to be strongly correlated with general education. Regarding the relationship between general education and the decision to start your own business, the findings are unclear.

Though less obvious, the data showing a connection between certain entrepreneurship education programs and entrepreneurship point to a favourable association between such education and the decision to start your own business and, eventually, its success. Though not as powerful, experience has a comparable link. It is unclear; therefore, how entrepreneurial education and economic success are related. Rather, it has been discovered that entrepreneurs are more likely to have completed general higher education than entrepreneurship-specific courses (Bennett and Dann, 2000).

Additionally, among the nations that typically participate in the Global Entrepreneurship Monitor (GEM) research, a correlation has been shown between start-up activity and higher education levels (Minniti et

al., 2006). Additionally, entrepreneurs with overall higher education levels have been found to have easier access to finance, which improves their success (Parker and van Praag, 2006).

Entrepreneurship education has a significant impact on entrepreneurial behaviour and proclivities, according to another set of studies (Sexton and Bowman, 1983; Kolvereid and Moen, 1997; Henderson and Robertson, 1999). Additionally, research has shown connections between personality traits, education, and entrepreneurship (Luthje and Franke, 2002), while other studies have linked these factors to an individual's cognitive infrastructure (Krueger, 2000; and Mitchell et al., 2002). According to Mitchell et al. (2002), cultural and societal values, in addition to education, tend to reinforce entrepreneurial cognition. According to Karanja et al. (2016), the entrepreneurial curriculum has a major impact on students receiving entrepreneurship education in terms of fostering an entrepreneurial attitude.

Research Gap and Problem Statement

Although scholars concur that the purpose of entrepreneurship education is to instill entrepreneurial skills in people, the effectiveness of such educational programs is hotly contested. This analysis highlights the fact that a large portion of the literature is centred on Western nations, with relatively little research being done on entrepreneurship education in India. Consequently, it is necessary to conduct a comprehensive analysis of the entire ecosystem of entrepreneurship education in India. In order to answer these objectives, this research attempts to investigate the ecosystem of entrepreneurship education at all levels of the nation. Furthermore, the study examines the obstacles that Indian entrepreneurship education faces and offers a framework for enhancing environment for entrepreneurship education in the nation, which in turn improves the entrepreneurial ecosystem and eventually translates into sustainable economic development, which is seen as a key national policy goal.

Objective

The following Objectives are the focus of this study:

- To research India's ecosystem for entrepreneurial education at different levels.
- To comprehend the difficulties that India's entrepreneurial education faces.
- To suggest a framework for enhancing India's ecosystem for entrepreneurial education.

DATA AND METHODOLOGY

The current study's exploratory research approach aims to accomplish the mentioned goals. Secondary sources, including journals, published national and international publications, and the websites of academic institutions and other organisations involved in entrepreneurship education, are used to gather data.

Entrepreneurship Education Ecosystem in India

Ignoring these debates about whether or not entrepreneurship education encourages entrepreneurial activity in an economy, many prestigious business schools provide entrepreneurship education to management students in an attempt to instill an entrepreneurial culture in the country. The realisation that entrepreneurship is a crucial instrument for creating economic progress has been the main factor in the development of entrepreneurship as a topic of study.

Following the liberalisation movement in the 1990s, which reduced start-ups' capital limitations, entrance hurdles, and established institutions for the development of entrepreneurial potential, the Indian economy has significantly promoted entrepreneurship. The shift from an agrarian economy to one with notable contributions from other sectors has brought attention to how important education is in helping people improve their entrepreneurial skills, which in turn allows them to engage in entrepreneurial activities in these new industries. An efficient environment for entrepreneurship education has emerged as a key concern for many emerging nations, among other elements essential to the growth of entrepreneurship.

Understanding the importance of entrepreneurship education for the economic development of a developing nation like India is crucial (Todd and Javalgi, 2007). In order to promote entrepreneurship and ultimately achieve balanced socioeconomic growth, entrepreneurship education and training are provided at different levels in India.

Function of Government in Developing Entrepreneurial Skill at the School Level

The Indian government is actively involved in fostering entrepreneurial skills in people from an early age, with the ultimate goal of creating a successful startup ecosystem in the nation. The Atal Innovation Mission (AIM) has been established at NITI Aayog. The Atal Tinkering Laboratories (ATL) network was set up in schools by AIM with the goal of making India a creative nation. ATL is a place where schoolchildren are encouraged to develop their entrepreneurial and innovative talents via "Do It Yourself" projects that seek to stimulate their imagination, creativity, and curiosity.

ATLs are set up in Grade VI–XII schools that are run by the government, a local organisation, or private trusts or the community. In order to create ATLs, AIM has chosen 2,441 schools throughout India. These innovation workspaces, which are furnished with cutting-edge technology, have introduced students to technology platforms where they have already begun creating prototype solutions and innovative projects like improved waste management, irrigation management, and sensor-based solutions. India is ranked 10th out of 65 countries that participate to GEM research in terms of school-level entrepreneurship education, according to the GEM report (2016). A strong entrepreneurial culture and the realisation of young people's entrepreneurial instincts may be greatly aided by government programs such as Atal Tinkering Labs.

Function of Higher Education Institutions in Entrepreneurship Education

Globally, entrepreneurship education has been shown to be successful at the higher education level, where students take both short- and long-term entrepreneurship courses and engage in projects and activities with an entrepreneurial focus. The UNCTAD-recommended Entrepreneurship Policy Framework states that it is critical to introduce students to entrepreneurship education prior to their university specialisation selection.

By making entrepreneurship a fundamental subject in business education, the Indian higher education system is showing a growing tendency towards fostering students' entrepreneurial skills. Numerous reputable institutions, including IIMs, IISc Bangalore, XLRI, NMIMS, ISB Hyderabad, and others, offer full-time entrepreneurship courses. Universities are taking steps to assist students in developing the abilities and self-assurance needed to turn their company concepts into viable ventures. The number of incubation centres in Indian universities and independent organisations is also increasing. These centres offer a comprehensive hand-holding by offering services like co-working space, access to markets and finance, networking opportunities, and assistance with regulatory compliance, in addition to teaching nascent start-ups the fundamentals of business.

The notion of faculty-student collaboration, which brings together academics and students to collaborate on their own company ideas, has been successfully encouraged by India's entrepreneurial education ecosystem. IITs in Hyderabad, Delhi, Chennai, Mumbai, and Kharagpur are in the forefront of this collaborative movement in India. The National Science and Technology Entrepreneurship Development Board (NSTEDB) has designated IIT Madras Incubation Cell (IITMIC) as a Technology Business Incubator. IITMIC has supported 91 businesses that were started by academics and students working together. Even the technological businesses that IITMIC incubates view its faculty members as minority shareholders or founders. At IIT Bombay's Society for Innovation and Entrepreneurship (SINE), academics and students collaborate on over 40% of commercial projects. Successful enterprises founded on faculty-student collaboration have also been fostered by IIT Hyderabad.

The N S Raghavan Centre for Entrepreneurial Learning of IIM Bangalore (NSRCELIIMB) has carried out worldwide cooperation initiatives in recognition of the importance of networking and knowledge partnerships in the growth of entrepreneurship. One such one has been the London Business School, Kaufmann Foundation, and Babson College's Global Entrepreneurship Monitor (GEM) Project. Similarly, the entrepreneurship cell at IIM Calcutta is well-known around the world for organising the largest business proposal competition in Asia, i2I-ideas to implementation, in association with the Yale Entrepreneurial Society (YES) at Yale University.

By encouraging creative entrepreneurial activity in their incubation facilities, reputable institutions contribute significantly to the development of a thriving startup ecosystem in India. Aspiring entrepreneurs must meet the "3 I" requirements of being innovative, impactful, and implementable in order to be eligible to participate in the incubation centre at NSRCEL-IIMB. The International Institute of Information Bangalore's Innovation Centre provides end-to-end incubation services to prospective businesses through short- and medium-term programs including Cube, Axle, and Nova. Three criteria are used by the open incubator IIIT-B Innovation Centre to choose startups: novel (having a unique business

concept), non-trivial (having the potential to make it difficult for competitors to enter the market), and useful (having the capacity to transform an idea into a commercial service in 18 to 24 months).

The Function of Institutes for Entrepreneurship Development in the Teaching of Entrepreneurship

To foster entrepreneurial potential and facilitate successful enterprise, the Indian government has set up entrepreneurship development institutions in several states. Notable organisations such as the Indian Institute of Entrepreneurship (IIE), the Entrepreneurial Development Institute of India (EDII), and the National Institute of Entrepreneur and Small Business Development (NIESBUD) offer Entrepreneurship Development Programs (EDPs) through a group of trainers who teach prospective business owners the essential skills and knowledge of running a business.

Through organised conversations, business plan training, motivating workshops, and simulation-based experiential learning, students are taught entrepreneurial skills. The entrepreneurship development institutes work with industry to deliver sector-specific trainings to meet the unique needs of potential entrepreneurs in various industries.

Challenges to Effective Entrepreneurship Education in India

Even though India has worked very hard to promote entrepreneurship via educational programs at all levels, creating a successful environment for entrepreneurship education is fraught with difficulties. As an academic discipline, entrepreneurship has not yet become a popular choice among the nation's business students. According to Shankar (2012), this is a compelling enough argument for many educational institutions to exclusively offer entrepreneurship as an extracurricular or co-curricular activity. He lists the following six major barriers to entrepreneurial education in India:

1. Insufficient institutionalisation
2. Insufficient native experience
3. A shortage of qualified educators
4. Results-oriented short-term emphasis
5. Educational constraints
6. Not regarded as a key subject

It has been noted that entrepreneurship education in India is more heavily encouraged at the university level than at the school level, which prevents people from cultivating an entrepreneurial attitude early on. A good entrepreneurial curriculum for fostering entrepreneurial talent and spirit in students has not been produced by educational institutions that offer business education with a specific focus on student entrepreneurship (Dutta, 2012; and Mutsuddi 2012). Furthermore, as entrepreneurship courses are still primarily offered to business and economics majors and, to a lesser extent, to engineering students, it has been noted that non-business students at the higher education level lack access to entrepreneurship education and training. Although rural development is crucial to a nation's economic growth, the conditions experienced by Indian rural entrepreneurs are unfavourable to the growth of entrepreneurship. The rural population's poor level of entrepreneurial talent and ignorance of the potential for entrepreneurship might be the causes (Saxena, 2012). The challenge in the current situation is to broaden the emphasis and breadth of entrepreneurship education in India and to rebuild the educational system in a strong and creative way to improve entrepreneurial outcomes.

Suggested Structure for a Successful Entrepreneurship Education Environment

The many stakeholders in India have stepped up to support young people's entrepreneurial mindsets, but there is still much room for development and a need to create an environment that is more supportive of education. In light of this, the author offers a framework that would facilitate the development of a successful national ecosystem for entrepreneurship education.

Enrolment rates may decline in emerging nations like India after completing elementary school, underscoring the importance of taking entrepreneurship into account at a young age. Therefore, there should be a lot of emphasis on using creative methods to foster entrepreneurial awareness and behaviour at the elementary school level. Lessons should be gained from educational efforts implemented abroad. With over 20 million young people each year, Disney's Hot Shot Business online game, developed in partnership with the Kauffman Foundation, has had amazing success educating kids ages 9 to 14 about the fascinating world of business.

According to Maria et al. (2017), people may be taught entrepreneurial skills as early as elementary school. The Educational Experience (EE) sub-program "My First Company: Entrepreneurship by Playing" in Mexico demonstrated the value of exposing people to entrepreneurship at a young age. The researcher

contents that, particularly in developing nations, educational experience may significantly improve people's financial circumstances and foster their entrepreneurial instincts.

To encourage entrepreneurial spirit and instil entrepreneurial talent throughout communities, informal training initiatives outside of the official education system should focus on underprivileged and rural populations. According to the UNCTAD Entrepreneurship Policy Framework, students should participate in extracurricular activities like company visits as they have been successful in certain nations. More work should be done at the university level to create and expand incubation facilities where deserving company concepts may be nurtured. Universities ought to establish a network of mentors who are ready to offer start-ups professional advice. University efforts should be directed on promoting entrepreneurship education across disciplines by making it a fundamental topic, rather than restricting it to business students. According to Onuma (2016), entrepreneurial education is essential in all subject areas. Furthermore, an effective curriculum for entrepreneurship should be created that encourages experiential learning methods and sector-specific training programs in addition to teaching fundamental entrepreneurial skills. According to Karanja et al. (2016), in order to introduce students to technology and other significant business-related topics, entrepreneurship curricula should emphasise case studies, facilitate collaboration with entrepreneurs, and provide access to role models. Part-time and online training programs have to be offered to prospective business owners who might find it challenging to enrol in a traditional course. To unite dedicated business owners on a single platform, trainees' peer network should be established. This might further facilitate successful entrepreneurship through networking effects. The free online learning materials that prospective business owners may use should be made more widely known. Institutions that provide entrepreneurial education and training, as well as entrepreneurship development centres, ought to work with private businesses. This kind of cooperation with commercial companies can help prospective start-ups build their own businesses and address actual business issues. The government ought to provide incentives to promote this kind of cooperation. In order to provide entrepreneurial education that is both relevant and focused on outcomes, the government should also invest in training the instructors and trainers who teach it.

CONCLUSION

India is turning becoming a startup hotspot because of the financial rewards associated with their entrepreneurial endeavours. The nation is offering entrepreneurship education at different levels in an effort to increase the amount of entrepreneurial activity. The value of entrepreneurship education to the economy has been hard to prove, therefore research shows mixed results about whether such educational interventions genuinely encourage entrepreneurial outcomes. Notwithstanding these disputes, the number of entrepreneurial education and training programs in India's educational system has grown.

Both the government and educational institutions have embraced the creative and result-oriented methods for teaching entrepreneurship. But students and aspiring business owners still do not consider entrepreneurship to be a preferred path, which means that current educational programs urgently need to be made more relevant. Subject to additional study, this report suggests a functional framework for revamping the nation's entrepreneurship education ecosystem in order to improve entrepreneurial outcomes and promote sustainable economic growth.

Limitations and Scope for Future Research

Because the work is conceptual in nature, its drawback is that no empirical analysis was done by the researcher. Because it gives a comprehensive picture of the nation's current entrepreneurship education ecosystem, it gives scholars the chance to empirically assess the success of entrepreneurship education programs implemented at various levels, such as the training and skill-development courses given to aspiring business owners at the elementary, secondary, and tertiary levels in the future.

REFERENCES

1. **Gandhi, S. R.** (2021). Entrepreneurship Education Scenario in India: A Study. *Vidhyayana – An International Multidisciplinary Peer-Reviewed EJournal*, 6(6), June 2021.
2. **Maharana, N., & Chaudhury, S. K.** (2022). Entrepreneurship education and entrepreneurial intent: A comparative study of private and government university students. *IIM Ranchi Journal of Management Studies*, 1(2), 191-208. <https://doi.org/10.1108/IRJMS-09-2021-0118>
3. **Shukla, S., Dwivedi, A. K., & Acharya, S. R.** (2022). Entrepreneurship teaching in India and the region. *The Journal of Entrepreneurship*, 31(2_suppl). (Published online July 7, 2022)

4. **Joshi, M. P., Pandit, D., Tiwari, S. R., & Choudhary, A. (2024).** Entrepreneurship education and entrepreneurial communities in India: Does gender really play a role? *Journal of Enterprising Communities: People and Places in the Global Economy*, 18(2), 392–414. <https://doi.org/10.1108/JEC-10-2022-0145>
5. **Soam, S. K., Rathore, S., Yashavanth, B. S., Dhumantaroo, T. R., Rakesh, S., & Balasani, R. (2023).** Students' perspectives on entrepreneurship and its intention in India. *Sustainability*, 15(13), Article 10488. <https://doi.org/10.3390/su151310488>
6. **Suresh, T. S., Thomas, T., & Mathew, J. (2025).** Contemporary insights and future outlook of entrepreneurship education and training in India. *Journal of Information Systems Engineering and Management*, 10(36s).
7. **Gupta, R., Mishra, A., & Dwivedi, A. K. (2024).** Unleashing the prospect: Cracking the nexus between women's entrepreneurial intention, behaviour and the entrepreneurial ecosystem. In A. Chakrabarti, S. Suwas, & M. Arora (Eds.), *Industry 4.0 and Advanced Manufacturing (Vol. 1,2)*. Singapore: Springer Nature Singapore.
8. **Sodhi, S., & Dwivedi, A. K. (2024).** What do entrepreneurs with disability want? Understanding the needs for entrepreneurship capacity building training programmes. In A. Chakrabarti, S. Satyam, & M. Arora (Eds.), *Industry 4.0 and Advanced Manufacturing*. Singapore: Springer.
9. **Khetarpal, R., Mishra, A., Kumar, A., et al. (2023).** Unraveling entrepreneurial mindset: Exploring the relationship between entrepreneurship education, intention and behaviour. *Industry 4.0*. Epub ahead of print 2023.
10. **Aashish, K., Dixit, K., & Dwivedi, A. K. (2022).** Understanding appropriate teaching pedagogy for startup entrepreneurship. In *Industry 4.0 and Advanced Manufacturing: Proceedings of I4 AM 2022 (pp. 319–326)*. Singapore: Springer Nature Singapore.
11. **Thakar, P., Mehta, A., & Manisha. (2024).** Unified prediction model for employability in Indian higher education system [Preprint]. arXiv.
12. **Zhu, J., & Luo, L. (2025).** Designing the future of entrepreneurship education: Exploring an AI-empowered scaffold system for business plan development [Preprint]. arXiv.
13. **Biswas, S. (2021).** She innovates: Female owner and firm innovation in India [Preprint]. arXiv.
14. **Surana, K., Singh, A., & Sagar, A. D. (2020).** Strengthening science, technology, and innovation-based incubators to help achieve Sustainable Development Goals: Lessons from India [Preprint]. arXiv.
15. **NITI Aayog. (2025).** Atal Innovation Mission (AIM): Update on Atal Tinkering Labs and Incubation Centres.
16. **Entrepreneurship Development Institute of India. (2023).** Global Entrepreneurship Monitor (GEM) India Reports 2021–22 & 2022–23.
17. **Delhi Skill and Entrepreneurship University. (2025).** Institutional framework and program offerings.
18. **Manipal Academy of Higher Education. (2025, June).** Higher education institutions expand online degree courses.
19. **Government of Rajasthan/DOITC. (2025).** Statewide incubation network for student and graduate startups in Rajasthan.
20. **Government of Arunachal Pradesh. (2025).** Expansion of APIIP and mentorship collaboration via educational institutions.
21. **Allahabad University Incubation Centre. (2025).** Student-led startups in lodging and health-oriented products.
22. **Tadoba Andhari Tiger Reserve's Vanyajivan Skill Academy. (2025).** Rural youth entrepreneurship in solar and repair trades.
23. **Andhra Pradesh degree colleges. (2025).** Integration of multidisciplinary minors—including entrepreneurship—under NEP-2020 framework.
24. **Wangchuk, S. (2025).** Advocacy for socially responsible entrepreneurship at JIS Group event.