

The Effectiveness of National Innovation and Startup Policy (NISP) in Cultivating Entrepreneurial Ecosystems within Management Institutions in Pune

Dr. Amol Mane

Assistant Professor, Dept. of Business Administration and International Business
MAEER's MIT Arts, Commerce and Science College, Alandi (D), Pune, India

Abstract: *This study investigates the effectiveness of the National Innovation and Startup Policy (NISP) in cultivating entrepreneurial ecosystems within management institutions in Pune. A mixed-method approach involving surveys and interviews with students, faculty, and NISP coordinators across 15 HEIs was employed. The findings reveal that NISP has fostered a supportive environment by promoting awareness, offering mentorship, and establishing infrastructure. However, challenges remain, including limited funding, lack of industry partnerships, and insufficient resources for startups.*

Analysis of student responses indicates a positive influence on entrepreneurial interest and confidence. However, concerns exist around access to funding, infrastructure, and specialized equipment. Additionally, diversifying engagement activities is crucial to reach a wider student base.

Based on these results, recommendations are provided to enhance NISP's effectiveness. These include increased funding, fostering industry collaborations, expanding awareness campaigns, and providing high-value resources like seed funding and investor networks. Additionally, dedicated faculty mentors and standardized resource allocation across institutions are recommended. Finally, establishing data-driven evaluation mechanisms with student feedback loops is crucial for continuous improvement.

By implementing these recommendations, NISP can be strengthened to cultivate robust entrepreneurial ecosystems within management institutions, fostering innovation and contributing to India's emergence as a global hub for entrepreneurship.

Keywords: National Innovation and Startup Policy, Entrepreneurial Ecosystem, HEIs, Entrepreneurship, Start-Up

I. INTRODUCTION

The National Innovation and Startup Policy (NISP) was introduced by the Indian government in 2019 with the aim of fostering a robust innovation ecosystem in India. Higher Educational Institutions (HEIs) play a pivotal role in nurturing innovation and entrepreneurship. This research proposal aims to delve into the implementation of the NISP within HEIs in Pune and Indore cities, assessing its effectiveness, identifying challenges, and extracting strategic insights. By examining the experiences of these cities, which are known for their vibrant startup ecosystems, this study will contribute to a deeper understanding of the policy's impact and provide valuable recommendations for policymakers, academic institutions, and startups.

Objectives of the Study

- To evaluate the implementation of NISP across HEIs in India.
- To measure the impact of NISP in promoting entrepreneurship among students and faculty.
- To identify key challenges faced by institutions in adopting and executing NISP guidelines.
- To provide recommendations to enhance the effectiveness of NISP in cultivating entrepreneurial ecosystems within HEIs.

II. RESEARCH METHODOLOGY

A mixed-method approach is proposed for this study:

- **Quantitative Data Collection:** Surveys targeting students, faculty members, and administrative staff in HEIs across various Indian states. This will measure awareness, engagement, and perceived impact of NISP.
- **Qualitative Data Collection:** In-depth interviews with NISP coordinators and students of HEIs to understand challenges and areas for enhancement in NISP implementation.

Sampling Frame:

Total population: 50 (as per NISP Website) (<https://nisp.mic.gov.in/InstituteWiseStatus>)

Total Institutes selected for the study: 15 (30% of the population)

Total number of students selected: 100

Sample Size:

No. of Institutes selected	NISP Co-Ordinators	No. of students
	(01 from each selected institutes)	
15	15	100
Total Sample	115	

III. REVIEW OF LITERATURE

The literature on India’s entrepreneurial ecosystem underscores a dynamic but challenging landscape for startups, particularly within educational institutions. Srivardhini Jha (2018) discusses the promising aspects of India's startup scene, including opportunities and venture funding, yet emphasizes a need for a shift from mere valuation to value creation and inclusivity in the startup movement. Mehta (2022) highlights India's trajectory towards becoming a fast-growing economy, where startup policies and a business-friendly environment foster innovation, particularly relevant in addressing large-scale employment and market demands. Adhana and Kumar (2020) explore the importance of university incubators, essential for nurturing sustainable business models in India's unique economic context. Naveen (2018) offers a student-focused perspective, examining how academic institutions’ resources—such as funding and placement support—directly influence startup opportunities. Garg and Gupta (2021) trace the Indian government’s role in evolving the ecosystem through incubators, accelerators, and intellectual property protection. Finally, Kandakatla (2021) details governmental initiatives like the Aatmanirbhar Bharat mission, which aims to foster self-reliance through entrepreneurship and innovation in higher educational institutions, supported by policies like NEP and NISP.

Research Gap

While these studies provide insights into the growth of India’s entrepreneurial ecosystem and the role of policies, few studies focus on the specific impact of the **National Innovation and Startup Policy (NISP)** on building entrepreneurial ecosystems within higher education institutions (HEIs) at a localized level, such as in Pune. This gap highlights the need for an in-depth examination of NISP’s effectiveness in fostering entrepreneurship within HEIs, understanding challenges specific to its implementation, and assessing its impact on students and faculty engagement in the context of Pune’s educational environment. This research aims to address this gap by evaluating NISP’s role in nurturing an entrepreneurial culture in Pune’s HEIs, identifying barriers, and recommending policy adaptations.

IV. SURVEY ANALYSIS AND DISCUSSION

Survey analysis and discussion based on the responses of NISP/Start-up Co-ordinators of the selected HEIs:

Table 1: Steps taken by HEIs to promote NISP:

Which steps has your institution taken to promote NISP? (Select all that apply)		
Response	No. of respondents	%
Awareness Programs	15	22

Entrepreneurship Cell	15	22
Workshops	15	22
Mentorship	15	22
Incubation Facilities	9	13
Total	69	100

Source: Survey

Analysis:

Awareness Programs, Entrepreneurship Cells, Workshops, and Mentorship each received the same level of institutional emphasis, with **22%** of respondents indicating these initiatives as steps their institutions have taken to promote the National Innovation and Startup Policy (NISP). This suggests that these activities are equally prioritized by institutions.

Incubation Facilities are reported by **13%** of respondents, which is noticeably lower than the other steps. This may indicate that setting up incubation facilities requires more resources or may be a less common initiative due to its complexity and funding requirements.

Interpretation:

Institutions appear to focus heavily on foundational aspects of the entrepreneurial ecosystem, such as raising awareness, establishing support structures (like entrepreneurship cells), providing skill-building workshops, and offering mentorship. However, fewer institutions have established incubation facilities, which are critical for providing startups with resources, office space, and other logistical support. This gap suggests an area where institutions could invest more to strengthen the NISP's effectiveness in fostering a complete entrepreneurial ecosystem.

Table 2: Resources provided by HEIs under NISP:

What resources does your institution provide under NISP? (Select all that apply)		
Response	No. of respondents	%
Seed Funding	5	12
Infrastructure	15	35
Mentorship	15	35
Investor Networking	5	12
Specialized Equipment	3	7
Total	43	100

Source: Survey

Analysis:

Infrastructure and Mentorship are the most commonly provided resources, each being available in 35% of institutions. This suggests that institutions prioritize providing foundational support and guidance to budding entrepreneurs, which are critical for initial startup development. Seed Funding and Investor Networking are available at 12% of institutions. These resources are often essential for startups to grow beyond the early stages, yet their lower availability could indicate financial or resource limitations within many institutions. Specialized Equipment is offered by only 7% of institutions. This resource often requires significant investment and maintenance, which may limit its availability, especially in institutions with fewer resources.

Interpretation:

The focus on infrastructure and mentorship shows that institutions are actively supporting early-stage startup needs. However, limited access to seed funding, investor networks, and specialized equipment could hinder the scaling of student startups. Institutions aiming to foster a more robust entrepreneurial ecosystem under NISP might consider

partnerships or funding solutions to expand these high-value resources, which are critical for advancing from ideation to a successful business model.

Table 3: Level of engagement of the students with NISP initiatives:

How engaged are students with NISP initiatives?		
Response	No. of respondents	%
Very low	0	0
Low - Moderate	4	27
High	9	60
Very high	2	13
Total	15	100

Source: Survey

Analysis:

High Engagement: A majority of students, 60%, are highly engaged with NISP initiatives. This indicates a strong interest among students in entrepreneurship and innovation activities promoted by their institutions under NISP. **Very High Engagement:** 13% of students show very high engagement, suggesting that a subset of students is highly motivated and likely deeply involved in entrepreneurial activities. These students may serve as potential leaders or ambassadors for NISP-related initiatives within their institutions. **Low to Moderate Engagement:** 27% of students exhibit low to moderate engagement, which could reflect a need for improved awareness or more accessible activities to appeal to a broader student base. **No Very Low Engagement:** The absence of responses in the "Very low" category suggests that most students have at least some level of awareness or involvement with NISP initiatives.

Interpretation:

The high level of engagement among students is a positive indicator of the effectiveness of NISP initiatives within the institution. However, with 27% of students showing only low to moderate engagement, there may be room for increasing outreach efforts or diversifying the types of activities to engage students who are less involved. Tailored strategies like peer-led sessions, interactive workshops, or incentive-based participation could be explored to enhance engagement across all levels.

Table 4: Success of NISP in nurturing a culture of entrepreneurship among students:

How successful is NISP in nurturing a culture of entrepreneurship among students?		
Response	No. of respondents	%
Very unsuccessful	0	0
Unsuccessful	0	0
Neutral	0	0
Successful	9	60
Very successful	6	40
Total	15	100

Source: Survey

Analysis:

High Success Rate: The data shows that 60% of respondents perceive NISP as successful in fostering an entrepreneurial culture. This suggests that the initiatives and resources provided under NISP are positively impacting students' attitudes towards entrepreneurship. **Very High Success Rate:** An additional 40% of respondents consider NISP to be very successful, indicating that nearly half of the students view the initiatives as exceptionally effective in building a culture of entrepreneurship within their institution. **Absence of Negative or Neutral Responses:** Notably, there are no responses

in the categories of "Very unsuccessful," "Unsuccessful," or even "Neutral." This unanimous positive feedback demonstrates strong approval and likely reflects effective implementation and support of NISP activities.

Interpretation:

The overwhelmingly positive perception, with 100% of respondents rating NISP as either successful or very successful, indicates that NISP has made substantial strides in creating a supportive entrepreneurial ecosystem within the institution. This success could be attributed to targeted awareness programs, practical workshops, and resources like mentorship and infrastructure that resonate well with students.

Table 5: Respondents response on the role of NISP in addressing the specific needs of the institution’s student body:

Do you feel NISP addresses the specific needs of your institution’s student body?		
Response	No. of respondents	%
Not at all	0	0
Slightly	0	0
Moderately	10	67
To a great extent	5	33
Total	15	100

Source: Survey

Analysis:

Moderate Satisfaction: The majority, 67% of respondents, feel that NISP addresses the needs of the student body to a moderate extent. This suggests that while students recognize the benefits of NISP, there may be areas where the program could be tailored further to meet specific needs. High Satisfaction: An additional 33% of respondents feel that NISP meets the needs of the student body "to a great extent," indicating that a significant portion of students find the initiatives to be well-suited to their institutional context. Absence of Negative Feedback: No respondents selected "Not at all" or "Slightly," reflecting an overall positive perception and confirming that students do see value in the program.

Interpretation:

The data indicates that NISP is viewed as generally effective in meeting student needs, with **100%** of respondents expressing at least moderate satisfaction. However, the fact that the majority rated it as only "moderately" effective suggests potential for improvement. This could imply that while NISP's initiatives are beneficial, there may be gaps in addressing specific or niche needs of students.

Table 6: Collaborations with external incubators or industry partners under NISP at the institution

Are there collaborations with external incubators or industry partners under NISP at your institution?		
Response	No. of respondents	%
Yes	8	53
No	7	47
Total	15	100

Source: Survey

Analysis:

Mixed Response: The responses show a close split, with 53% of institutions reporting collaborations with external incubators or industry partners, while 47% have no such partnerships. Limited Partnerships: The data indicates that nearly half of the institutions have not yet established external collaborations. Collaborations with industry and incubators are key to providing students with real-world entrepreneurial exposure and access to resources beyond the institution.

Interpretation:

This split suggests that while some institutions are proactive in forming external partnerships to enhance NISP’s effectiveness, nearly half may be missing out on the potential benefits of such collaborations. Institutions without partnerships might face limitations in resources, mentorship, and industry connections, which can hinder the growth of a robust entrepreneurial ecosystem.

Table 7: Respondents response on NISP’s lasting impact on student entrepreneurship at their institution:

Do you believe NISP will have a lasting impact on student entrepreneurship at your institution?		
Response	No. of respondents	%
Strongly disagree	0	0
Disagree	0	0
Neutral	0	0
Agree	10	67
Strongly agree	5	33
Total	15	100

Source: Survey

Analysis:

Positive Outlook: All respondents have a favourable view of NISP’s potential impact, with 67% agreeing and 33% strongly agreeing that it will have a lasting impact on student entrepreneurship. There are no responses indicating disagreement or neutrality. **High Confidence in NISP’s Sustainability:** The unanimous positive response reflects confidence in NISP’s ability to foster an enduring entrepreneurial culture within these institutions. This suggests that stakeholders recognize the policy’s long-term value and its alignment with institutional goals of encouraging entrepreneurship.

Interpretation:

The results indicate strong optimism about NISP’s role in shaping a sustainable entrepreneurial ecosystem within higher education institutions. This could be attributed to NISP’s focus on practical steps—such as fostering entrepreneurial mindsets, providing mentorship, and offering resources—which are foundational for long-term impact.

Table 8: Additional steps required to improve NISP’s impact on entrepreneurship development

What additional steps would you recommend to improve NISP’s impact on entrepreneurship development?		
Response	No. of respondents	%
Increased Funding	15	34
More Partnerships	12	27
Dedicated Faculty Mentors	5	11
More Infrastructure	12	27
None	0	0
Total	44	100

Source: Survey

Analysis:

Increased Funding as a Priority: The top recommendation is Increased Funding, selected by 34% of respondents. This suggests that stakeholders believe that financial support is critical to scaling NISP’s impact, potentially enabling more resources, better facilities, and greater reach. **Desire for More Partnerships and Infrastructure:** Both More Partnerships and Infrastructure are equally valued, with each chosen by 27% of respondents. This indicates a recognition of the importance of collaboration with industry and other institutions, as well as the need for physical resources to support entrepreneurial activities (such as incubation spaces, labs, and meeting areas). **Need for Dedicated Faculty Mentors:**

11% of respondents recommended Dedicated Faculty Mentors as an additional step. This reflects an awareness of the importance of expert guidance and personalized mentorship in entrepreneurship, which can provide students with strategic insights, motivation, and technical expertise.

Interpretation:

The data points to a consensus on the need for increased resources to bolster the NISP's impact. Financial support is viewed as the cornerstone, with partnerships and infrastructure also highly valued for creating a comprehensive support system for student entrepreneurs. The call for dedicated mentors, although lower in percentage, underscores the perceived value of having experienced guidance to nurture entrepreneurial skills and projects.

Survey analysis and discussion based on the responses of the students of the selected HEIs:

Table 9: Awareness among the students about National Innovation and Startup Policy (NISP)?

Are you aware of the National Innovation and Startup Policy (NISP)?		
Response	No. of respondents	%
Yes	65	65
No	35	35
Total	100	100

Source: Survey

Analysis:

High Awareness Level: The majority of respondents, 65%, are aware of NISP. This indicates that a significant portion of the surveyed population has knowledge of the policy, which is essential for engagement and participation in NISP-related initiatives. **High awareness is often the first step toward successful implementation and effectiveness of such policies.** **Room for Improvement:** Despite the majority being aware, 35% of respondents are still unfamiliar with NISP. This represents a substantial portion who may be missing out on opportunities and benefits associated with the policy. **Low awareness could hinder the overall success of NISP initiatives, as potential participants and beneficiaries remain uninformed.**

Interpretation:

The data suggests that while awareness of NISP is relatively high, there is still a need for improvement. Increasing awareness efforts could involve conducting information sessions, seminars, and digital outreach programs to reach the 35% who are currently unaware. Boosting awareness among this group could lead to higher engagement and a broader impact of the policy within the institution.

Table 10: Role of NISP in increasing the students' interest in entrepreneurship

Do you agree with the statement that NISP has increased your interest in entrepreneurship?		
Response	No. of respondents	%
Strongly disagree	0	0
Disagree	0	0
Neutral	7	16
Agree	22	49
Strongly agree	16	36
Total	45	100

Source: Survey

Analysis:

Agree and Strongly Agree: A majority of respondents, 85% (49% agree and 36% strongly agree), indicate a positive response, suggesting that NISP has indeed increased their interest in entrepreneurship. **Neutral:** 16% of respondents are

neutral, showing neither a strong interest nor disinterest. Disagree and Strongly Disagree: 0% responded negatively, indicating that none of the respondents felt that NISP had a negative or no impact on their interest in entrepreneurship.

Interpretation:

The data shows that NISP has had a strong positive influence on students' interest in entrepreneurship. With 85% of respondents agreeing or strongly agreeing, it's clear that the policy is effective in stimulating entrepreneurial interest among the surveyed students. This positive response suggests that the initiatives and programs under NISP are resonating well with the student body.

Table 11: Resources available for the student through NISP:

Which resources are available to you through NISP? (Select all that apply)		
Response	No. of respondents	%
Mentorship	45	100
Funding	0	0
Access to Incubators	28	62
Networking	22	49
Infrastructure	32	71
None	0	0
Total	45	100

Source: Survey

Analysis:

- Mentorship: All respondents (100%) indicated that mentorship is available, making it the most accessible resource under NISP.
- Infrastructure: 71% of respondents have access to infrastructure, suggesting that facilities such as co-working spaces, labs, or equipment are widely available.
- Access to Incubators: 62% of respondents can access incubators, which shows a strong institutional support for startup incubation.
- Networking: 49% of respondents reported access to networking opportunities, which could include events or platforms to connect with industry professionals and other entrepreneurs.
- Funding: Surprisingly, 0% of respondents reported funding availability, indicating a significant gap in financial support for entrepreneurial initiatives.

Interpretation:

The data suggests that while NISP is successful in providing non-financial resources like mentorship, infrastructure, and incubation access, it lacks in direct funding support. The strong emphasis on mentorship and infrastructure indicates that NISP is focused on building a supportive environment for skill development and early-stage support. However, the absence of funding might limit students' ability to move from ideation to actual business development, as financial resources are critical for prototyping, marketing, and scaling.

Table 12: Adequacy of the resources provided to develop a start-up:

Are the resources provided adequate to develop a startup?		
Response	No. of respondents	%
Strongly disagree	4	9
Disagree	9	20
Neutral	16	36
Agree	12	27
Strongly agree	4	9

Total	45	100
-------	----	-----

Source: Survey

Analysis:

Strongly Agree: Only 9% of respondents strongly agree that the resources provided are adequate. Agree: 27% of respondents agree, which means a combined 36% (9% strongly agree + 27% agree) feel positively about the adequacy of resources. Neutral: The largest portion, 36%, is neutral, indicating uncertainty or mixed feelings regarding the adequacy of resources. Disagree: 20% of respondents disagree, suggesting that a significant portion does not find the resources sufficient. Strongly Disagree: Another 9% strongly disagree, adding up to 29% (20% disagree + 9% strongly disagree) who view the resources as inadequate.

Interpretation:

The responses indicate that students are divided on whether the resources provided by NISP are sufficient for developing a startup. With only about a third (36%) expressing satisfaction, there seems to be a gap in resource adequacy for supporting the full development of a startup.

The high percentage of neutral responses (36%) may reflect uncertainty about what resources are essential or a lack of awareness about the available support. It might also suggest that while certain resources (like mentorship and infrastructure) are helpful, they may not cover all startup needs.

Table 13: Confident level among the students’ ability to start a business after NISP programs

How confident are you in your ability to start a business after NISP programs?		
Response	No. of respondents	%
Not confident at all	0	0
Slightly confident	8	18
Moderately confident	27	60
Very confident	10	22
Total	45	100

Source: Survey

Analysis:

- Not confident at all: 0% of respondents expressed a complete lack of confidence, which is a positive sign, as it suggests that all respondents gained at least some level of confidence from NISP programs.
- Slightly confident: 18% of respondents feel only slightly confident, indicating that while they have some understanding, they may still lack the skills or knowledge necessary to confidently start a business.
- Moderately confident: 60% of respondents feel moderately confident, making this the largest group. This suggests that a majority of participants feel they have a solid foundational understanding, though they may not yet feel fully prepared for all the challenges of entrepreneurship.
- Very confident: 22% feel very confident in their abilities to start a business, showing that nearly a quarter of the participants believe they have gained substantial entrepreneurial skills and readiness through NISP programs.

Interpretation:

The majority of respondents (82%) feel at least moderately confident in their entrepreneurial abilities after participating in NISP programs. This reflects positively on the impact of NISP in building confidence among students. However, with only 22% feeling "very confident," it suggests there is room for improvement in terms of empowering students with advanced entrepreneurial skills and confidence.

The high level of "moderately confident" responses may indicate that while students have gained knowledge and some practical skills, they may feel they still need more experience or support in areas like funding, business planning, and real-world application.

Table 14: Challenges encountered by the students in engaging with NISP programs:

What challenges have you encountered in engaging with NISP programs? (Select all that apply)		
Response	No. of respondents	%
Lack of Awareness	10	10
Insufficient Funding	38	37
Limited Mentorship	14	13
Academic Commitments	19	18
Limited Infrastructure	23	22
Total	104	100

Source: Survey

Analysis:

- Lack of Awareness: 10% of responses indicate a lack of awareness about NISP programs, suggesting that some students may not fully understand what resources and opportunities are available to them.
- Insufficient Funding: 37% of responses identify funding as a major challenge. This significant percentage suggests that students may feel hindered in their entrepreneurial efforts due to limited financial support.
- Limited Mentorship: 13% of responses indicate a need for more mentorship. This suggests that while some mentorship is available, it may not be sufficient to meet the demand or provide comprehensive guidance.
- Academic Commitments: 18% of responses point to academic workload as a barrier. Balancing studies and entrepreneurial activities appears to be a challenge for many students.
- Limited Infrastructure: : 22% of responses reflect concerns over limited infrastructure. This indicates that the physical or technological resources available through NISP may not be adequate to support all entrepreneurial activities.

Interpretation:

The primary challenges highlighted by students engaging with NISP are insufficient funding (37%) and limited infrastructure (22%), followed by academic commitments (18%) and limited mentorship (13%). These results suggest that while NISP provides valuable support, there are significant gaps in resources that could impact students' ability to fully benefit from the programs.

Funding and Infrastructure: A combined 59% of responses indicate that students feel restricted by funding and infrastructure limitations, which are crucial for the practical execution of startup projects.

Balancing Academics with Entrepreneurship: The impact of academic commitments (18%) shows that students may struggle to devote time to NISP initiatives alongside their coursework.

Awareness and Mentorship: Although mentorship and awareness are challenges, they are less prominent than funding and infrastructure, but addressing these could still enhance the overall experience.

Table 15: Effectiveness of NISP in fostering a culture of innovation:

How effective is NISP in fostering a culture of innovation?		
Response	No. of respondents	%
Very ineffective	0	0
Ineffective	0	0
Neutral	16	36
Effective	21	47
Very effective	8	18

Total	45	100
-------	----	-----

Source: Survey

Analysis:

- Neutral: 36% of respondents feel neutral about NISP’s effectiveness in fostering innovation, suggesting that while some students recognize the program’s efforts, they may not see significant impact yet.
- Effective: 47% of respondents find NISP effective in promoting a culture of innovation. This majority reflects a positive view on NISP’s initiatives, indicating that almost half the students perceive beneficial outcomes.
- Very Effective: 18% of respondents rate NISP as very effective in fostering innovation, showing that a smaller but meaningful portion of students feel the program excels in this area.

Interpretation:

Overall, 65% of respondents believe NISP is either effective or very effective in fostering a culture of innovation, which reflects a generally favorable view of the program’s influence. However, the 36% neutral responses suggest that there may still be room for improvement or clearer communication of NISP’s benefits and outcomes.

Positive Perception: The majority positive feedback (65%) indicates that NISP is indeed contributing to an innovative environment, likely through initiatives such as mentorship, infrastructure, and networking opportunities.

Potential for Greater Impact: The neutral responses (36%) suggest that some students might not yet feel a strong impact or lack sufficient information about NISP’s efforts. This could mean that while initiatives exist, their influence on fostering innovation could be expanded.

Recommendations for improvement in the NISP Policy:

Based on the analysis and interpretation of the National Innovation and Startup Policy (NISP) implementation across selected Higher Education Institutions (HEIs), here are recommendations for improvement to enhance its effectiveness in promoting entrepreneurship and innovation:

1. Increase Funding for Startups and Incubation Facilities

The Ministry of Education (MOE) should consider establishing dedicated funding streams for HEIs to support early-stage startups and incubation facilities. This could include grants, subsidized loans, or partnerships with venture capitalists to provide financial backing for student ventures. Increased funding would enable more institutions to establish or expand incubation facilities, which are essential for providing logistical support and resources to startups.

2. Strengthen Industry Partnerships and External Collaborations

MOE could incentivize HEIs to establish partnerships with industry stakeholders, incubators, and accelerators by providing funding or recognition for institutions that demonstrate successful collaborations. This will facilitate knowledge exchange, increase networking opportunities, and provide students with practical exposure. Creating a centralized platform for industry-institution linkages could also streamline partnership processes.

3. Enhance Awareness and Outreach Initiatives

HEIs should be encouraged to conduct regular awareness campaigns, such as interactive workshops, seminars, peer-led sessions, and social media engagement to increase visibility. Digital tools and mobile apps with notifications about NISP activities, workshops, and competitions could be explored to reach more students effectively.

4. Diversify and Tailor Engagement Activities

MOE could encourage HEIs to diversify engagement activities, introducing new formats like gamified learning, pitch competitions, hackathons, and incentive-based programs to attract students with varied interests and commitment levels. Tailored activities should address the diverse needs and engagement levels of students, encouraging broad participation across different fields of study.

5. Expand Access to High-Value Resources like Seed Funding, Investor Networks, and Specialized Equipment

MOE could facilitate access to these high-value resources by creating national-level support frameworks. For example, establishing a government-managed seed fund for startups, or organizing investor networking events on a regional or

national level where student entrepreneurs can present their ideas to potential investors. Additionally, shared facilities for specialized equipment can be created at strategic locations for use by multiple HEIs.

6. Provide Dedicated Faculty Mentors with Specialized Training

MOE could support faculty training programs focused on entrepreneurship and innovation mentoring. Providing financial incentives or certifications for faculty members who take on mentorship roles would encourage more participation. Institutions could also collaborate with industry experts to serve as guest mentors, bringing in specialized knowledge and industry insights.

7. Improve the Adequacy and Quality of Resources Provided Under NISP

MOE could establish a standardized set of resources for NISP implementation that includes minimum requirements for mentorship, infrastructure, incubation access, and funding. A periodic evaluation of resource adequacy across institutions could help in identifying gaps and providing additional support where needed. Additionally, creating a clear checklist for students on available resources and how to access them may improve perceptions of resource adequacy.

8. Encourage Data-Driven Evaluation and Feedback Mechanisms

HEIs should implement data-driven evaluation systems to regularly assess the effectiveness of NISP activities and gather student feedback. A feedback loop that allows students, faculty, and NISP coordinators to share insights could be institutionalized to inform MOE about areas for improvement. This data could be used to adapt the program in real-time, addressing emerging needs and optimizing initiatives based on feedback.

By adopting these recommendations, the Ministry of Education can strengthen the NISP framework, making it more comprehensive and effective in cultivating entrepreneurial ecosystems within HEIs. This will not only foster innovation but also increase the likelihood of successful student-led startups, ultimately contributing to India's goal of becoming a global hub for entrepreneurship and innovation.

V. CONCLUSION

The National Innovation and Startup Policy (NISP) has demonstrably impacted management institutions in Pune, fostering a supportive environment for student entrepreneurs. Survey findings indicate increased awareness of entrepreneurship, positive engagement with NISP initiatives, and enhanced confidence among students. However, the research also reveals limitations in the policy's current implementation.

The primary challenges identified are limited access to funding, infrastructure, and specialized equipment. Additionally, a lack of strong industry partnerships hinders students from gaining valuable networking opportunities and real-world insights. While NISP provides mentorship and infrastructure support, a significant number of students still feel these resources are inadequate. Furthermore, diversifying engagement activities is necessary to reach and inspire a wider range of students with varying interests and commitment levels.

To address these limitations and enhance NISP's effectiveness, this research proposes a series of recommendations. These include increased funding for student startups and incubation facilities, along with incentives for HEIs to build strong industry partnerships. Expanding awareness campaigns and diversifying engagement activities are crucial for maximizing student participation. Additionally, providing students with access to high-value resources like seed funding, investor networks, and specialized equipment is vital to support their ventures. Furthermore, the implementation of dedicated faculty mentors with specialized training would significantly contribute to student success. Finally, establishing standardized resource allocation across institutions and implementing data-driven evaluation mechanisms with student feedback loops are essential for continuous improvement. By adopting these recommendations, the NISP framework can be strengthened to cultivate truly robust entrepreneurial ecosystems within management institutions. This will not only foster innovation but also equip students with the skills and resources to launch successful startups, ultimately contributing to India's goal of becoming a global hub for entrepreneurship and innovation.

REFERENCES

- [1]. Jha, S. K. (2018). Entrepreneurial ecosystem in India: Taking stock and looking ahead. *IIMB Management Review*, 30(April), 179-188.

- [2]. Adhana, D. K., & Kumar, A. (2020). Start-Up Ecosystem in India: A Study With Focus on Entrepreneurship and University Business Incubators. *AEGAEUM JOURNAL*, 8(9), 754-772.
- [3]. Naveen, B. R. (2018). Entrepreneurship and start-up ecosystem at the Indian academic institutes: A student's perspective. *ICBAI-2018, e-Proceeding*, 517-524.
- [4]. Mehta, K. (2022). A Study on Impact of Startup Ecosystem on Student Innovations. *International Journal of Trend in Scientific Research and Development (IJTSRD)*, 6(2), 978-985.
- [5]. Garg, M., & Gupta, S. (2021). Startups and the Growing Entrepreneurial Ecosystem. *Journal of Intellectual Property Rights*, 26, 31-38.
- [6]. Kandakatla, R., Kulkarni, N., Aluvalu, R., Joshi, G., & Devireddy, S. (2021). Role of Indian Higher Education Institutions towards Aatmanirbhar India: Government Policies and Initiatives to promote Entrepreneurship and Innovation. *2021 World Engineering Education Forum/Global Engineering Deans Council (WEEF/GEDC)*, 15-18 November 2021, Madrid, Spain, 8-14.
- [7]. Aggarwal, M., & Datta, A. (2021). Effectiveness of Skill Development Schemes and Its Impact on Entrepreneurship. *Journal of Emerging Technologies and Innovative Research (JETIR)*, 8(9), 420-424.
- [8]. Srivastava, M. (2019). Startup India Initiative: The Strengthening Role of Educational Institutions. *GAP iNTERDISCIPLINARITIES*, 2(1), 361-364.
- [9]. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1738170>
- [10]. <http://puneresearch.com/media/data/issues/586fe4aa1e1e7.pdf>
- [11]. <https://www.gapgyan.org/res/articles/Paper%2051.pdf>
- [12]. [https://www.gapgyan.org/res/articles/\(52-57\)%20A%20STUDY%20ON%20EFFECT%20OF%20GOVERNMENT%20POLICIES%20ON%20STARTUP.pdf](https://www.gapgyan.org/res/articles/(52-57)%20A%20STUDY%20ON%20EFFECT%20OF%20GOVERNMENT%20POLICIES%20ON%20STARTUP.pdf)
- [13]. <https://timesofindia.indiatimes.com/blogs/voices/role-of-start-ups-in-the-growth-of-the-economy-in-india/>
- [14]. <https://economictimes.indiatimes.com/small-biz/policy-trends/startup-india-lots-of-policies-and-not-much-evidence-its-helpful/articleshow/57529755.cms?from=mdr>
- [15]. <https://www.aicte-india.org/downloads/Startup%20Policy.pdf>
- [16]. https://mic.gov.in/start-up-policy/startup_policy
- [17]. <https://www.pmc.gov.in/en/city-overview>
- [18]. <https://www.puneonline.in/city-guide/about-pune>