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Innovation Performance Appraisal of HEIs: A Study of Andhra Pradesh

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ABSTRACT

India is the only South Asian country ranked 50th in the latest Bloomberg Innovation Index 2021. Indian Higher Education Institutions (HEIs) have been performing very well. It has been proved that India is a hub of scientific research. Currently, India ranks third globally in terms of the total research output, accounting for 5.31 per cent of the research publications. The HEIs have shown consistent growth in the quality and quantity of research in the past decade. India has over 1000 universities, with 54 central universities, 416 state universities, 125 deemed universities, 361 private universities, 159 Institutes of National Importance, around 1500 top institutes, and over 45,000-degree colleges as of 2020. The leading objective of the study is to appraise the performance of HEIs in respect of education and knowledge generation and with particular reference to innovation. In 2016, the National Institutional Ranking Framework (NIRF) was launched to rank higher education institutions based on objective criteria to promote competitive excellence in higher educational institutions. The ATAL Ranking of Institutions on Innovation Achievements (ARIIA), launched in 2018 to rank higher education on different indicators of vital start-up ecosystems on campus and innovation. The study considers the rankings of the National Institutional Ranking Framework (NIRF) and the ATAL Ranking of Institutions on Innovation Achievements (ARIIA) as parameters to appraise the innovation performance of the HEIs in India in general and the HEIs in Andhra Pradesh in particular. The study also covers the role of the Institution's Innovation Councils (IICs) in fostering the culture of innovation of the development of entrepreneurship and promotion of start-ups in all Higher Education Institutions (HEIs) across India. The study foresees the tremendous future in innovation, entrepreneurship, and start-ups with the rich demographic dividend and the HEIs strong network.

Keywords: *Innovation, research, rankings, entrepreneurship, start-ups, NIRF, ARIIA, IIC.*

Objectives:

The objectives of the present paper are:

- To study the environment developed in the HEIs to promote innovation, entrepreneurship, and start-ups among the students.
- To understand the promotion of the Research and Innovation ecosystem in the HEIs
- To comprehend the upgrade quality of education to global standards.
- To analyze the performance of the HEIs comparing the NIRF and ARIIA rankings and the reforms in Higher education.

Area of study:

The study of Innovation performance appraisal of Higher Educational Institutions (HEIs) is undertaken on the Higher Educational Institutions in India and Andhra Pradesh.

Methodology:

The study is based on the secondary data of the NIRF and ARIIA, including MHRD's MIC and other sources like Bloomberg. The average method is used to arrive at the overall ranking of states.

Higher Education in India with Global Perspective:

India is the only country from the South Asian region which has ranked 50th in the latest Bloomberg Innovation Ranking Index 2021. On the High Technology Density index, India stands at 28th rank. It could be credited to highly skilled human recourse, particularly in the latest science and technology front by HEIs. South Korea has gained the top place on the index by pushing Germany to fourth place. As stated above, India has scaled up to the 50th in the Bloomberg Innovation Index 2021, ascending to the fourth spot from the previous year's position excelling in all areas.

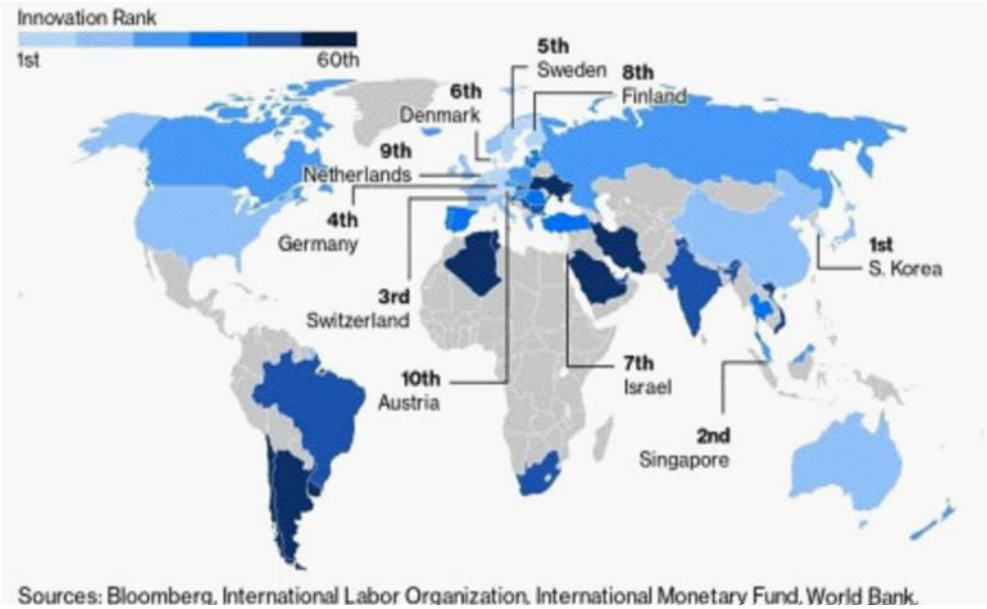
2021 Bloomberg Innovation Index:

Table - 1 shows the innovation ranks from 1 to 10 in which South Korea ranks first, second Singapore, Switzerland ranked 3rd and Germany, Sweden, Denmark, Israel, Finland, Netherlands, and Austria stand 4,5,6,7,8,9 and 10 places respectively. Figure - 1 also shows the Bloomberg innovation ranks of various countries globally.

Table - 1: Bloomberg Innovation Ranks of the Countries in the World

Rank	1	2	3	4	5	6	7	8	9	10
Country	S.Korea	Singapore	Switzerland	Germany	Sweden	Denmark	Israel	Finland	Netherlands	Austria

Figure - 1: Bloomberg Innovation Ranks of Various Countries



Source:https://www.tbsnews.net/world/india-represents-south-asia-bloomberg-innovation-index-2021-196702?s=08

India in Bloomberg Innovation Index 2021:

The place of India with its more robust Higher Education Institutions (HEIs) found in the Bloomberg Innovation Index 2021 is as follows:

- India has performed the best in the high-tech density category and ranked 28th.
- India has a representation in the patent category with 32nd rank.
- India has implemented in the R& D intensity category, ranking 51st.
- India has performed in the Manufacturing value-added category; it has ranked 56th
- India has a represent in the productivity category; it has ranked 58th
- India has an implement in the tertiary education efficiency category; it has ranked 28th
- India has performed in the researcher concentration category; it has ranked 59th.

Indian Higher Education:

Higher education is given in post-secondary institutions of learning and usually offers a degree, diploma or certificate of higher studies at the end of a course of study. The higher educational institutions include universities and colleges and various professional schools that prepare law, theology, medicine, business, music, and art. Higher education also includes teacher-

training schools, junior colleges and institutes of technology. Indian HEIs have performed very well in the first two aspects of education, knowledge generation, and innovation in relative terms; however, they are presumed to lag behind the innovation front.

Higher Education Institutions (HEIs) :

India has over 1000 universities, including 54 central universities, 416 state universities, 125 deemed universities, 361 private universities, and 159 Institutes of National Importance, including AIIMs, IIMs, IIITs, IISERs, IITs and NITs. There are around 1500 top institutes and over 45,000-degree colleges in the country as of 2020. Over the years, India has become a hub of multiple scientific research. The universities are categorized as central, state, deemed, and private. Table-2 shows the total number of universities in India and Andhra Pradesh in particular.

Table- 2: Universities in India And Andhra Pradesh

State/India	Central Universities	State Universities	Deemed Universities	Private Universities	Total Universities
Andhra Pradesh	3	25	4	6	38
India	54	441	126	397	1018

Source: en.m.wikipedia.org

National Institutional Ranking Framework (NIRF)

The National Institutional Ranking Framework (NIRF), the first-ever framework by the Department of Higher Education, Ministry of Education, Government of India meant to rank Higher Education Institutions in India. This ranking work used to be done usually by private entities, especially news magazines, before the NIRF's launch in 2016. India was quite upset about the universities standing in QS World university ranking and the Times Higher Education World University Ranking and the poor performance in global league tables to subjective ranking methodology and criteria which depend a lot on the perception of a select group of persons. Hence, the government emulated the NIRF with the parameters such as teaching, learning & resources, research and professional practice, graduation outcome, outreach and inclusivity and perception. Hence, NIRF India has started its rankings with more suitable parameters to the Indian context.

HEIs @ NIRF

The number of Indian institutes registered for the National Institutional Ranking Framework (NIRF) Ministry of Education Government of India ranking 2020 increased by 20 per cent compared to 2019. In the year 2020, about 3,800 institutes participated in the NIRF Rankings. In 2021, the number was scaled up to 6000. The ranking exercise for the sixth edition of India Rankings for the year 2021 continues with the practice of providing Rankings of institutions of higher education in India in four categories, namely Overall, Colleges, Universities & Research Institutions and seven subject domains, namely Engineering, Management, Pharmacy, Law,

Medical, Architecture and Dental. In 2021 the ranking of Research Institutions was released for the first time.

Participation in NIRF:

To encourage broader participation in India Rankings, all institutions that applied the previous year were considered pre-registered for India Rankings 2021 and invited to participate in the ranking exercise. While other institutions interested in participating in India Rankings 2021 were invited to register on the NIRF Web portal as a new registration. Table - 3 provides the number of pre-registered institutions and those that registered themselves voluntarily.

Table - 3: Number Of Registered And Pre - Registered Institutions

Description	Registered	Submitted
Pre-registration Institutions	3620	3366
New Registration Institutions	958	664
Total Institutions	4578	4030

Source:NIRF booklet_2021_final_3sep_2021.cdr (nirfindia.org)

Table-4 shows the number of participating different categories and domains of institutions.

Table-4: Participating Institutions in Different Categories and Domains

Sl. No	Category / Discipline	Total Number of Institutions	CFTIs and CFUs
1	Overall	1657	91
2	Engineering	1143	60
3	Management	659	34
4	Pharmacy	351	6
5	Architecture	78	14
6	College	1802	1
7	Medical	111	2
8	Law	120	7
9	Research	234	54
10	Dental	117	2
TOTAL		**6272**	**271**

Source : NIRF booklet_2021_final_3sep_2021.cdr (nirfindia.org)

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Table-5 displays the participation of institutions in the NIRF during 2016 - 2021

Table-5: Institutions Participation in NIRF During 2016 - 2021

Year	Unique Institutes	Over all	Univer - city	Engg .	Management	Pharmacy	Architecture	College	Medical	Law
2016	2426	-	233	1438	609	454	28	803	-	-
2017	2411	724	278	919	542	316	42	535	43	49
2018	2809	957	321	906	487	286	59	1087	101	71
2019	3127	1479	296	970	555	301	65	1304	113	80
2020	3771	1667	335	1071	630	334	48	1659	118	97
2021	4030	1657	362	1143	659	351	78	1802	111	120

It can be observed from the table-5 that India Rankings (NIRF) has attracted the participation of institutions of higher education from across India in all categories and subject domains. It is evident from the above tables that the number of participating institutions has been increasing year after year in almost all categories and subject domains. The number of unique institutions has registered with an increase of 66.12 per cent from 2,426 in 2016 to 4,030 in 2021. The maximum increase of 236.82 per cent could be seen in the College category, increasing from 233 colleges in 2016 to 1802 colleges in 2021.

Top-ranked institutions in various categories in Andhra Pradesh - 2021:

National Institutional Ranking Framework, Ministry of Education, Government of India announced the results of the Ranking List of Participating Institutions across India. The states' share with their ranking institutions is shown in the following table.

Table - 6: States and NIRF Top-ranked Institutions

SI. No	State	Institutes
1	Tamil Nadu	19
2	Maharashtra	12
3	Uttar Pradesh	8
4	Delhi	7
5	Punjab	7
6	West Bengal	7
7	Karnataka	5
8	Assam	4
9	Kerala	4
10	Odisha	4
11	Telangana	4
12	Andhra Pradesh	3
13	Gujarat	3
14	Rajasthan	3
15	Madhya Pradesh	2
16	Bihar	1
17	Chandigarh	1
18	Himachal Pradesh	1
19	Jammu and Kashmir	1
20	Jharkhand	1
21	Meghalaya	1
22	Pondicherry	1
23	Uttarakhand	1
24	Haryana	0
	TOTAL	100

Source: MoE, National Institute Ranking Framework (NIRF) (nirfindia.org)

As shown from table-6, many Higher Education Institutions (HEIs) have found places in the NIRF rankings. The study of the Report reveals that among the Top-ranked 100 institutions in the Overall Category, the Andhra University (48), Visakhapatnam, KL College of Engineering (35), Vaddeswaram, and Sri Venkateswara University (92), Tirupati have secured ranks.

The Andhra University (24), Visakhapatnam, KL College of Engineering (69), Vaddeswaram, Sri Venkateswara University (54), Tirupati, Gandhi Institute of Technology and Management (67), Visakhapatnam, and Vignan's Foundation for Science, Technology and Research (97) Guntur, ranked Top 100 Universities.

Andhra Pradesh found a place with its KL College of Engineering (50), Vaddeswaram, College of Engineering (A) (74), Visakhapatnam, Vignan's Foundation for Science, Technology and Research (111), Guntur, University College of Engineering (123), Kakinada, Velagapudi Ramakrishna Siddhartha Engineering College (178), Vijayawada, and Sri Venkateswara University (200), Tirupati engineering colleges in the list of Top 200 in Engineering Category.

The management institutions KL College of Engineering (38), Vaddeswaram, and KREA University (50), Sri City, Chittoor, from Andhra Pradesh are ranked in the list of Top 75 Management Institutions Category.

The School of Planning and Architecture (8), Vijayawada, is ranked 8 in the Top 25 in Architecture Category.

Among the Top 40 Dental Category, Vishnu Dental College (23), West Godavari bagged 23rd rank.

Damodaram Sanjivayya National Law University (28), Visakhapatnam ranked in the Top 30 Law Category.

The AU College of Pharmaceutical Sciences, Andhra University (30), Visakhapatnam, Sri Padmavathi Mahila Visva Vidyalayam (44), Tirupathi, Sri Venkateswara University (54), Tirupathi, Raghavendra Institute of Pharmaceutical Education & Research (55), Anantapur, Sri Venkateswara College of Pharmacy (62), Chittoor, Guntur's Chalapathi Institute of Pharmaceutical Sciences (69) are ranked in the Top 75 ranks of the Pharmacy category.

In the Top 50 Medical category, the only college in Andhra Pradesh is Narayana Medical College (43), Nellore. In the College category, Andhra Loyola College (34) Vijayawada is the only college placed 34th rank in India's Top 100 college category.

It can be perceived from the preceding analysis that the HEIs have been performing well in two education and knowledge generation aspects rather than innovation aspects.

MoE-MHRD's Institution Innovation Council (IIC):

The MoE-MHRD's Innovation Cell inaugurated the 'Institution's Innovation Council (IIC)' to foster the innovation culture in the Higher Education Institutions (HEIs) across India. The

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Ministry of Human Resource Development established 'MHRD's Innovation Cell (MIC)' to promote innovation and entrepreneurship in Higher Education Institutions (HEIs).

The main objectives of the MIC are:

- To encourage the creation of 'Institution's Innovation Council (IICs) across selected HEIs.
- To promote the innovation ecosystem in the institution through multitudinous modes.
- To encourage, nurture and inspire young students to work with new ideas and transform them into prototypes.
- The Institution's Innovation Councils (IICs), established in the HEIs, are intended to promote the innovation ecosystem in the campus of the HEIs across the country.

Major Focus of IIC:

The primary focus of the IIC includes:

- To create a dynamic local innovation system.
- Start-up and entrepreneurship supporting mechanism in HEIs
- Prepare the institutes for the framework of ARIIA.
- Develop ecosystem for scouting ideas and pre-incubation of ideas.
- Develop better cognitive ability among technology students.

Functions of IIC:

- No significant capital investment is required to establish IIC as it will use the existing local ecosystem.
- Students and faculty associated with IIC will get exclusive opportunities to participate in various innovation-related initiatives and competitions organized by the MHRD.
- Win exciting Prizes or Certificates every month.
- Meet or Interact with renowned Business Leaders and top-notch academicians.
- Provide the opportunity to nurture and prototype new ideas.
- Mentoring by Industry Professionals.
- Experiment with the new and the latest technologies.
- Visit new places and learn about a new culture.

Atal Ranking of Institutions on Innovation Achievements (ARIIA):

The Ministry of Human Resource Development (MHRD) introduced 'Atal Ranking of Institutions on Innovation Achievements (ARIIA) in 2018 to rank education institutions and

universities based on innovation-related indicators or parameters used globally to rank the most innovative education institutions and universities in the world.

Objectives of ARIIA:

- Setting direction for HEIs towards streamlining and establishing a robust start-up ecosystem in campus and region.
- Measuring Innovation & Start-up ecosystem based on Input, Process, Output and Outcome-based parameters.
- Focusing on both quantity and quality aspects of the start-up ecosystem available at the institute.
- Also, measure the impact of these innovations and start-ups from Higher Educational Institutions (HEIs) on society and the market.
- Moreover, aiming to uplift India's Position in the Global Innovation Index from 48th to top 30 in 5 Years.

Purpose of ARIIA:

The ARIIA ranking will inspire Indian institutions to reorient their mindset and build ecosystems by encouraging high-quality research, innovation and entrepreneurship. Furthermore, the ARIIA will set the tone and direction for institutions for future development to make them globally competitive and at the forefront of innovation.

Categories and Classifications of the ARIIA:

The ARIIA 2021 classified the participating HEIs under two heads: "Technical HEIs" and "Non-Technical HEIs". Each class is again categorized under two broad categories such as "Publicly Funded Institutions" and "Privately or Self-Financed Institutions". In addition to this, a particular category for "HEI exclusively for Women Education" is part of the ranking. Sub-categories provisioned under each category include:

1. Publicly Funded Institutions:
    i. Institute of National Importance and Central Universities and CFTIs.
    ii. State University & Deemed Universities (Govt. & Govt. Aided).
    iii. Govt. Colleges/Institutes.
2. Privately or Self-Financed Institutions:
    i. University & Deemed University (Private).
    ii. Private Colleges or Institutes.

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Innovation is the buzzword across the globe for the 21st century. Innovation transforms ideas into new or improved products, processes, or services. Atal Ranking of Institutions on Innovation Achievements (ARIIA) ranks all major higher educational institutions and universities in India on indicators of promoting and supporting "Innovation and Entrepreneurship Development" amongst students and faculties.

The innovation and start-up ecosystem in HEIs is the prime parameter considered for ARIIA ranking. The other parameters are also considered for the ranking. They are:

1. Activities to promote and support innovation & start-up on the campus.
2. Pre-incubation and incubation infrastructures & facilities available on campus.
3. Academic courses offered by the institute on innovation, IPR and start-up.
4. Successful innovation and start-ups emerged from the campus.
5. Investment, collaboration and partnerships with ecosystem enablers.
6. Research outputs, publications, and intellectual properties generated.
7. Technology transfer and commercialization effort.

Only 496 institutes competed to get a position in the ARIIA ranking in the first edition in 2019. In the 2nd edition of 2020, the number of participating institutions was increased to 674. Surprisingly in the current 3rdedition, 2021 recorded unprecedented participation of 3,551 HEIs registered 1,438 institutions including all IITs, NITs, IISc, etc. The participation in the 3rd edition reached more than double compared to 2nd edition and approximately four times as compared to the first edition, 2019. The 3rd edition of ARIIA classified participating institutions into two categories: technical and Non-technical. In the 3rd edition, the ARIIA introduced a different framework for non-technical institutions. The framework further strengthened the innovation and entrepreneurial ecosystem in the HEIs.

The technical category has five sub-categories:

1. CFTIs, Central University, & Institute of National Importance.
2. State University & Deemed University (Govt. & Govt. Aided).
3. Govt. College or Institution (Govt. & Govt. Aided).
4. University & Deemed University (Self-Finance/Private).
5. Private College or Institute (Self-Finance/Private).

The newly introduced non-technical category is classified the HEIs into two sub-categories:

1. CFIs, Central University or Institute of National Importance (Non-Technical).

2. General (Non-Technical).

The ARIIA invites applications from the HEIs. The submitted applications are subjected to multiple screening, validation, and evaluation stages as per the ARIIA framework and guidelines developed by the evaluation committee. Ranks are prepared for HEIs based on the score and range designed for the parameters, sub-parameters, and category-wise scores. The Top-performing technical and non-technical HEIs were assigned a rank and band of 'Outstanding'. In contrast, all the remaining technical and non-technical institutions in each category gave a band of 'Excellent', 'Performer', 'Promising' or 'Beginner' to encourage their effort and participation in the ARIIA.

The 3rd edition of the Atal Ranking of Institutions on Innovation Achievements (ARIIA) 2021 announced the results on 29th December 2021 and made them accessible at www.ariia.gov.in. The lists of category wise HEIs with their rank or band details are presented in the following tables - 7 to 13.

Table - 7: CFTIs/Central University/Institute of National Importance (Technical): Top 10 Ranks

SI. No	Institute ID	Institute Name	Rank	State
1	ARI-U-0456	Indian Institute of Technology Madras	1	Tamil Nadu
2	ARI-U-0306	Indian Institute of Technology Bombay	2	Maharashtra
3	ARI-l-1074	Indian Institute of Technology Delhi	3	Delhi
4	ARI-l-1075	Indian Institute of Technology Kanpur	4	Uttar Pradesh
5	ARI-U-0560	Indian Institute of Technology Roorkee	5	Uttarakhand
6	ARI-U-0220	Indian Institute of Science	6	Karnataka
7	ARI-U-0013	Indian Institute of Technology Hyderabad	7	Telangana
8	ARI-U-0573	Indian Institute of Technology Kharagpur	8	West Bengal
9	ARI-U-0263	National Institute of Technology Calicut	9	Kerala
10	ARI-U-0530	Motilal Nehru National Institute of Technology	10	Uttar Pradesh

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Table - 8: State University & Deemed University (Govt.&Govt.aided) (Technical):Top 10 Ranks

SI. No	Institute ID	Institute Name	Rank	State
1	ARI-U- 0078	PanjabUniversity	1	Punjab
2	ARI-U-0098	Delhi Technological University	2	Delhi
3	ARI-U-1056	Netaji Subhas University of Technology	3	Delhi
4	ARI-U-0159	Chaudhary Charan Singh Haryana Agricultural University	4	Haryana
5	ARI-U-0444	Avinashilingam Institute For Home Science And Higher Education For Women	5	Tamil Nadu
6	ARI-U-0308	Institute of Chemical Technology	6	Maharashtra
7	7ARI-U-0135	Gujarat Technological University	7	Gujarat
8	ARI-U-0323	Savitribai Phule Pune University	8	Maharashtra
9	ARI-U-0136	Gujarat University	9	Gujarat
10	ARI-U-0470	Periyar University	10	Tamil Nadu

Table -9: Govt. College/Institution (Govt. & Govt. Aided) (Technical): Top 5 Ranks

SI. No	Institute ID	Institute Name	Rank	State
1	ARI-C-41593	College of Engineering Pune	1	Maharashtra
2	ARI-C-37013	PSG College of Technology	2	Tamil Nadu
3	ARI-C-212	L. D. College of Engineering	3	Gujarat
4	ARI-C-26794	Thiagarajar College of Engineering	4	Tamil Nadu
5	ARI-C-33641	Veermata Jijabai Technological Institute	5	Maharashtra

Table - 10: University & Deemed University (Self-finance/Private) (Technical): Top 10 Ranks

SI. No	Institute ID	Institute Name	Rank	State
1	ARI-S-4863	Kalinga Institute of Industrial Technology Khordha	1	Odisha
2	ARI-U-0373	Chitkara University	2	Punjab
3	ARI-U-0379	Lovely Professional University	3	Punjab
4	ARI-U-0473	S.R.M. Institute of Science And Technology	4	Tamil Nadu
5	ARI-U-0147	Pandit Deendayal Petroleum University	5	Gujarat
6	ARI-U-0458	Kalasalinpam Academy of Research and Education	6	Tamil Nadu
7	ARI-U-0747	Chandigarh University	7	Punjab
8	ARI-U-0490	Vellore Institute of Technology	8	Tamil Nadu
9	ARI-U-0497	Amity University	9	Uttar Pradesh
10	ARI-U-0329	Symbiosis International	10	Maharashtra

Table -11: Private College/Institute (Self-finance/Private) (Technical)

SI. No	Institute ID	Institute Name	Rank	State
1	ARI-C-18817	G Fl Raisoni College of Engineering	1	Maharashtra
2	ARI-C-16614	R.M.K. Engineering College	2	Tamil Nadu
3	ARI-C-46111	KIET Group of Institutions	3	Uttar Pradesh
4	ARI-C-36995	Sri Krishna College of Engineering And Technology	4	Tamil Nadu
5	ARI-C-1352	Nitte Meenakshi Institute of Technology	5	Karnataka

Table - 12: Institute Of National Importance, Central University & CFIS (Non-technical): Top 2 Ranks

SI. No	Institute ID	Institute Name	Rank	State
1	ARI-U-0104	Indira Gandhi National Open University	1	Delhi
2	ARI-S-8909	Indian Institute of Management Kozhikode	2	Kerala

MoE's INNOVA (GOVERNM

Table - 13: General (Non-technical): Top 5 Ranks

SI. No	Institute ID	Institute Name	Rank	State
1	ARI-S-88	Entrepreneurship Development Institute of India	1	Gujarat
2	ARI-C-43694	Sree Narayana College	2	Kerala
3	ARI-U-0262	Mahatma Gandhi University	3	Kerala
4	ARI-C-41124	PSG College of Arts And Science	4	Tamil Nadu
5	ARI-C-35787	Holy Cross College, Tiruchirappalli	5	Tamil Nadu

Table - 14: States And Institutions on Top Ranks

SI. No	State	Institutes
1	Tamil Nadu	12
2	Maharashtra	7
3	Gujarat	5
4	Uttar Pradesh	4
5	Delhi	4
6	Kerala	4
7	Punjab	4
8	Karnataka	2
9	Haryana	1
10	Telangana	1
11	West Bengal	1
12	Odisha	1
13	Uttarakhand	1
	TOTAL	47

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It can be observed from table - 14 that among all states, Tamil Nadu, with its 12 top-ranked institutions, stood first in innovation, entrepreneurship and start-ups, followed by Maharashtra and Gujarat states. The study states that Andhra Pradesh has little to mention.

NIRF Vs ARIIA

Table 15: Comparative Study of the States With A Reference to the NIRF And ARIIA Rankings

SI. No	State	Institutes			
		NIRF	% to Total	ARIIA	% to Total
1	Tamil Nadu	19	19	12	25.53
2	Maharashtra	12	12	7	14.89
3	Uttar Pradesh	8	8	4	8.51
4	Delhi	7	7	4	8.51
5	Punjab	7	7	4	8.51
6	West Bengal	7	7	1	2.13
7	Karnataka	5	5	2	4.26
8	Assam	4	4		
9	Kerala	4	4	4	8.51
10	Odisha	4	4	1	2.13
11	Telangana	4	4	1	2.13
12	Andhra Pradesh	3	3		
13	Gujarat	3	3	5	10.64
14	Rajasthan	3	3		
15	Madhya Pradesh	2	2		
16	Bihar	1	1		
17	Chandigarh	1	1		
18	Himachal Pradesh	1	1		
19	Jammu and Kashmir	1	1		
20	Jharkhand	1	1		
21	Meghalaya	1	1		
22	Pondicherry	1	1		
23	Uttarakhand	1	1	1	2.13
24	Haryana	0	0	1	2.13
	TOTAL	100		47	2.13

The comparative study of the states with reference to the NIRF and ARIIA is analyzed. The list of the Top 10 best performing states based on the NIRF and ARIIA performance

considering the total averages is given below table - 16. It can be observed that Tamil Nadu stands first in both the NIRF and ARIIA rankings, followed by Maharastra and Uttar Pradesh with the second and the third places, respectively.

Table - 16: Top 10 Best Performing States

SI. No	State		
1	Tamil Nadu	44.53	1
2	Maharashtra	26.89	2
3	Uttar Pradesh	16.51	3
4	Delhi	15.51	4
5	Punjab	15.51	5
6	Gujarat	13.64	6
7	Kerala	12.51	7
8	Karnataka	9.26	8
9	West Bengal	9.13	9
10	Telangana	6.13	10

The Top 10 best performing states based on the NIRF and ARIIA performance in terms of education, knowledge generation and innovation is depicted in the following figure - 2

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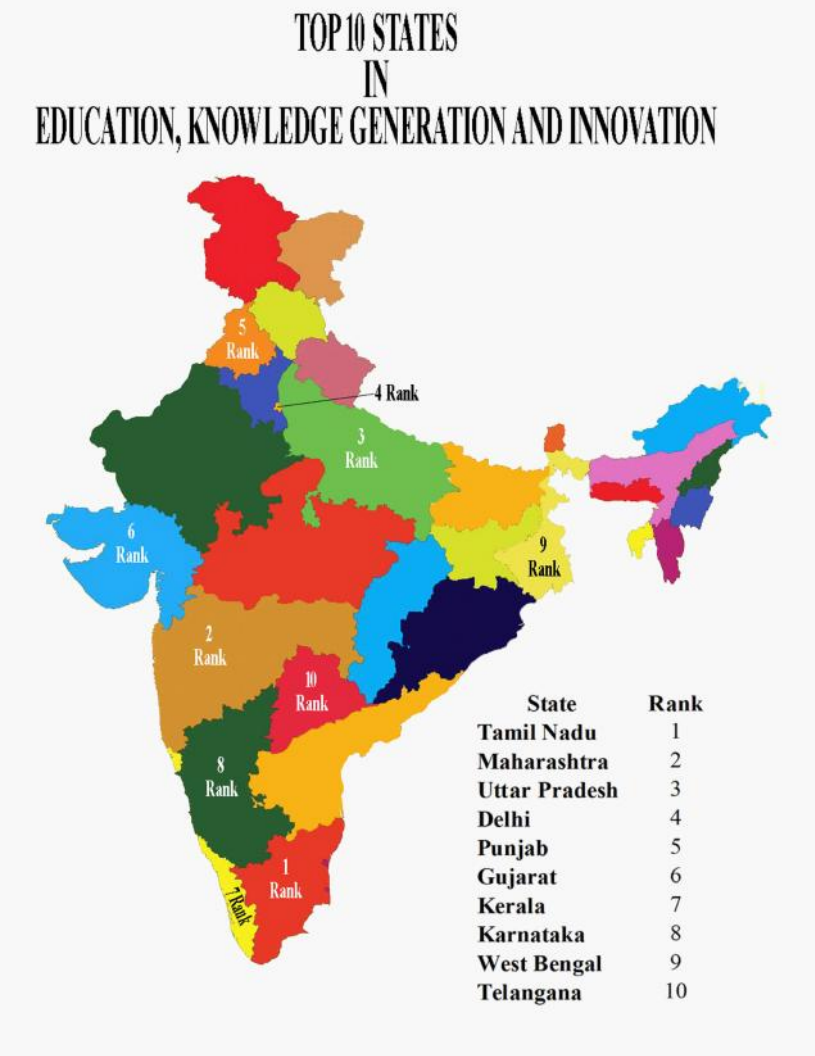

Figure-2

PERCEPTIONS AND CONCLUSION

The participation of the HEIs in the NIRF and the ARIIA is said to be encouraging. Still, when compared with the number of institutions in higher education, it can be perceived that the participation of the HEIs is quite discouraging. Only a minimum percentage of participation in the ranking institutions is observed. This trend needs to be improved. All the Higher Educational Institutions in the country should participate in the ranking competition promoting excellence in quality education, research, innovation and entrepreneurship through IICs. It will put India on top of education, knowledge generation, and innovation.

REFERENCES

1. India represents South Asia on Bloomberg Innovation Index 2021. https;// www. Tbsnews,net/world/india-represents-south-asia bloomberg-innovation- index-2021-196702
2. How NEP can transform higher education in India. Hindustan times, http:// www.Hindustan times
3. New education policy 2021- Lexlife India, https:// lexlife.in
4. Building Innovation Ecosystem in Educational Institutes: Daily Current Affairs https:Dhyheyasis.com
5. Atal Ranking of Institutions on Innovation Achievements 2021 (ARIIA 2021) https://ariia.gov.in›ARIIA 2021Ranking Report
6. MoE, National Institute Ranking Framework (NIRF) nirfindia.org
7. Sansad TV Perspective: Episode on 05th January, 2022: Innovation in Education, byjus.com

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