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A COMPREHENSIVE REVIEW OF NATIONAL INSTITUTIONAL RANKING FRAMEWORK (NIRF) IN COMPARISON TO WORLD UNIVERSITY RANKING

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Abstract

This extensive study compares the World University Ranking system to the National Institutional Ranking Framework (NIRF) to analyse how they compare. The NIRF, which was created especially for the Indian higher education system, rates and assesses institutions depending on how well they perform against a variety of criteria. The World University Rankings, on the other hand, include universities from all around the world and offer a worldwide perspective on institutional quality. Beginning with the specific issues and priorities of the Indian higher education system, the review first considers the applicability of the NIRF within the Indian context. It looks at how the NIRF provides stakeholders with a thorough picture of institutional performance through relevant comparisons and information that is specific to the Indian context. The analyze then goes into detail on the criteria that the NIRF and the World University Rankings utilize. It examines the standards, weights, and metrics used by both systems, pointing out any similarities and contrasts. It is assessed whether the World University Rankings place more emphasis on international diversity and the impact of research than the NIRF does on variables including teaching, research, outreach, and perception. The review also examines how both ranking methods can be benchmarked. It looks at how the NIRF functions as a national benchmarking tool, enabling institutions to evaluate their position within the higher education system in India. The World University Rankings, on the other hand, provide a global standard, allowing institutions to determine where they stand on the global stage. Another crucial factor examined in the study is transparency. In terms of the ranking criteria, factors, and weightings, it evaluates how transparent the NIRF and the World University Rankings are. The accessibility of this data is assessed since it enables institutions to understand the evaluation procedure and improve their performance in particular areas.

Keywords: NIRF, World University Rankings, research, outreach.

INTRODUCTION

The Government of India launched the National Institutional Ranking Framework (NIRF) in 2015. It strives to offer a thorough ranking of the nation's higher education institutions based on several factors. Promoting openness, responsibility, and quality evaluation in the Indian higher education system is the main goal of NIRF (1). The purpose of NIRF is to provide students, parents, and other stakeholders with a solid and trustworthy framework for assessing educational institutions and empowering them to make educated decisions. NIRF aims



to promote a fair and standardised evaluation of universities across several disciplines of study by providing rankings in various categories, including overall university, engineering, management, pharmacy, and more (2). The framework assesses institutions based on a variety of factors that cover many different aspects of institutional performance. These criteria include Outreach and Inclusivity, Graduation Outcomes, Research and Professional Practises, Teaching, Learning, and Resources, and Perception. NIRF seeks to assess the overall quality, academic performance, research output, and societal impact of higher education institutions in India by taking these aspects into account (3). Educational institutions eagerly anticipate NIRF rankings because they offer recognition and act as a yardstick for their success. Additionally, by offering a trustworthy indicator of an institution's strengths and areas of emphasis, these rankings assist students in making wise decisions about their pursuit of higher education (4). Therefore, NIRF significantly contributes to fostering constructive rivalry among institutions, fostering ongoing development, and raising the standard of higher education in India. It is a useful tool for stakeholders in evaluating and contrasting the effectiveness of institutions and determining the direction of the nation's educational system (5).

The importance of global university rankings on the landscape of higher education around the world is enormous. These rankings have a significant impact on how well-known and competitive colleges are globally. Here are some crucial details emphasising their importance: University rankings have a considerable impact on national and institutional policies and strategic planning, which helps to shape the higher education environment. These rankings serve as an indicator of colleges' standing on a global level and offer useful insights into the reputation and prestige of educational institutions. High-ranking institutions gain from elevated visibility and awareness, captivating top talent, researchers, and collaboration opportunities (6). Rankings also make it possible to compare institutions according to their strengths, flaws, and areas of expertise. By considering all these aspects like research output, teacher credentials, and student satisfaction, prospective students can make more educated about where to pursue their studies.

In higher education institutions, a culture of quality assurance and development is also fostered in part by international university rankings (7). Universities work to improve their performance in several areas, such as research output, faculty qualifications, student satisfaction, and foreign relationships, to improve their rankings. Institutions are encouraged to improve their educational offerings and overall performance by striving for higher rankings. Institutions can compare their successes to those of their peers' using rankings as standards and sources of best practises. Reputable colleges frequently act as role models, providing insightful advice that other schools can apply to imitate their success. This fosters the adoption of successful techniques and approaches and stimulates healthy competition among institutions.

University rankings also have an impact on financial decisions made by investors, generous organizations, and governments. Universities with higher rankings frequently have easier access to grants, funding options, and partnerships, all of which help to further growth, innovation, and research projects (8). For stakeholders looking to spend their resources for the greatest impact and return, rankings offer useful information. Student and teacher mobility is significantly impacted by global university rankings. Highly regarded colleges attract eminent scholars and gifted students from all around the world, resulting in diverse learning environments and encouraging

intellectual connections. This knowledge and idea-sharing benefits a dynamic academic community and improves the learning process.

Rankings are also very important for fostering international collaborations and partnerships between universities. High-ranking universities are more likely to collaborate on research projects, exchange students, and develop strategic relationships with other esteemed institutions, fostering worldwide academic networks and enhancing information exchange (9). Finally, rankings have an impact on strategic planning and policy in higher education. Governments and institutions use rankings as indicators to set goals, highlight areas for development, and allocate resources efficiently. By considering the rankings, policymakers can take actions that are in line with the larger objectives of improving the Caliber and competitiveness of their educational systems (10).

1.1.Scope and Coverage

India's higher education institutions use a ranking system called the National Institutional Ranking Framework (NIRF). It is only concerned with rating and evaluating the effectiveness of Indian colleges, universities, and institutes in a range of academic fields. The Government of India created NIRF with the intention of offering an extensive and trustworthy ranking system for Indian colleges. It emphasises the diversity of higher education in the nation and the significance of fostering excellence, accountability, and transparency in Indian education. NIRF considers the difficulties, circumstances, and needs of the Indian educational system by concentrating only on Indian higher education institutions (11). It considers elements unique to the higher education landscape in India, such as societal inclusion, regional diversity, and the necessity for academic institutions to address regional issues and objectives.

The only focus of NIRF on Indian institutions enables a more announced assessment of these institutions' advantages and disadvantages in relation to India. It assists students, parents, and policymakers in gaining knowledge about the standard, effectiveness, and potential of Indian institutions in a different area, including instruction, research, employment, and outreach. Furthermore, the NIRF's emphasis on Indian institutions makes it possible to compare similarly situated institutions fairly across the nation. It gives institutions a platform to compare themselves to their counterparts and highlight areas for growth (12). Although NIRF only examines higher education institutions in India, it is crucial to remember that these rankings do not intend to undervalue the importance or caliber of universities located elsewhere. Other global ranking systems, which enable cross-national comparisons and international benchmarking, evaluate universities all around the world. To promote excellence and accountability in the nation's higher education sector, a ranking system that is uniquely tailored to the Indian context is required, and NIRF's exclusive concentration on Indian higher education institutions fills this need (13). **1.2.World University rankings**

Global higher education institutions are the sole subject of international university rankings; no single nation or region is highlighted. With a variety of elements and indications considered, these rankings seek to provide a thorough review of colleges around the world. Global university rankings evaluate institutions of higher learning based on factors like research output, academic standing, faculty calibre, student satisfaction, international diversity, and teamwork (14). They use various approaches and data sources, such as scholarly polls, academic journals, citations, cross-national cooperation, funding, and other performance indicators.

To give comparative analysis and rankings of universities on a global level, world university rankings are created. They are a useful resource for scholars, students, and organisations to comprehend the advantages, disadvantages, and stature of universities in various nations and areas. Prospective students interested in pursuing higher education frequently use these rankings as a resource, as do academics looking for chances for collaboration and institutions want to assess their performance against international norms. It's important to remember that global university rankings encompass higher education institutions from all over the world, encouraging international comparisons and showcasing excellence in a range of academic disciplines and research areas. They do not, however, solely concentrate on a specific nation or region (15).

1.3. Parameters used by NIRF

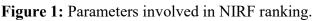
Indian higher education institutions are assessed using a set of criteria by the NIRF (National Institutional Ranking Framework). These criteria offer a thorough evaluation and cover numerous aspects of institutional performance. Here is a discussion of the NIRF's parameters:

- 1. **Teaching, Learning, and Resources:** This parameter evaluates the effectiveness of the instruction and the resources that are available for learning. It considers elements including the student-teacher ratio, the credentials and expertise of the teachers, student happiness, and the accessibility of facilities like libraries and technology-enhanced learning resources.
- 2. **Research and Professional Practises:** NIRF considers both the level of professional practise participation as well as the number, quality, and effect of research output. Research publications, patent filings, sponsored research projects, partnerships with businesses and other institutions, and the presence of excellence centres are also evaluated (16).
- 3. **Graduation Outcomes:** This parameter evaluates the results of education by looking at things like student retention, graduation rates, graduates' employability, and alumni's success in getting employment or chances for higher education. It displays how well the institution does at preparing students for the workforce or further education.
- 4. **Outreach and Inclusivity:** NIRF places a strong emphasis on the value of diversity and outreach in higher education. This indicator considers how well an institution reaches out to various populations and offers educational access. It assesses variables like the percentage of students from socially and economically disadvantaged families, gender equity, the accessibility of the school for students with disabilities, and social inclusion activities.
- 5. **Perception:** NIRF takes perception into consideration as a key factor. It covers how academics, employers, and the public view the institution. Surveys are undertaken to obtain feedback and understanding from stakeholders regarding the institution's reputation in academia, the significance of its research, and its impact on society (17).

Institutions are assessed depending on how well they perform within each parameter, which is given a particular weightage. The results of each parameter's scores go towards determining the institution's overall ranking. NIRF seeks to offer a comprehensive assessment that considers several aspects of institutional quality and societal effect

in addition to just academic success. For continued relevance and compatibility with shifting educational needs and objectives, NIRF routinely examines and updates its criteria and methods.





1.4.Parameters used for World University rankings.

The methodology used by the various organisations that produce the world university rankings vary. But these rankings frequently consider some common variables. Here are some of the main elements that international university rankings frequently consider:

- 1. Academic Reputation: Academic reputation plays a big role in how universities around the world rank. Surveys of academics and researchers are undertaken to determine how well-regarded, prestigious, and well-regarded institutions are in the world's academic community.
- 2. **Faculty-to-Student Ratio:** The proportion of faculty to students is frequently used as a gauge for the level of individualised attention and engagement that students can anticipate (18). A lower faculty-to-student ratio means easier access to professors and perhaps more interesting learning opportunities.
- 3. **Research Output and Impact:** Indicators of research success, such as the quantity of scholarly publications, citations, and the influence of the institution's research, are frequently taken into consideration when evaluating the best universities in the world. The quantity and calibre of research output show how the institution contributes to knowledge advancement.
- 4. **International Collaboration:** Rankings of universities around the world place a high importance on collaboration with foreign institutions. An institution's level of global participation and capacity to promote cross-cultural knowledge exchange can be determined by the scope of its international research collaborations, joint programmes, and exchange opportunities.
- 5. **Employer Reputation:** Employers' perceptions of the calibre of graduates from a specific university can be a significant factor. Employer reputation surveys measure graduates' employability and career prospects, showing how well the institution aligns with market demands and how competitive its graduates are (19).
- 6. **Student-to-Faculty Ratio:** Like the faculty-to-student ratio, the student-to-faculty ratio is considered when determining how much individualised attention and support are provided to pupils. A lower student-to-faculty ratio suggests better access to academic help, mentoring, and advice.

- 7. **International Diversity:** Rankings frequently give weight to the existence of a varied student body and faculty, including those from abroad. It illustrates a university's capacity to draw in top talent from around the world and foster a diverse learning environment.
- 8. **Financial Resources:** Financial resources, investments in infrastructure, research facilities, and academic resources are all factors that certain rankings consider. An institution's ability to offer a supportive environment for learning and research is indicated by adequate finance.

It's vital to remember that while these elements are frequently considered, different ranking organisations may assign different weights to each factor. To provide a thorough evaluation of institutions on a worldwide scale, more elements may be added in addition to each organization's unique methodology (20).



Figure 2: Parameters involved in World University ranking.

1.5.Data Collection 1.5.1. NIRF

Through an internet site, the National Institutional Ranking Framework (NIRF) largely gathers data from the institutions themselves. This method of gathering data is intended to guarantee that complete and correct data is acquired directly from the institutions. Here is a description of how NIRF gathers data:

- 1. Online Portal: NIRF offers a website made especially for data collection. Institutions must sign up on the NIRF portal to access the data submission procedure.
- 2. Registration: Institutions who are interested in taking part in the NIRF rankings must register on the portal and provide basic information, including their name, address, contact information, and the category or discipline they fall under.
- 3. Data Parameters and Indicators: To evaluation, NIRF prescribes the data parameters and indicators that institutions must submit. These criteria consider a variety of factors, such as outreach, perception, research, teaching, and learning.
- 4. Data Submission: Institutions must next use the web portal to submit the requested data and information. They offer both qualitative and quantitative information about each parameter. For instance, they might

provide information on the number of academic members, student enrolment, research publications, statistics on placement, infrastructural information, and outreach programmes.

- 5. Supporting Documentation: Institutions may be asked to submit supporting materials along with their data submission to confirm the veracity and accuracy of the data. Audited financial records, accreditation reports, faculty biographies, research outputs, and pertinent certifications or accolades are a few examples of this (21).
- 6. Data Verification: NIRF may perform data verification tests to make sure the submitted information is accurate and reliable. Cross-referencing the data with outside sources, visiting the sites, or, if necessary, requesting clarification from the institutions are all examples of how to do this.
- 7. Ranking Procedure: Following the conclusion of the data gathering phase, NIRF makes use of the gathered information to evaluate and rank the institutions in accordance with the predetermined criteria and weights. The institutions are given scores based on how they performed for each parameter during the ranking process, and these values are then averaged to produce the final ranking.
- 8. Rankings are made public: NIRF publishes the rankings on its main website. Students, parents, policymakers, and other stakeholders can access the rankings to help with decision-making and to give transparent information about the performance of the institutions.

NIRF makes sure that the information obtained is thorough, standardised, and directly supplied by the institutions themselves by collecting data largely from them via the internet portal. This method makes it possible to evaluate universities taking part in the NIRF rankings in a reliable and consistent manner (22).

1.5.2. World University Rankings

To guarantee a thorough and impartial analysis, data collection for global university rankings uses a variety of sources. The following are some typical techniques and information sources:

- 1. Self-Reported Data from Universities: Ranking companies frequently rely on self-reported data from universities. Institutions include details about their facilities, foreign partnerships, financing for research, student demographics, faculty-to-student ratios, and other factors. This information aids in identifying the distinctive traits and services provided by each university.
- 2. Academic Expert Surveys: Ranking organisations regularly interview academic experts, such as researchers and scholars, to gain perceptions and viewpoints on the calibre and standing of universities. These polls offer insightful subjective opinions and third-party assessments of the calibre of academic research at universities.
- 3. Bibliometric Data: To evaluate the productivity, impact, and influence of research, bibliometric data analyse academic publications and citations. Organisations gather information from a variety of sources, including academic databases, to assess variables including the quantity of publications, the influence of citations, and the impact of citations on universities and their researchers. The research performance of universities is assessed with the use of these objective quantitative data.

- Employer Surveys: Feedback from recruiters and employers, as well as employer surveys, are used to evaluate the reputation and employability of graduates from various colleges. These polls measure how well-prepared graduates are for the labour market and how excellent graduates are perceived by employers (23).
- 5. Metrics for Internationalisation: Ranking organisations gather information on internationalisation initiatives, such as the number of international students, faculty exchange programmes, partnerships, and international research collaborations. This information demonstrates how diverse and engaged colleges are with the world.
- 6. Academic Indicators: Several academic indicators are taken into account, including the proportion of faculty members who conduct research, the number of faculty members with advanced degrees, honours and honours awarded by faculty, and student-faculty ratios.
- 7. Publicly Available Information: Ranking organisations also make use of publicly accessible data from official documents, university websites, and government sources. Data on funding, grants for research, infrastructure, facilities, and other pertinent elements might be included in this material (24).

It is crucial to remember that ranking organisations use strict techniques to guarantee data quality, accuracy, and uniformity between colleges. To preserve the integrity of the ranking process, they frequently use statistical analysis, weighting methods, and data verification techniques.

1.6.Global Recognition 1.6.1. NIRF

The NIRF rankings are well respected in India and are an important domestic standard for assessing institutions of higher learning. These rankings are made specifically to evaluate and classify Indian institutions and colleges according to various criteria and measures. NIRF rankings offer insightful information about the effectiveness and calibre of Indian schools, assisting students, parents, and policymakers in making knowledgeable choices about higher education. They provide a thorough evaluation of colleges in a variety of areas, such as teaching, research, graduation rates, outreach, and perception. The broad use of NIRF rankings by educational institutions and students in India for decision-making and setting academic excellence goals demonstrates the rankings' acceptance in the country. The lists serve as a guide for applicants, as well as for organisations aiming to raise their standard of excellence and competitiveness (25).

The NIRF rankings are tailored to the unique requirements and circumstances of the Indian educational system by concentrating only on higher education institutions in India. They offer a local viewpoint and support healthy competition among schools, motivating them to improve their instruction, research, and general level of excellence. Even while NIRF rankings are largely used as a domestic standard, it's crucial to remember that they are different from rankings of universities around the world. They offer a specialised evaluation system designed specifically for the issues and needs of the higher education sector in India. Because they offer a trustworthy and widely accepted gauge of institutional performance and assist stakeholders in making decisions about their academic pursuits, NIRF rankings are essential to the Indian higher education industry (26).

1.6.2. World University rankings

World university rankings are extensively used as a standard for international comparisons among institutions of higher learning and enjoy substantial international respect. The landscape of international higher education is significantly shaped by these rankings, which have an impact on many academic areas, student preferences, research collaboration, talent recruiting, policy choices, and institutional branding and marketing. Let's delve more into these salient points:

Global Comparison: World university rankings offer a forum for contrasting educational institutions across many nations and areas. They provide a thorough evaluation of universities, considering many elements like academic standing, teacher calibre, research output, student contentment, and multicultural diversity. To make wise judgements regarding their academic and research endeavours, this enables students, researchers, and academic professionals to assess the relative strengths and shortcomings of institutions around the world. International Reputation: Institutions' rankings have a big impact on their standing internationally. High-ranking institutions are frequently viewed as prestigious and of the highest calibre (27). Top talent, international relationships in research, and collaborations are drawn by this honour. High rankings can have a significant effect on attracting students from all over the world, renowned faculty members, and financial investments in research and infrastructure.

Student Mobility: International student recruitment and student mobility are influenced by global university rankings. When looking for the best universities in their desired fields of study, students who are interested in attending college abroad frequently consult international rankings. The rankings help students make well-informed decisions about studying abroad by offering useful information about the academic quality, research possibilities, faculty competence, and overall reputation of institutions. Students use these rankings as a resource to locate colleges that support their academic objectives and provide the best chances for their preferred fields of study.

Research partnership and financing: International rankings have a big impact on the availability of financing and research partnership opportunities (28). With other top-ranked universities both domestically and abroad, highly ranked schools are more likely to collaborate on research projects. These institutions' recognition in the rankings raises their stature and appeal to researchers as partners. Additionally, rankings are frequently considered by funding organisations and sponsors when giving research grants and money because highly rated institutions are thought to have a history of conducting excellent research.

Talent Acquisition: To find universities known for producing top-notch graduates, both academic and business employers frequently consult world university rankings. Rankings serve as a benchmark for judging an institution's reputation and educational standards (29). Graduates from prestigious schools are thought to have gotten a challenging education and to have desirable skills and knowledge. Thus, companies consider graduates of top universities to be well-prepared for the business world, which shapes their hiring decisions and the career prospects of graduates.

Policy Influence: At the national and institutional levels, policy choices and strategic planning can be influenced by global university rankings. Global rankings can be used as a benchmark by governments and educational authorities to pinpoint areas that need improvement, allocate funds wisely, and create policies that raise the standard of higher education. The rankings offer insightful information about the institutions' strengths and

weaknesses, assisting policymakers in identifying best practises and areas that need improvement for the entire educational ecosystem.

Institutional branding and marketing: Organisations that do well in international rankings frequently use their rankings as a marketing strategy to strengthen their brand and draw in international partners, faculty, and students. The rankings help an institution's reputation and exposure on the global arena by acting as an external validation of its calibre. To attract a wide and skilled pool of students, faculty members, and collaborations, institutions proactively use their ranking positions to highlight their distinctive strengths, academic programmes, research capabilities, and facilities (30).

1.7.Focus on Diversity

1.7.1. NIRF

The NIRF acknowledges the significance of inclusion and outreach in the assessment of Indian higher education institutions. The NIRF framework's inclusion of the "Outreach and Inclusivity" criteria demonstrates an emphasis on evaluating institutions' efforts to engage various populations and promote equality. The NIRF recognises the importance of disadvantaged groups' involvement and representation, such as economically underprivileged areas, marginalised populations, and people with disabilities. Institutions are urged to embrace practises and policies that value inclusion and diversity, and to set up facilities and support networks to meet the needs of these groups. To achieve social justice and equal access to education, reservation regulations are also taken into account by NIRF. The framework encourages organisations to adopt unique initiatives and programmes, such as financial aid, mentoring, and support services, that cater to the requirements of underprivileged communities. Moreover, NIRF supports outreach initiatives, community service programmes, rural development projects, and collaborations with regional organisations because it understands the significance of institutions' connection with the larger community and society. In the overall NIRF ranking system, the "Outreach and Inclusivity" indicator is given significant weight, highlighting its significance in evaluating institutions' performance and their contribution to social development (31).

1.7.2. World University rankings

The effectiveness of higher education institutions on a worldwide scale is evaluated in large part by the results of international university rankings. They consider a number of elements when evaluating a university's research output, academic standing, worldwide participation, faculty and student calibre, and financial resources. The following are some crucial ideas about global university rankings:

Research Performance: Research production, impact, and productivity are heavily weighted in global rankings. The performance of a university's research is mostly determined by elements including money, funding sources, and research publications. Rankings heavily depend on the quantity and calibre of research produced by academics and researchers.

Academic Reputation: International rankings take universities' academic reputations into account. To acquire arbitrary assessments of the institution's status in the academic community, surveys of academic experts—including faculty members and researchers—are conducted. Reputation is frequently based on elements like the calibre of the institution's faculty, its contributions to research and innovation, and its standing in the industry (32).

Internationalisation and worldwide Engagement: When evaluating institutions for worldwide rankings, this information is considered. This covers elements like the percentage of international students enrolled, the diversity of the staff, research partnerships with international partners, and the institution's reputation internationally. A university's reputation internationally is influenced by its capacity to draw foreign professors, students, and research partnerships.

Faculty and Student Quality: The rankings frequently consider an institution's faculty and students. The academic performance and selectivity of students, faculty qualifications and experience, faculty member-to-student ratios, and the institution's overall quality can all be taken into consideration.

Financial Resources: When determining global rankings, financial factors including infrastructure, endowments, and financing for research may also be considered. Institutions with plenty of funding are frequently better able to draw in top teachers, carry out cutting-edge research, and give students access to cutting-edge facilities. Global rankings may take diversity into account, but their main priorities are the evaluation of research quality, academic standing, internationalisation, and financial resources. These rankings are intended to offer a comparative examination of institutions on a global level, assisting students, researchers, and institutions themselves in making decisions and comprehending their place in the higher education scene globally (33).

1.8.Subject-Specific Rankings

1.8.1. NIRF

In order to help students evaluate academic institutions, NIRF offers subject-specific rankings. By giving students in-depth knowledge about how institutions perform in their preferred fields of study, this element of NIRF improves its usefulness. NIRF analyses institutions in a wide range of academic subjects, including engineering, management, pharmacy, law, and many more, because it is aware that different universities excel in diverse academic fields.

Students can make more educated decisions regarding their higher education options thanks to subject-specific rankings. Students can assess the institutions' strengths and shortcomings in their selected subjects by viewing the subject-specific rankings (34). They can evaluate universities according to criteria like the calibre of the faculty, the quantity and quality of the research produced, the partnerships with businesses, and the infrastructure available for their chosen field.

The NIRF subject-specific rankings help institutions discover their areas of strength and areas that need development. It promotes healthy competition and inspires institutions to improve their performance in particular fields, ultimately boosting the quantity and standard of higher education across the nation. Students can evaluate colleges in certain fields and make educated judgements about their academic and professional goals using the subject-specific rankings provided by NIRF. It offers a thorough and in-depth examination of institutions, assisting students in selecting the one that best meets their academic interests and long-term objectives (35).

1.8.2. World university rankings

Although diversity may be considered to some extent in global university rankings, these evaluations of research performance, reputation, and internationalisation take precedence. Diversity is acknowledged to be a significant issue, but it frequently forms a component of a larger evaluation framework that emphasises other significant aspects of universities. Global rankings place a strong emphasis on research performance, which considers metrics

including funding, citations, and research production. Rankings are heavily influenced by the quantity, calibre, and impact of research done by academics and researchers. Rankings are often higher for universities with strong research initiatives and significant accomplishments.

Another important criterion that is considered in worldwide rankings is academic repute. Surveys of academic professionals, such as professors and researchers, are carried out to collect arbitrary evaluations of a given institution's reputation in the academic world. Reputation is often based on elements like the calibre of the professors, contributions to research and innovation, and overall importance in the field (36). Global rankings give a lot of weight to internationalisation and global participation. Institutions are judged on their capacity to draw in foreign students, support faculty diversity, form international research partnerships, and maintain a solid worldwide reputation. A university's standing internationally is influenced by its active participation and presence abroad.

Diversity may be considered throughout the evaluation process, but it is frequently combined with other elements and placed within the larger framework of research, reputation, and internationalisation. This is since global rankings seek to offer a thorough evaluation of institutions' ability to compete on a global scale, as well as to draw in talent, promote innovation, and contribute to the global academic community. Global rankings certainly take diversity into account, but their main priorities are research output, academic standing, and internationalisation. To comprehend universities' competitiveness on a worldwide scale and to give students, researchers, and the institutions themselves useful information about their place within the higher education sector, these rankings were created (37).

1.9.Subject-Specific Rankings

1.9.1. NIRF

The National Institutional Ranking Framework's (NIRF) ability to provide subject-specific rankings, which allow students to assess schools based on certain disciplines or fields of study, is one of its distinctive characteristics. NIRF respects the value of subject knowledge and the potential for academic excellence across universities. Students may compare universities from a more nuanced and thorough viewpoint thanks to NIRF's subject-specific rankings. It enables them to evaluate the advantages and disadvantages of colleges in particular academic fields, assisting them in making well-informed selections regarding their academic interests.

Rankings by subject consider several factors that are unique to each discipline, including faculty credentials, research output, academic resources, and industry partnerships (38). These criteria have been specially designed to consider the distinct standards and benchmarks of each academic area. For instance, factors like the faculty-to-student ratio, laboratory infrastructure, research publications, and industrial partnerships may be given more weight in the discipline of engineering. Students can gain a complete grasp of the academic environment and opportunities present fields thanks to the subject-specific rankings provided by NIRF. With the use of this knowledge, they are better able to match their goals and interests with the capabilities of various institutions. It enables students to make more educated selections about the colleges and degree programmes that best suit their academic and vocational aspirations.

Students are given more power by NIRF's subject-specific rankings, which provide a thorough analysis of colleges in particular fields. Students can evaluate the strengths and weaknesses of colleges in their chosen fields of study

by considering factors particular to each subject, helping them to make well-informed decisions regarding their academic journey (39).

1.9.2. World university rankings

It's important to note that global university rankings give subject-specific rankings in addition to the NIRF, which provides subject-specific rankings for comparative analysis. While research performance, reputation, and internationalisation are frequently the main focuses of global rankings, they also consider the value of subject knowledge and the distinctive advantages that come with universities in particular fields.

Subject-specific rankings are available to evaluate and compare universities across a range of academic subjects in international rankings including the QS World University Rankings, Times Higher Education World University Rankings, and Academic Ranking of World Universities (ARWU). These rankings take into account factors unique to each discipline, including as research productivity, faculty expertise, academic repute, and citations in specialised publications.

Students and researchers can assess institutions based on their capabilities in particular fields thanks to subjectspecific rankings in global rankings. This makes it possible to analyse university performance at a more detailed level, enabling decision-making regarding pursuing studies or research in particular disciplines.

The inclusion of subject-specific rankings in the global rankings expands the wealth of knowledge available to students and researchers and enables them to research institutions that stand out in their fields of study. It offers a wider view of the academic scene and encourages healthy rivalry among universities to be the best in particular academic fields.

In addition to the subject-specific rankings offered by NIRF, global rankings also include subject-specific rankings. These rankings act as useful instruments for comparative analysis, allowing students and researchers to evaluate institutions' accomplishments and subject-matter knowledge (40).

1.10. Ranking Outcomes

Understanding the techniques and criteria employed by each ranking system is necessary to compare the rankings produced by NIRF and the World University Rankings for similar institutions.

NIRF Rankings: The Ministry of Education, Government of India, launched the National Institutional Ranking Framework. Based on several factors, including teaching, learning, and resources; research and professional practise; graduation rates; outreach and inclusivity; and perception, it assesses higher education institutions in India.

The World University Rankings: Which are released by several groups including Times Higher Education (THE) and QS World University Rankings, rank universities all over the world based on various of groups including Times Higher Education (THE) and QS World University Rankings, rank universities all over the world based on a variety of metrics. These indicators frequently include things like research productivity, professor-to-student ratios, citations per faculty, international faculty and student ratios, employer reputation, and academic standing.

It's vital to remember that each ranking system has its own methodology, standards, and focus when comparing the rankings produced by NIRF and World University Rankings for similar institutions. These observations are made:

The differences between the World University Rankings and the National Institutional Ranking Framework (NIRF) are caused by several reasons. To begin, these ranking systems use unique methods and metrics. While the NIRF mostly focuses on Indian institutions, the World University Rankings include universities from across the world. Due to major differences in the evaluation criteria, this scope variation may cause ranking revisions.

The different criteria that various ranking systems emphasize are another factor. The NIRF emphasizes factors like outreach and diversity that are particularly pertinent to the Indian higher education system (41). On the other hand, worldwide rankings like Times Higher Education (THE) or QS frequently give priority to elements like global renown, research excellence, and international diversity. The rankings for colleges that are part of both systems may differ because of these discrepancies in the criteria.

The weighting of the data and its accuracy both affect ranking variations. Data accessibility and accuracy may vary between the NIRF and the World University Rankings. The accessibility and validity of the data that institutions supply for various ranking systems can have an impact on those institutions' rankings. Ranking inconsistencies can also be caused by differences in how different ranking systems weight various elements and indicators.

The regional versus global focus of the World University Rankings and the NIRF is another important consideration. The NIRF primarily assesses Indian institutions considering the Indian educational system, considering their unique advantages and disadvantages. The World University Rankings, in contrast, evaluate institutions' performance from a global perspective and compare them on a global level. As institutions are assessed using various benchmarks and criteria, these changes in focus might cause gaps in rankings.

In general, there may be variances when comparing the rankings produced by NIRF and World University Rankings for similar institutions because of changes in techniques, criteria, and regional or global settings. When analysing and contrasting the rankings, it's crucial to consider these elements as well as the distinct goals of each ranking system (42).

1.11. Analyze the similarities and differences in the rankings

1.11.1. Similarities in the rankings

The NIRF and the World University Rankings both have the same objective of assessing higher education institution quality. Although they might employ various methods or sources, both rankings take an institution's entire reputation into account. Both the NIRF and the World University Rankings frequently take into consideration elements like employer and academic reputation.

Impact and research production are important factors in both rankings. When assessing an institution's research performance, publications, citations, and other pertinent metrics are frequently considered. This reflects how highly the NIRF, and the World University Rankings rank institutions based on their research output.

Both rankings also consider indicators of teaching and learning, albeit the particular standards and weights assigned to each indicator may vary. The faculty-to-student ratio, student happiness, and graduation rates are a few examples of criteria that can be assessed in both the NIRF and the World University Rankings. These metrics offer perceptions on the standard of instruction and atmosphere for learning offered by the schools (43).

1.11.2. Differences in the rankings

The scope of the rankings is where the NIRF and the World University Rankings diverge most noticeably. The NIRF only considers Indian colleges, but the World University Rankings rate universities from throughout the globe. The institutions included in the rankings and the rankings' overall competitiveness vary because of the scope differences.

The World University Rankings and the NIRF have different weighting and criteria. While foreign rankings like THE and QS use a more global approach, the NIRF's standards are uniquely geared to the Indian higher education system. Due to the differing weights given to various criteria, rating outcomes for institutions that are identical may change.

The regional context also affects how the NIRF, and the World University Rankings compare. The NIRF considers elements like inclusion and outreach that are particularly important in the Indian setting. The World University Rankings, in contrast, might give international diversity and cooperation more weight. For institutions operating in various contexts, these regional variations may result in differences in rankings.

The NIRF and the World University Rankings may also use different data sources and information-gathering strategies. Institutions may also supply variable quantities of data for certain rankings, which may influence the rankings generated. The final ranks and differences between the two ranking systems may be impacted by the data's availability and correctness (44).

1.12. Strengths and Limitations

1.12.1. Strengths and Advantages of NIRF

The Indian higher education system's backdrop makes the NIRF highly relevant. It was created primarily to evaluate and rank educational institutions in India, considering the country's particular difficulties, needs, and peculiarities. The NIRF can offer insightful analyses, relevant comparisons, and knowledge that is unique to the Indian context and attributable to this contextual relevance.

The NIRF's thorough method of ranking universities is one of its advantages. It considers a variety of factors, such as teaching, learning, research, outreach, and perception. This thorough evaluation technique gives stakeholders a comprehensive understanding of an institution's performance, enabling them to recognise its advantages and disadvantages in numerous areas. This helps institutions to pinpoint their strong points and opportunities for development.

The NIRF also functions as a method for national benchmarking, enabling institutions to assess their performance against that of their counterparts across the nation. The Indian higher education system benefits from healthy competition and ongoing progress because to this benchmarking feature. Institutions can evaluate where they stand in relation to other institutions, take note of high-performing institutions, and work to improve.

Another important component of the NIRF is transparency. Transparency in the evaluation process is ensured by making the ranking criteria, parameters, and weights assigned to each parameter available to the public. Institutions are motivated to improve their performance in particular areas by this transparency, which helps them better understand how it is measured. Additionally, it encourages stakeholders to be trustworthy and accountable (45).

1.12.2. Strengths and Advantages of World University Rankings

The World University Rankings have a global audience and offer a platform for comparing and evaluating universities from all around the world. With the use of this global viewpoint, institutions, researchers, and students can evaluate where they stand in relation to other countries and the rest of the world. It enables a broader viewpoint and streamlines international comparisons. The World University Rankings provide major weight to an institution's reputation and standing. High rankings can help an institution gain recognition and stature internationally. Universities are frequently judged on the basis of their academic and professional reputations. The prestige and expansion potential of the school can be further increased by the attention of elite faculty, students, and researchers, funding possibilities, and collaborations that result from this improved reputation.

Research output is a key factor in the World University Rankings. Measures such as research publications, citations, and other related indicators are heavily weighted. This emphasis on research performance encourages universities to foster a thriving research culture, secure funding for research initiatives, and contribute to the advancement of scientific knowledge. Institutions that excel in research can gain a competitive edge in the rankings and attract top researchers and resources.

The need to recruit talent from around the world is further emphasised by the World University Rankings. Universities with a high reputation can attract staff and students from various countries and backgrounds. This rich diversity of expertise raises the institution's prestige internationally, improves the atmosphere for learning and research, and fosters cross-cultural relationships. Global talent enhances the academic community and adds to the institution's overall greatness (46).

1.13. Future Direction

The National Institutional Ranking Framework (NIRF) plays a crucial role in evaluating and ranking education institutions in India. Since its inception, NIRF has provided valuable insights into the quality and performance of Indian universities and colleges. However, as the world becomes increasingly interconnected, it is essential to explore the prospects of NIRF in comparison with global university ranking systems. In this article, we will examine the potential developments and challenges that lie ahead for the NIRF, considering live examples and trends in the field of higher education (47).

1.14. Expansion of Parameters

The NIRF may expand its parameters to align more closely with the global ranking methodologies. Currently, NIRF considers parameters such as teaching, research, graduation outcomes, and perception. In the future, it may incorporate additional parameters, such as international collaboration, faculty qualifications, industry engagement, and student diversity, to better reflect global benchmarks. For instance, the NIRF may include international collaboration as a parameter to assess the extent of research collaboration between Indian institutions and their global counterparts. This could involve measuring joint publications, projects, and participation in international conferences (48).

1.15. Enhanced Research Focus

To compete globally, the NIRF may emphasize research output and impact. Encouraging institutions to increase research funding, promote interdisciplinary research, and foster partnerships with industries and research

organizations can help enhance the research ecosystem. For example, the NIRF might consider metrics such as research publications in high-impact journals, research grants, patents filed, and technology transfer as indicators of research performance. This could incentivize institutions to focus on quality research in real-world applications (49).

1.16. International Recognition

The NIRF may explore ways to increase international recognition and visibility of Indian institutions. This could involve collaboration with international ranking agencies, participation in global academic networks, and benchmarking against top-ranked universities worldwide. The NIRF could partner with renowned global ranking agencies such as QS World University Rankings or Times Higher Education World University Rankings to exchange data and methodologies. This collaboration could help Indian institutions gain more international exposure and improve their rankings on global lists (50).

1.17. Emphasis on Student Experience and Employability

The NIRF may give more weight to parameters related to student experience, employability, and alumni success. This encourages institutions to focus on holistic education, career services, entrepreneurship support, and alumni engagement. The NIRF might include metrics such as student satisfaction surveys, internship and placement rates, alumni feedback, and entrepreneurial activities as indicators of the overall student experience and employability prospects (51).

1.18. Continuous Evaluation and Feedback

The NIRF may adopt a more dynamic and frequent evaluation process to ensure that the rankings accurately reflect the current state of institutions. This could involve regular data collection, evaluation cycles, and feedback mechanisms to drive continuous improvements. The NIRF could introduce a mid-term evaluation cycle, allowing institutions to monitor their progress and make necessary improvements in a shorter time frame. Additionally, it can incorporate feedback from stakeholders, including students, faculty, and industry experts, to enhance the ranking methodology.

It is important to note that these future directions for the NIRF are hypothetical and based on general trends. The actual evolution of NIRF may depend on the decisions made by responsible authorities, feedback from stakeholders, and the changing landscape of higher education globally (52).

1.19. Impact

The impact of rankings, such as the NIRF and World University Rankings, on higher education institutions is significant and multifaceted. These rankings have the power to influence policymaking, resource allocation, and university strategy. Institutions often strive to improve their rankings because higher rankings can lead to increased funding, prestige, and recognition.

Rankings can shape policy decisions by guiding government funding and investments in higher education. Institutions that perform well in rankings may receive greater financial support, whereas those with lower rankings

may face challenges in securing resources. Rankings also impact university strategies, as institutions may prioritize areas valued in ranking methodologies, such as research output or student satisfaction.

Perceptions and reputations are crucial in ranking games. Rankings can influence the public perception of institutions, affecting student enrolment, faculty recruitment, and collaboration opportunities. Institutions that consistently rank high may be seen as more reputable and attract top talent, while lower-ranked institutions may struggle to overcome the perception associated with their ranking.

Note that rankings have both positive and negative implications. While they can foster healthy competition and drive excellence in higher education, they can also lead to a narrow focus on specific indicators and potentially overlook other important aspects of education such as social impact or community engagement. Institutions should consider ranking as one of many factors when evaluating their overall mission and goals (53).

Conclusion

The assessment emphasises the National Institutional Ranking Framework (NIRF) and international university rankings, highlighting their unique objectives and target markets. NIRF is a national ranking system in India that only considers higher education institutions in India. It serves as a benchmark for colleges in India by taking factors like teaching, research, graduation outcomes, outreach, and perception into account. On the other side, internationalisation, reputation, and other characteristics are given more attention in global university rankings. They offer a global comparative examination of educational institutions, allowing for international comparisons and assisting institutions, academics, and students in making well-informed judgements. Global rankings provide a greater emphasis on research excellence, academic renown, and internationalisation than NIRF, which places an emphasis on diversity, outreach, and representation of underrepresented groups. However, both rankings to some extent acknowledge the value of diversity.

It is advisable to consider a variety of rankings and other considerations while making judgements. Examining subject-specific rankings and evaluating institution performance in particular fields are important for students and researchers. When evaluating colleges, it's crucial to consider a variety of aspects, including the calibre of the professors, available funding, the facilities, and individual preferences. People can obtain a thorough grasp of institutions and make judgements that are in line with their academic and career aspirations by considering a variety of rankings and considerations.

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