

Empowering Minds: The Evolution of Higher Education in Tamil Nadu towards Innovation and Excellence

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Abstract

This article focuses on proposed reforms to be implemented in Tamil Nadu to achieve excellence and development in the realm of higher education. The quality of higher education is intrinsically linked to a nation's economic and social development. In a rapidly developing nation such as India, with its vast population, reforming higher education to meet current needs has become increasingly significant. Pragmatic policy directives from the government are essential for the proper growth of higher education, given the complex situation in the country. In recent years, the higher education sector has expanded remarkably. After studying the dominant reforms made at the global level, India should adopt measures that are relevant to the Indian situation. It is important to note that globalization cannot be ignored, and global aspirations should be taken into account when implementing reform measures in higher education in Tamil Nadu. Only a deep understanding of the subjects can make learners and researchers innovative. The significance of research for development in every field should be ingrained in the psyche of planners, administrators, and rulers. For instance, during the COVID-19 pandemic, the entire world recognized the importance of research in vaccine development to prevent the spread of the dreaded disease. Interdisciplinary, multidisciplinary, and transdisciplinary research are the need of the hour. The curriculum should be tailored to meet the needs of the students and create employable graduates, inspiring the youth to become entrepreneurs. Skill-oriented education for employability should be the focus at every stage of curriculum development. Personalized learning and mentor-mentee learning should also be seriously implemented. Above all, universal human values-based learning should be adopted.

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Introduction

The state of Tamil Nadu, located in the southern part of India, has long been regarded as a hub of education and culture. With a rich history and a strong emphasis on learning, the state has continuously evolved its higher education landscape to foster innovation and excellence. This article delves into the

transformative journey of higher education in Tamil Nadu, highlighting the key factors that have contributed to its growth, the initiatives undertaken, and the outcomes achieved. Tamil Nadu, with its plethora of higher education institutions, is a leading state in the realm of higher education. The current efforts of the government have poised this field for further growth, as evidenced by the GER ratio of 51.4 percent. In addition to access, equity has been a major concern of the Tamil Nadu government, and their policies and proper implementation have resulted in an egalitarian system of higher education. The Higher Education Council, which operates in accordance with the structure suggested by RUSA, facilitates the necessary changes required from time to time. It is imperative that all higher educational institutions, educational leaders, and administrators remain up-to-date with changing technological trends and societal needs to offer quality and need-based education. The Tamil Nadu Chief Minister, M. K. Stalin, quoted an ancient Tamil poet, stating that "education is the real wealth that can't be stolen." He emphasized the significance of acquiring education and called upon the youth to study seriously, acquire knowledge and skills needed for a quality life, and lead a prosperous life. The Chief Minister highlighted the bright higher education scenario in Tamil Nadu and mentioned that his government has been taking measures to ensure that higher education is accessible to all classes of people by providing financial aid and improving infrastructure. The State Education policy aims to create a science-based rational society, and a committee comprising a High Court Judge and educational experts will frame the policy for effecting needed reforms in the curriculum. This article focuses on some reforms that could be adopted in Tamil Nadu to achieve excellence and development in the field of higher education.

Higher Education in India: A Historical Perspective

Tamil Nadu has a legacy of educational excellence dating back centuries. Ancient centers of learning like Kanchipuram and Madurai were known for their scholarly pursuits. However, it was during the British colonial period that modern education gained prominence in the state. The establishment of institutions like the University of Madras in 1857 laid the foundation for a formalized higher education system. Post-independence, Tamil Nadu continued to prioritize education, leading to the establishment of numerous universities, colleges, and research institutes. In ancient times, India boasted a distinguished system of higher education, with renowned institutions such as Takshila, Nalanda, and Ujjaini attracting students from Central Asia, China, and Southeast Asia. Following the decline of these institutions, the British colonial rulers introduced modern formal university education, which has since grown significantly in post-independence India due to the demand for access to higher education. This has led to the establishment of numerous teaching-centric Higher Education Institutions. However, it is important to note that the pursuit of excellence in higher education should be a thoughtful balance between local and global aspirations and practices, rather than solely based on international ranking, rating, and accreditation. While the higher education sector has expanded remarkably in recent years, it is crucial to ensure equity and access for all classes of people, particularly marginalized sections of society. In India, expansion should not only focus on creating world-class institutions but also on providing quality education to the masses and equal opportunities for all to pursue education. As India revisits its National Education Policy after more than three decades, it is imperative to analyze the role and relevance of higher education for a developing economy and society. Globalization and internationalization have been key factors in changing the landscape of higher education in India, and it is essential to adopt measures that are relevant to the Indian situation while taking into account global aspirations. Quality and excellence have become core parameters for institutions to compete and sustain, and stakeholders have demanded many reforms, including global quality.

Indian Higher Education: An Overview

The Indian higher education system holds a significant position in the global arena. Higher education institutions have shifted their focus from an instructor-centric approach to a pupil-centric approach, allowing for greater freedom in selecting main and similar subjects within and across disciplines. To maintain high standards in higher education in India, public policy must keep pace with the development of knowledge and technology. Emphasis should be placed on five pillars, namely education, excellence, employment, export, and entrepreneurship, with support from government, private, public, and international entities. Upgrading the current quality of higher education to meet global standards is imperative, and simplifying the process and system is necessary to attract more foreign students to Indian Higher Education Institutions. Encouraging investment in higher education will provide improved higher education in the country. The intrinsic connection between quality in higher education and a nation's economic and social development is undeniable. In India, reforming higher education to meet current needs is crucial, and pragmatic policy directions from the government are essential for proper growth. Higher education has become a critical factor for the nation's economic, political, social, and cultural growth and development. The higher education sector in India has seen unprecedented expansion, but expansion must be linked with ensuring equity and access, unlike in the developed world, where expansion is associated with creating world-class universities. Excellence in higher education is the most critical component for the survival, sustenance, and growth of the sector. Higher education has evolved into an industry and service, appealing to masses and respective governments and non-government entities. Accountability is central to higher education institutions, and the value for money is closely interlinked with the ideology that education should contribute to scientific,

technological, informational, social, and cultural advancements. Accreditation, ranking, and rating systems are the main instruments of measuring quality and standards among HEIs, with each having its own methodology, outcome, and orientation.

Transforming Higher Education in Tamil Nadu

Tamil Nadu is recognized as one of the leading states in the realm of higher education. The state boasts a significant number of higher education institutions (HEIs), with every district having an arts and science college, an engineering college, and a polytechnic. There are currently 59 universities (including central and deemed universities) and 2423 colleges in the state. Additionally, 135 autonomous colleges and 371 institutions have been accredited by the National Assessment and Accreditation Council (NAAC). Self-financing institutions also play a crucial role in the higher education sector. Tamil Nadu has already established a functional higher education council that largely aligns with the model developed by the Rashtriya Uchchatar Shiksha Abhiyan (RUSA) in terms of structure and function. The council is responsible for coordinating and determining standards in institutions of higher education in Tamil Nadu, and it oversees the policies and programs of universities and colleges. The government of Tamil Nadu has been ambitious and forward-looking in the development of its education policies, which are clearly outlined in the State's Vision 2023. The vision document declares the government's aspiration to make Tamil Nadu a knowledge and innovation hub, with institutions giving equal importance to humanities, sciences, engineering, and other disciplines. The focus has been on balanced quality improvement and value addition, with a bottom-up approach to ensure cohesive and integrated planning at the state level. The state plan aims to offer more access, ensure equity, and usher in excellence in higher education. It addresses the removal of inequities and implements governance and regulatory reforms, with a concentration on improving the quality of the teaching-learning process. The plan also aims to produce competitive and employable graduates, ameliorate intra-state differences, and achieve uniform progress across the state. Tamil Nadu state universities have been advised to align their program objectives with the sustainable development goals in curriculum, research, innovation, co-curricular, and extracurricular activities. The Tamil Nadu State Council for Higher Education facilitates quality enhancement through its advisory role, training programs, faculty development programs, and policy-making initiatives. The government of Tamil Nadu has planned for intensive structural reforms to create a knowledge society that is mandated to transform the state into a knowledge economy.

Innovation, Excellence and Development

The Government of Tamil Nadu has expressed a significant concern for equity in addition to access within the realm of higher education. The demographic makeup of college attendees reflects an egalitarian system that is prevalent throughout the State. In order to fulfill its promise of creating a truly egalitarian society, the State has developed an action plan for higher education that balances opportunity for all with a commitment to excellence. The State aims to bring individuals from less privileged classes into the global market and to create a unique educational hub that embodies rational thinking, social justice, gender parity, and human values. The State expects Tamil Nadu to become a center of academic excellence and a highly sought-after destination for students seeking quality education and research opportunities. While educational institutions have a strong foundation of knowledge, delivery systems require revamping. Need-based planning will enable the promotion and assurance of excellence in higher education. The five-year perspective plan aims to enhance innovative thinking, research motivation, employability, entrepreneurial capabilities, and availability of quality faculty, making Tamil Nadu a locally responsible and globally relevant education hub. The Government of Tamil Nadu has recognized, supported, and patronized the research potential of State universities, and some colleges have been identified as ideal for pursuing path-breaking research. Critical reforms have transformed higher education in terms of access, practices, and governance. Policy reforms and institutional arrangements have aided in integrating quality assurance and enhancement into the process. Internationalization and globalization of higher education have been implemented to harness competence, cooperation, collaboration, and creativity in research, teaching, and service amongst HEIs. Global and national ranking, rating, and accreditation systems have a substantial impact on decision-making for institutions and stakeholders in higher education. Quality evaluations emphasize meeting objectives, documentation, and using institutional quality mechanisms to maintain standards. The meaning of excellence in higher education has been a topic of debate. The Government aims to make higher education institutions hubs of innovation, excellence, and development, providing quality education on par with globally reputed institutions to students from rural and marginalized backgrounds. The aim of higher education is to identify, recognize, and improve the talent of youth to enable them to face emerging challenges.

Dravidian Ideology

Of the 22 universities in Tamil Nadu that are run by the state, only two were established prior to Independence, and only one was established between 1947 and 1967. The remaining 19 universities were established after 1967 by the Dravidian government, which has left a lasting legacy on Tamil Nadu. The state has taken progressive measures to address the concerns of the girl child and bridge the gender gap in society, exemplified by the groundbreaking Moovalur Ramamirtham Ammaiyar Higher Education Assurance Scheme. Tamil Nadu is a leader in social empowerment and social justice, as evidenced by the welfare schemes implemented in higher education that promote the holistic development of students from marginalized sections of society. The education department has taken proactive measures to revamp the curriculum of Engineering, Polytechnic, Arts, and Science courses in consultation with corporate and industry partners to meet the latest technological advancements and industrial requirements. The department also plans to enhance the syllabus for upskilling to meet the demands of the job market, incorporate topics to fulfill industrial requirements, and create better prospects for employment. The department is committed to enhancing academic standards on par with international levels. Before discussing the necessary reforms in the higher education sector, it is pertinent to review the status of higher education in Tamil Nadu. The state has the highest Gross Enrolment Ratio (GER) of 51.4 percent in the country, with 59 universities and 2423 colleges catering to the needs of aspiring students from all classes. The access and equity provided to learners in the state is indicative of the egalitarian system of higher education prevalent here. Innovative scholarship schemes introduced by the state, in addition to the implementation of Government of India schemes, have given a boost to enrolment in higher education institutions. The state has also implemented initiatives such as fee reimbursement to first-generation students, free bus passes, and free textbooks to deserving students, which have ensured good enrolment of students in HEIs. The monthly stipend scheme for all women students pursuing higher education is a step towards creating gender equity and is the best of its kind in India.

The Goal-Driven Approach

The goal-oriented approach has established Tamil Nadu as a prominent player in the national education landscape, with a Gross Enrolment Ratio (GER) of 51.4, which is nearly double the national average of 27.1. This achievement is highlighted in the All-India Survey of Higher Education (AISHE) 2021 report, which showcases Tamil Nadu's exceptional performance in various parameters such as GER, gender parity index, category-wise enrolment, women vs men enrolment, number of higher education institutions, teacher-student ratio, enrolment in research, and others. Tamil Nadu has consistently excelled in the National Institutional Ranking Framework (NIRF), with 19 institutions in the overall category, 19 institutions in the university category, and Anna University emerging as the top-ranked state university in Tamil Nadu. Additionally, 33 institutions in the Arts and Science category and 36 technical institutions are ranked within the top 100 and top 200 ranks, respectively. The Tamil Nadu Council for Higher Education (TANSCH) plays a pivotal role in assisting the government in formulating policies and implementing reforms to enhance the standard of higher education in the state. The government's policy document clearly outlines its objective, stating that "the state envisions an ideal development that is evident in its social fabric – the strands of rational thinking, social justice, gender parity, human values, all together to make Tamil Nadu a unique educational hub."

Technical Education

Technical education plays a pivotal role in the economic development of the state. The dynamic interface between institutions, industry, and society ensures that the state is equipped with skilled manpower and efficient technocrats. In response to the requirements of industry and its modernization, technical education has enabled stakeholders to possess technical as well as entrepreneurial skills. The government is designing innovative plans to make the youth of the state self-reliant and take up innovative projects that address real-life social issues of the state. Engineering colleges were established with the aim of providing quality higher education on par with international standards in the technological front to produce a dynamic community of graduates and scholars. The government recognizes the need for enhancing the skills of the students to match with the industrial requirements and create better job opportunities. To this end, need-based add-on courses are offered to the final year engineering students. Furthermore, to enhance employability skills and working knowledge, skill-based courses are being conducted from the year 2021-22 in collaboration with Tamil Nadu Skill Development Corporation. In order to formulate policies, laws, regulations, and provide various programs based on the needs of the society and for achieving the goals of the government in the field of higher education in Tamil Nadu, a Learning Management System integrated with an Enterprise Resource Planning Software (LMS & ERP) shall be established in all higher educational institutions.

Action Plan

The provision of quality higher education is of paramount importance and serves as a crucial factor in bringing about social and economic changes in the lives of the underprivileged and marginalized segments of society. The government is committed to safeguarding the interests of the economically and socially disadvantaged strata of society by facilitating easy access to quality higher education through government and government-aided institutions in a comprehensive manner. The government is also implementing motivational initiatives and beneficial schemes to encourage and attract more women to pursue higher education, thereby enabling them to achieve greater heights in society and attain economic independence. The establishment of new colleges for women provides a platform to reduce the number of dropouts among female students and helps to realize the vision of women empowerment. It is imperative that all faculty members are provided with opportunities to update their knowledge in their respective subjects and encouraged to stay abreast of modern developments and research findings at the global level. Attendance at faculty improvement programs, training programs, and workshops should be made mandatory for all teaching staff at least once every two years throughout their career, spanning a period of 30 years. Participation in 15 such programs would undoubtedly enhance their ability to teach with confidence and expertise, ultimately contributing to the teaching-learning process. This would require significant efforts on the part of planners who are committed to introducing reforms in the field of higher education. The concept of quality and excellence can be utilized as a competitive tool, which could result in a culture of consumerism. A well-trained faculty, in turn, would serve as a great source of inspiration to students, who should be trained to master concepts through the inspiring teaching of well-trained faculty. Without a deep and clear comprehension of concepts, pursuing higher studies would be futile. Only a profound understanding of the subjects would enable learners to become innovative researchers. The significance of research for development in every field should be ingrained in the psyche of planners, administrators, and rulers. For instance, during the COVID-19 pandemic, the entire world recognized the importance of research in the field of vaccine development to prevent the spread of the dreaded disease. Interdisciplinary, multidisciplinary, and transdisciplinary research are the need of the hour. Therefore, more funds should be allocated for research, as is the case in Japan and South Korea.

Self-Sustainability

In Tamil Nadu, institutions of higher education must acquire innovative technologies to enhance the effectiveness of their teaching and learning processes. These technologies should be utilized for the development of resource planning systems, simulation laboratories, and e-learning platforms. Common e-learning platforms found in higher education institutions in Tamil Nadu include smart boards and ICT, which may require customization to meet the specific needs of end users. However, some institutions have opted to develop their own e-learning platforms to better serve their students. The rapid development of higher education institutions in Tamil Nadu can be attributed to globalization and advancements in science and technology. To measure the success of higher education, it is important to consider factors such as skill development, productivity, and the optimal utilization of human resources. Higher education must recognize its role in promoting economic development and encourage innovation to achieve this goal. It is also crucial to align the supply and demand for employability skills in the economy. To achieve growth and development in industry, teaching and learning practices in higher education institutions should prioritize practice-oriented education. As India is poised to have the world's largest self-sustainability workforce, it is imperative to recognize the importance of technology-oriented education. Higher education policies and strategies should focus on empowering the youth for self-sustainability. The government has announced the establishment of a Knowledge City with the aim of providing quality education and attracting international talent. This initiative primarily focuses on the development of a knowledge-based economy with world-class infrastructure and market-oriented courses.

Toning up Mental Well-Being

The proliferation of mass media and social media platforms, including WhatsApp, Facebook, YouTube, Twitter, and Instagram, has resulted in an unprecedented invasion of screens. Coupled with the impact of the COVID-19 pandemic and the subsequent closure of educational institutions, this has had a detrimental effect on the mental and emotional health of young people pursuing higher education, as noted by Radha R., Mahalakshmi K., Sathish Kumar V., and Saravanakumar A.R. in 2020. Adolescent boys and girls are particularly vulnerable, and this is evident in households across the board. Emotional disturbances such as insecurity, anxiety, depression, and suicidal tendencies are common among young people who are addicted to unhealthy habits. Mental disturbance can also lead to a decline in attention span and poor learning outcomes. Shockingly, a recent UNICEF survey revealed that one in seven young people aged between 15 and 24 exhibit poor mental health. The increase in mental health problems among young people is a serious concern, and urgent steps must be taken to provide mental health care services to foster emotional well-being among students. Elaborate plans must be devised to provide counseling to students in all higher educational institutions, and counseling centers should be established on every campus. Educators should receive proper training in psychology to enable them to provide effective counseling services. Trained counselors should be appointed to man these

centers. Awareness programs should be conducted to reinforce the importance of avoiding bad habits and to encourage young people to come out of them or avoid them altogether. Youth-driven activities should be given a boost, and students should be encouraged to undertake team work and collaborative projects. This requires careful planning and pragmatic execution, with the advice and involvement of psychologists and experts.

Key Factors Driving Transformation

Several factors have played a pivotal role in transforming higher education in Tamil Nadu:

1. **Government Support:** The state government's commitment to education has been a driving force. It has allocated significant budgets to the education sector, enabling the establishment of new institutions, the enhancement of existing ones, and the introduction of innovative programs.
2. **Quality Faculty:** Tamil Nadu's universities have attracted top-tier faculty members who contribute to both research and teaching. Their expertise has significantly raised the bar for academic standards and research output.
3. **Research and Innovation:** The emphasis on research has led to the creation of research centers and collaborations with industries. This synergy has resulted in groundbreaking research, patents, and technological advancements.
4. **Autonomy and Flexibility:** Many institutions have been granted academic autonomy, allowing them to design and modify courses to align with changing industry needs and global trends.
5. **Skill Development:** Higher education in Tamil Nadu is not solely focused on theoretical knowledge. Skill development programs have been integrated into the curriculum to enhance students' practical abilities and employability.
6. **Infrastructure Development:** Modern infrastructure, including state-of-the-art laboratories, libraries, and digital resources, has provided students and faculty with the tools necessary for advanced learning and research.

Initiatives Undertaken

Tamil Nadu's higher education transformation has been marked by several noteworthy initiatives:

1. **Choice Based Credit System (CBCS)** The implementation of CBCS allows students to choose interdisciplinary courses, giving them a broader skill set and a more holistic education.
2. **Entrepreneurship Promotion** Many institutions have established entrepreneurship cells to nurture innovative ideas and guide students in starting their ventures.
3. **Industry Partnerships** Collaborations with industries have facilitated internships, practical training, and research projects, bridging the gap between academia and real-world applications.
4. **Digital Learning** The state has embraced digital learning platforms, providing access to online courses and resources, particularly advantageous during the COVID-19 pandemic.
5. **Innovation Hubs:** Innovation and research hubs have been set up to encourage collaborative projects and multidisciplinary research.

Outcomes and Future Outlook

The transformation of higher education in Tamil Nadu has yielded impressive outcomes. The state's institutions have gained recognition nationally and internationally for their research contributions. Graduates are well-prepared to enter the workforce, and many have become entrepreneurs, contributing to economic growth.

Looking ahead, Tamil Nadu's commitment to innovation and excellence remains steadfast. The integration of emerging technologies like artificial intelligence, biotechnology, and sustainable energy into the curriculum will prepare students for the challenges of the future. Continued industry collaboration, emphasis on research, and nurturing of creative thinking will further elevate the state's higher education sector.

Conclusion

Tamil Nadu's journey of transforming higher education from traditional to innovative and excellent has been marked by dedication, strategic planning, and

unwavering support from various stakeholders. With a strong foundation, a vibrant academic community, and a focus on holistic development, the state is poised to continue its legacy of educational excellence while adapting to the demands of the ever-changing global landscape. The Government of Tamil Nadu, as an egalitarian entity, envisions a higher education system that is centered around the people and strategically endeavors to ensure that all aspects of higher education reach every segment of society. In order to achieve this goal, resources are allocated to enhance enrolment, teaching and learning, scientific research, training, and technological advancements. The implementation mechanism ensures efficient delivery with specific outcomes. The wide range of higher education institutions in Tamil Nadu has propelled the state to a significant position in the country, actively seeking new avenues in research, innovation, development, skill-based training, and technology through its multi-pronged commitment to equity, accessibility, affordability, and employability. The state's schemes are focused on fulfilling the aspirations of the youth, removing socio-economic impediments, and maintaining standards as per global benchmarks. The state produces a highly qualified and skilled workforce to fulfill the requirements of the nation and the world at large. It has also opened doors for the youth to become successful entrepreneurs. The introduction of a need-based curriculum should be considered to create employable graduates and inspire the youth to become entrepreneurs. Skill-oriented education for employability should be the focus at every stage of curriculum development. Strengthening of choice-based education at the higher level will help learners pursue education with real interest and involvement, encouraging them to hone their skills. Personalized learning and mentor-mentee systems should also be seriously implemented. Above all, universal human values-based learning should be adopted.

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