

1. ESTABLISHMENT OF TECHNICAL UNIVERSITY IN MAHARASHTRA: NEED AND PROPOSED ROLE

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Abstract

Technical education system has undergone major changes globally over the past decade. Technological advancements in information and communication technology have changed the way information is presented. The manner in which students learn has also evolved. Educational leaders along with the relevant infrastructure must also evolve to meet the needs of all the stakeholders' viz. students, faculty, industry, society, etc.

Considering the drawbacks of conventional universities, some of the proactive State Governments in India like Madhya Pradesh, Karnataka, Orrisa, Punjab, Rajasthan, Delhi, Haryana, Andhra Pradesh, Uttar Pradesh, etc have already established the Technical University in the respective states as a proactive approach towards focused improvement of the effectiveness of technical education. Similarly, Government of Maharashtra is also planning to establish a Technical University in the state in order to offer world class infrastructure for enhanced quality of technical education. In this paper, an attempt has been made to analyze the need of establishment of Technical University, it's proposed role, it's advantages and limitations.

Keywords: *Technical Education, Technical University, Quality, Research & Development, Industry-Institute Interaction, etc.*

Introduction

The economic progress of a country is strongly linked with the quality of technical education it offers. Technical education is essential to improve the technical manpower of a country. It is therefore, necessary for our technical education to undertake periodic review of the curriculum and subject content of the technical programmes to ensure that they are up to date and not obsolete and effectively fulfill the technological requirements of the country.

As mentioned in the report of Prof Yashpal Committee on 'Renovation and Rejuvenation of Higher education', A University is a place where new ideas germinate, strike roots and grow tall and sturdy. It is a unique space, which covers the entire universe of knowledge. It is a place where creative minds converge, interact with each other and construct visions of new realities. Established notions of truth are challenged in the pursuit of knowledge. To be able to do all this, the University must have appropriate will, resources, time, strategy, etc.

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The conventional Universities are diverse in their design and organization, reflecting the unique historical and socio-cultural settings in which they have grown. Presently, engineering colleges, pharmacy colleges, management colleges, architecture colleges, HMCT colleges in Maharashtra are affiliated with conventional universities. At present more than 500 colleges (consisting of diverse colleges like arts, commerce, science, engineering, management, pharmacy etc) are affiliated to the universities like University of Mumbai, University of Pune, Rashtra Sant Tukdoji Maharaj University Nagpur. However, as per the recommendations of Prof Yashpal Committee on 'Renovation and Rejuvenation of Higher education', not more than 200 colleges should be affiliated to a University for ensuring effective working.

Need for establishment of Technical University

In the existing form, the conventional universities are overburdened with the academic and administrative activities of colleges offering diverse courses like arts, commerce, science, engineering, management, pharmacy etc. Therefore, these Universities are not able to devote adequate time, resources, etc for making focussed efforts for improvement in quality of technical education.

If Maharashtra wants to compete at global level in providing quality technical manpower, it is mandatory for us to develop and implement focussed strategy for improvement of quality of technical education. Considering the entry of foreign universities in India, it is the need of hour to make reformative changes in the technical education system. Looking to the mushroom growth of technical education institutes offering engineering, pharmacy, management, architecture, HMCT courses in the state of Maharashtra, it is imperative to establish a Technical University so as:

- To bring various colleges affiliated earlier to

different Universities, with different syllabi, different procedures and different traditions under single umbrella.

- To reduce the gap of quality of technical manpower graduating from the institutes located in urban regions and rural regions of Maharashtra.
- To ensure optimum utilization of resources like infrastructure, faculty, library, etc
- To inculcate the organization culture of research & development.
- To inculcate the culture of internal revenue generation through R & D, Consultancy, CEPs, vendor to industry, etc
- To facilitate and control the technical colleges differently than other colleges considering the difference in the role technical education has to play in the development of country.
- To promote planned and sustainable development of technical education consistent with state and national policies.
- To strengthen the technical education system to face the global challenges.
- To facilitate training and development of faculty, students, supporting staff, etc
- To facilitate the collaborations with reputed industry, organizations, etc in India and abroad.

Technical University's Proposed Role in Maharashtra

The recent survey conducted by Outlook Magazine indicates that only few professional institutes located in Maharashtra found a place in the list of Top 50 colleges in India. Considering the drawbacks of conventional universities, some of the proactive State Governments in India like Madhya Pradesh, Karnataka, Orissa, Punjab, Rajasthan, Delhi, Haryana, Andhra Pradesh, Uttar Pradesh, etc

have already established the Technical University in the respective states as a proactive approach towards focused improvement of the effectiveness of technical education. Similarly Government of Maharashtra is also planning to establish a Technical University in the state in order to offer world class infrastructure for enhanced quality of technical education. The establishment of technical university at state level may help to improve the technical education system in following ways:

- Uniformity among procedures, course contents (*permitting regional variations based on requirements*), quality of education, etc.
- Practical orientation of technical education system through in plant training, finishing school, projects based on live problems in society/industry.
- Emphasis on Entrepreneurship, Research & Development and Incubation of firms in institutes.
- Emphasis on starting joint programmes by institutes and industry.
- Emphasis on interdisciplinary approach to research.
- Enhanced interaction with Industry (*coordinated centrally by the University*) for each affiliated institute even in remote areas.
- Start Nodal Training Institute for training the faculty and staff on similar lines of staff training colleges elsewhere.
- Linking technical education with other streams of education so as to have synergy.
- Facilitating networks of professional colleges, industry, research organizations, etc
- Facilitate optimum utilization of resources in emerging technologies like Robotics, Rapid Prototyping, CAD/CAM/CIM, Digital Library/ Delnet, Virtual Class rooms, Softwares,

Training & Placement activities, Organizing Seminars and Conferences, Online Examinations, Finishing Schools, etc

Advantages of Technical University

The establishment of technical university at state level may help to improve the technical education system in following ways:

- Removes the diversity in quality of technical education offered at various urban/rural regions within the state.
- Relieves the conventional universities from the task of managing growing technical education, and thus gives an opportunity to conventional university to focus on their core objectives.
- Available human resources within the state can be optimally utilized.
 - PG and Research guides within particular region will be made available to entire state, this enhances the Ph.D /PG output of the state which is the strong need of the time.
 - Joint research programs, resource sharing between the institutes takes place.
 - Repetition of the routine works at universities such as syllabi setting after every 4-5 years, paper settings, etc gets avoided.
- The academic calendar gets streamlined across the state. The present scene of delayed admissions, delayed results can be removed.
- Innovative academic practices such as credit sharing, credit transfer can be adopted to enrich the education offered.

Limitations of Technical University

The establishment of Technical University in Maharashtra may be subjected to following limitations:

- It may be against the philosophy of granting autonomy to colleges.
- For the success of Technical University in the state, it needs very efficient, innovative, visionary leadership to prosper. If the leadership is not appropriate, then it can take entire technical education within the State into wrong direction.
- Acceleration of large mass in education is always at small pace and degradation of large mass is always at higher pace. This law needs to be reversed which is possible with visionary administration at university. Other wise common university will lead to disaster.

Conclusion

The establishment of Technical University in Maharashtra is a need of hour considering the external factors affecting the quality of technical education. The organization structure of the proposed Technical University must ensure that the qualified, skilled, experienced faculty will get attracted and retained in technical education system. The recruitment of persons for key positions should be based only on merit. If this proposed Technical University gets visionary and capable leadership, it may help to develop world class technical education system in the state.

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