

# SELF FINANCED TECHNICAL UNIVERSITY

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It was UGC which strongly advocated the establishment of professional universities in seventies, but somehow this suggestion did not get the attention it deserved. Even today, we have only a few Technological Universities whereas quite a few professional Universities have been set up in other professions like Medicine, Agriculture, Ayurved, Veterinary etc. The experience of Agricultural universities has been that they have definitely contributed to the overall agricultural production and research in the country. Moreover these Universities have been put under the Agricultural Ministries both at the state and the Center, which ensures a direct interaction between and involvement in the Agricultural Institutes and the Agricultural Practice in the Field. Against this, we find that there has been reluctance of the Vice-Chancellors to allow the Engineering and Technical / Technological faculties of their Universities to opt out for a separate technical University; They feel as if they are being robbed off, of a finest feather of their cap. This attitude on the part of Vice-Chancellors has to change.

What is the Scenario today in the Universities vis a vis the Engineering faculty? They function very well upto Boards of Studies and Faculty; beyond that in the Academic council and the Executive Council, their separate identity is completely lost; They are clubbed together with all other non-professional faculties and the problems of Engineering Education which need a separate consideration and *treatment* do not get the attention nor the consideration they deserve. Our admissions

are not so simple as that of the liberal faculties; ours is a rigorous course and needs rigorous professional work culture, which cannot be cultivated in the present situation where Engineering faculty is bracketed with other faculties. As a result our exam schedule is totally out of gear; our admissions start late since they depend on the declaration of 12<sup>th</sup> standard / HSC results; the process of admission is a long drawn one and not even half of the first term is available for actual teaching. The students have to appear for the first Semester Exam within 5 to 6 weeks of their admission. Almost all winter and summer vacations are occupied by the practical and theory Exams and the student gets practically no vacations, particularly because of the time to time liberalisation of ATKT Rules. Exam results are delayed and we expect the students to join the second term without declaring the results of 1st term Exam. This has been going on for the last so many years and there is no end in sight, nor any special efforts being made to rectify the situation. Also there has been no net-working to introduce and pursue quality improvement activities like PADS, I.I.I., In-plant training, Teacher Training, Community Services, continuing Education programmes, consultation and R.D. activities. There is no professional approach in these collages even for budgeting and accounting. The Annual local visiting committees / affiliation Committees of the University have become in a literal sense, just Visiting Committees and a total farce. There is no regular procedure for monitoring the development of the Colleges. All these matters can be

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rectified by the establishment of a Technical University in every state. If the number of Engineering Colleges is large, there could be more than one such Universities. We have today (10 Govt. / Govt aided and 72 SFECs) 82 Engg. Colleges in Maharashtra; The figures for other Southern States being Karnataka (16+35=)51, (8+26=) 34 in Tamilnadu and (5+16=) 21 in Andhra Pradesh. Thus in these four states alone there are 188 Engg. Colleges. This situation calls for an immediate establishment of such Universities. There should be at least one affiliating Technical University in each states, if not more. There are many such Professional Universities in the Western Countries and these professional Universities have made distinctive contribution & to the elevation of the standards of, not only the Engg. Education system but have made the system more relevant to the needs of the society and the industry. We have been late and hence there should be no further delay, at least now.

What is the R & D situation in the universities and the constituent affiliated engineering colleges ? No research activity in engineering sciences, neither applied nor research; whatever research is there, it is mainly in I.I.T.s, I.I.S. Bangalore, Roorkee University and may be a little in a few Regional Engineering Colleges. That is why our research activity on the national plane is neither extensive nor impressive. Our Engineering Colleges are bereft of any academic or research atmosphere. Our industrial growth and development is greatly handicapped on this account. With the establishment of Technical University this situation will change radically. This Technical University should be planned not merely as affiliating, but as a research centre, a coordinator in Engineering Research at the state and regional level and form an important link in the horizontal and vertical research net-work, such network being totally absent today.

The Post graduate Departments which exist only in a few well established engineering colleges of long standing mostly come under the category " we also run P.G. Courses ". They hardly exhibit the characteristics of a vibrant and dynamic P.G. Centre. A technical university will definitely facilitate development of such p.g. centres and generate a vibrant, and dynamic atmosphere therein.

The important aspects of engineering education-curriculum design and development, watching the technological changes and new materials and methods of production, technological parks to attract the young entrepreuneuring engineers, continuing education programs for industrial personnel, extension services for the community, all these activities can be initiated in an effective and efficient way only by such a technological university, at each and every engineering college affiliated to it ; this university can coordinate and streamline such efforts at state level and the results thereof will be for any one to see, in a short time.

Yet there are other important reasons to justify a separate Technological University.

- 1) Lack of Industry-institution Interaction is always mentioned as a main drawback in Engg Education System rendering it not much relevant to the needs of Industry.
- 2) Industry as a direct beneficiary of the Technical Manpower utilises it but does not contribute anything for the growth and development of the systems, particularly financially,
- 3) Industry always complains about the irrelevance of the present Engg Curriculum and syllabi.
- 4) Industry expects institutions to find solutions to its problems, needs consultation services on large scale, but institutions do not offer this, the Industries Complain.

This situation continues for years because Industry is too busy in coping with technology changes, new and innovative methods of production, its own profit and loss account. On the other hand, the institutions are too much occupied with their routine work and feel shy to approach the industry and actually do not assess their strength and dismally fail to project it. That is why, there is practically no liaison between Industry and Institution and hence consequent lack of collaboration, which has adversely affected our industrial development in the national and global markets. All this situation can be rectified if the beneficiaries of the technical manpower produced by the Engineering Education System-The Industry-The PSU's i.e. the M.S.E.B., Environmental Boards, The Govts (PWD, Irrigation Depts)- come forward to establish a technological University on self-financed basis and also fund it, as state Governments have always been suffering from lack of funds for higher education and hence state Governments have been reluctant to establish new Universities, though the existing ones have become bulky and un-manageable.

Once the University has been established, it can generate its own funds. The funds could come from (a) State and Central Govts. (b) Beneficiary Organisations of the Educational Systems, Industries, P.U.S's, M.S.E.B., Environmental Boards etc. (c) Donations, (d) Fees from students, (e) Affiliation fees (f) Funds generated from Testing and consultation services, (g) Industry Institution Interaction, (h) Research and Innovation, (i) Continuing Educational programmes and other sources. Our experience in the recent past has been that funds will not be problem for a good cause. The problem is of will and determination to serve a worthy cause. If SFEIs have been established by private enterprises when Governments could not provide funds, similarly a self financed technical University could surely come up, which is so much needed to streamline co

co-ordinate guide and develop these large number of SFEIs whose crying need is an organised leadership that can make them quality and standard conscious and this leadership can be provided only by a technical university.

### 1) Conclusion :-

An Engineering College, today, is one of the many affiliated colleges of a university. It has no separate identity as such except that students throng its portals, because entry into a professional course ensures a job, at least a livelihood. This situation has to change. Every engineering college, where only the meritorious students get admission, has to be a center of excellence. An institution with regular academic schedule, qualified and experienced faculty sympathetic and devoted to the cause of students; An institution which realises the importance of the human resource and is determined to develop it; an institution which is inspired by the highest ideals of education and never forgets for a moment that, the purpose of engineering is to harness the natural resources and human talent for the betterment of the man and the society and education is to lead every person to be an enlightened citizen of this great country and this world at large, who knows his rights but never forgets and is always ready and willing to fulfill his obligations and duties towards his neighbours, citizens and the countrymen and the human brotherhood. The Engineering Colleges should aim at becoming such centres of excellence. Left to themselves as they are today, this is not possible; may be a technical university at the apex of these colleges can instil such a spirit and develop them on the lines mentioned above.

Only one note of warning - such a university needs to be delinked from politics and politicians. It should be dominated by academicians; only then the dream of Technical University and affiliated

centers of Excellence can be realised. Ideals are difficult to reach but their pursuit with sincerity of purpose and determined efforts is essential if our life is to be worthy and meaningful, since such pursuits will definitely take us a long way in realising our dreams. For this it is essential that (i) The Technical University affiliating all the

Engineering Colleges and funded by the beneficiaries of the Engineering Education System be established. (ii) Directorates of Technical Education and the Technical Universities be attached to the Industry Ministry. (iii) And the Technical University should be at least delinked from politics if it cannot be totally insulated.



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