

PERSPECTIVE PLAN FOR STARTING NEW POLYTECHNICS IN THE STATE

Introduction

Technical Education is instrumental in making a remarkable contribution to economic growth of the Developing Countries by ways of suitable manpower production according to the needs of the Industry, society and the Global World as a whole. To produce contemporary skilled manpower & technocrats suited to the present era of science and technology is the need of the hour. Polytechnic education in our country constitutes an important segment of Technical Education and contributes significantly to the economic development. Aimed at creating a vast amount of technical manpower, the polytechnics have played a pivotal role in providing skilled manpower at various levels for organized, unorganized and service sectors. Polytechnic education has therefore responded to the challenges of industrialization for self-reliance, as well as meeting international demands.

The aim of the polytechnic education is to create a pool of skill based manpower to support shop-floor and field operations as a middle level link between technicians and engineers. The pass-outs of Diploma level institutions in Engineering & Technology play an important role in managing shop-floor operations. It is further an established fact that small & medium scale industries prefer to employ diploma holders because of their special skills in interpreting engineering, drawings, estimating, costing, billing, supervision, measurement, testing, repair & maintenance etc.

The technical education scenario in Kerala, in the diploma level is by and large controlled by the government with 45 colleges in the government sector and 6 in the government aided sector. The sanctioning of self-financing colleges in the private sector started in 1994. At present there are 21 self-financing polytechnic colleges and 8 polytechnic colleges under IHRD. With many self financing engineering colleges opting for progressive closure the applications to start polytechnic colleges in the private sector has shown increase since 2017.

Background

In June 2012, a significant verdict aimed at improving the standard of engineering education in the State, by a Division Bench of the Kerala High Court directed the State government and the All India Council for Technical Education (AICTE) to take steps to de-recognize and close down the colleges which have been continuously performing badly for the last three years. AICTE has announced to close down colleges with less than 30 percent admissions and has already recommended the closure of 800 colleges in the Country which did not have a minimum of 30 percent admissions for five consecutive years and lacked proper infrastructure. In 2017, 122 private engineering colleges in the country have opted for progressive closure. It was reported that over 8 lakh Engineering seats had remained vacant in 2014-15. Studies have reported that over 80 percent of engineering graduates in the country are

not deemed as employable. It is also reported that the majority of engineering graduates are seeking employment that are not related to engineering and having only lower prospects, the blame has to be put on the mushrooming of private engineering colleges.

The state government is concerned about the degradation happened in the engineering under graduate sector over the last two decades and desires to take steps to avert this catastrophe in the diploma level education in the state. Accordingly, vide, GO(Ms)#178/2016/H.Edn. dated 22.08.2016, the state government had decided not to sanction new colleges in the self –financing sector and communicated to AICTE a request to seek the remarks/views of the state government before according approval to new technical institutions in future, in the state in self-financing sector.

On the social context, polytechnic education is sought by the lower income group, as a sure shot way of employability. The introduction of institutions in the self-finance sector in the past had made the polytechnic education expensive and pushed it beyond the reach of the lower and middle income group as the annual fee is more than that of an undergraduate engineering course.

Present Institutional Share

Engineering education in the State in the diploma level was essentially public funded and provided, right through from the beginning till 1994. Most of them were government owned although there existed a small number of government aided polytechnic colleges which were also, by and large, subjected to the same enrolment policy as far as student admissions were concerned. There are 45 government and 6 government-aided polytechnic colleges under the control of the Directorate of Technical Education (DTE) as on March 2018. Apart from the 8 under IHRD, 21 self- financing private colleges are also functioning in the state. Two of the government-aided Polytechnic Colleges also offer self-finance diploma courses. Additionally, one public sector undertaking is offering 3 year diploma course through their training division. It shows that 75% of Polytechnic Colleges in the state are either in the public sector or are public funded institutions

Status of Polytechnic Colleges in Kerala

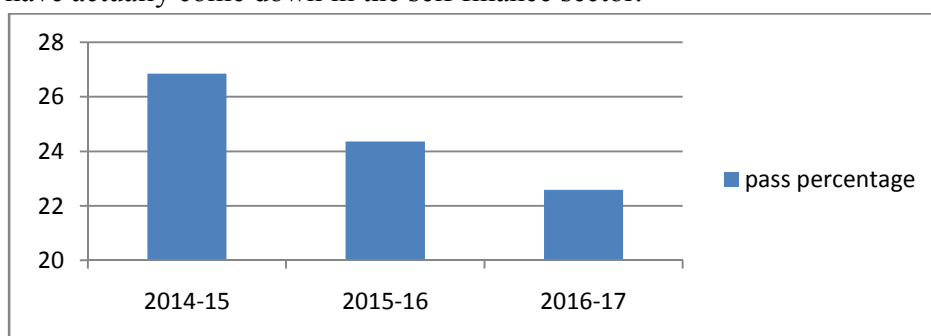
Category	Total Number
Govt.	45
Govt. Aided	6
Under IHRD	8
Private Self Financing Sector	21
Total	80



In Kerala 822 Polytechnic / diploma seats are lying vacant in 2017-18, as is evident from data obtained from Directorate of Technical Education. Three more polytechnic colleges in the government sector are in the pipe line and feasibility study is in progress in a number of constituencies.

Enrolment-Outturn scenario

Outturn rate shows the pass percentage of diploma students enrolled in a year in various branches. Students enrolling for engineering diploma courses in the State show that outturn rates have actually come down in the self finance sector.



Institute - wise result analysis based on data available as on November 2017, places just one self financing college in the top 30 among all polytechnic colleges in the state (source: www.tekerala.org). It is very evident that the expansion in capacity of undergraduate education has not led to improvement in output. This state of affairs have precipitated a serious public debate in the State, questioning the policy of liberalization which it appears does not seem to have improved the quality to the desired extent, while at the same time appeared to have a deleterious effect on the quality of engineers produced within the State. A repetition of the bleak scenario in the under graduate engineering courses is not desired in the diploma level education.

While the vacant seat percentage of the government and government-aided polytechnic colleges in Kerala in 2017-18 is 1.4% total approved intake capacity of 11736, it is 10.56% among the self-financing institutions. This figure may expand in the coming years.

Future Trend

It is evident from the current statistics obtained that, engineering colleges in the State are finding it difficult to fill all the seats in different branches sanctioned. The government is keen not to have the same trend repeated in the diploma level education in the state. With the current market-friendly policies and programmes, the technical education sector in India is drastically being transformed into a commercial business activity. Large number of engineering institutions mushroomed in almost every state in the country during the last decade. As mentioned earlier, the state government does not endorse this commercialization and identifies quality education as a fundamental right. Therefore, emphasis should be laid on the larger involvement of the public sector in technical education and also in regulating the expansion of the private sector.

Recommendations

Following points are suggested in the present context for further consideration and detailed evaluation, in the long term consideration of a perspective plan to enhance the quality of technical education at diploma level.

1. The state government has a clear vision on internationalization of technical education in the state, with focus on outcome based education and research oriented higher education, addressing the societal needs.
2. The immediate action plan envisaged is to maintain a healthy supply - demand ratio and to improve the quality of education offered by each institution.
3. A scientific need based study is yet to be conducted and the Government intends to do the same with the help of the industry and taking into consideration the global scenario to revamp the diploma level education.
4. No new polytechnic colleges and courses in existing polytechnic colleges may be allowed in 2018-19 in the self financing sector, as there are vacant seats in this sector.
5. Since enrolment in polytechnics is mainly from students belonging to lower socio economic strata of society, institutions, preferably public funded with affordable fee structure may be allowed.
6. Engineering colleges should not be converted into polytechnic colleges in the state. It will be a serious dilution of norms in the engineering education. The growth of technical/ professional education should be guided by scientific studies and genuine academic considerations and not by mere flexibility based on the marketability of courses promoted by educational entrepreneurs.

Prepared by Kerala State Higher Education Council