

Technical Education in North Eastern India: Problems and prospects

Dr. R.M.Pant

Professor & Head, Center for Management Studies,

North Eastern Regional Institute of Science & Technology,

Nirjuli-791109, Arunachal Pradesh (India)

Abstract. Ancient India, known for its rich cultural heritage boasted of housing world's largest Universities like Nalanda and Takshshila, where knowledge of wide range of subjects was imparted. Medieval India witnessed decline in traditional Indian systems and education during 'British India' saw the dominance of 'pre-Newtonian' and 'pre-Marxian' thinking based institutions, fit only to serve British interests. A new beginning was made with the creation of new temples of India i.e. IITs (Indian Institute of Technology) and host of other quality technical Institutes, giving boost to India's technical education. However these elite Institutions remained confined to only developed regions of the country and North Eastern states of India, characterized by underdevelopment remained isolated from these advancements. Development eluded these states in the absence of appropriate institutions to develop adequate human resource base. Limited institutions imparting technical education due to continuous negligence and inadequate infrastructural and other facilities are increasingly getting infected with numerous problems. This is affecting the overall development of these states, which otherwise holds very high promises and has potential to 'Turn economy of these states around'. Proposed paper is an attempt to study the problems these Technical Institutes of NE India are facing and also to suggest remedies to enhance their role in shaping India's destiny, which is emerging as a major player in new global economic order.

1. Introduction

A rich heritage that was diluted by the time continues to haunt India's academic planners. In ancient times, India enjoyed an upper hand in global trade because of its developed knowledge base evolved out of practices that sustained the test of the time. However, with continuous aggressions from outside world, weakened the system and Indian society was forced to adopt a 'closed door policy' or the policy of protectionism which continued even after decades of India becoming an independent country. Recent globalized trends which are witnessing a sea change in the knowledge sector necessitated changes in India's education system making it more broad-based to cater to the global needs. Institutions of excellence were created in selected regions, however North Eastern part of India continues to languish in the absence of proper infrastructure and adequate support systems. With scanty institutions offering technical education in eight states of North Eastern India, that too with several constraints, hampered the creation of right human resource base for region's economic development. Institutions offering technical education are infested with several problems dwarfing their growth.

2. Methodology

Methodology adopted to study the plight of technical education in North East India comprised of visits to selected prominent technical institutes of these states. Interviews with Director, faculty members and students were conducted. Questionnaires were also used to gather information. Secondary data from various offices was also studied carefully.

3. Findings

A survey of ten representative higher and technical education institutions of Arunachal Pradesh (Table.1) and other North Eastern States (Table.2) was conducted that reflected following facts:

- Syllabus has not been updated for more than 10 years in most of these institutions
- No or very few new courses have been added by these institutes to their initial programmes, despite the fact that some new areas are emerging where demand for trained Human Resources is high i.e. Hydropower, Bamboo technology, Bio technology, herbal remedies etc)
- Institute-Industry Interaction is almost non-existent
- Faculty flight is a common problem in these institutions, and little is being done to check it
- Quality and quantity of qualified faculties is declining at an alarming rate
- Number of PhD holders have reduced to minority in the faculty
- Little efforts are made to ensure high 'quality check' through recognized agencies like NAAC or NBA accreditation etc and where ever it is done, it is not really followed in letter and spirit
- Compromises at the time of faculty selections are also made frequently due to the reluctance of qualified faculty to join institutions located in remote places
- Majority of the Institutions were found low on Infrastructure
- Placement for students is a weak link for majority of the institutions

These findings are representative of most of the technical institutions operating in North Eastern Region. If scenario does not change, development of North eastern region would be in jeopardy due to the dismal performance of its modern temples.

4. Suggestions for changing the scenario

Indian economy has taken a conscious decision to be a part of global market and technical institutions that are increasingly recognized for their role in preparing right HR base, need sprucing up their activities. In unexplored North Eastern India, technical Institutions have still bigger role to play.

Following interventions may help improve the contribution of these modern temples in this fast changing world:

- Mutual distrust between Industry & Academia needs to be replaced with a 'win-win' partnership
- Updating technologies and the syllabus at regular intervals
- New need based & innovative programmes to be launched with market orientation
- Faculty & Industry personnel exchange programme at regular basis
- Quality in education-NBA, NAAC accreditation, ISO certification
- Quality research-Application orientation-patents
- Emphasis on better package with special hard area incentives for employees and faculties with more rigorous selection process
- Fair performance appraisal system for institution's growth
- Application oriented courses need to be offered to enhance employability of the students
- Encouraging private quality institutions in the region

5. Conclusion

Academic institutions have to be more relevant, dynamic and pro-active in the fast changing scenario. Their adaptability will ensure their survival and growth in future. In the absence of willingness to respond to changing need, they are inviting an inevitable threat of extinction that looms large before them.

North East which is trying hard to make its mark in the education map of the country will to avoid complacency with just quantity or number of institutions it has but will have to ensure good quality in its institutions. That only will enable them to create a place for themselves in the arena which is already crowded with established players.

6. References

- [1] Begi, Joram,(2008), 'Dynamics of Higher Education' (Ed.Vol.), Commonwealth Publishers, New Delhi
- [2] Directorate of Higher and Technical Education and school education, Arunachal Pradesh
- [3] Manorama Year Book, 2008
- [4] Pant, R.M. & Joshi Aditya, 'Perspectives on education and development in Arunachal Pradesh', 'Gloablization and the marginalized' (ed. Vol), Commonwealth Publishers, New Delhi

Table 1. List of Higher Technical Institutions in Arunachal Pradesh with Location and Year of Establishment

Sl. No	Name of Institution	Location	Year of Establishment	Status
1	Rajiv Gandhi University	Rono-Hills, Doimukh, Itanagar, Papumpare Distt.	1984	Central University
2	North Eastern regional Institute of Science and Technology	Nirjuli, Itanagar, Papumpare	1984	Deemed University
3	Jawahar Neheru College	Pasighat, East siang Distt.	1964	Government Degree College
4	Dera Natung Government College	Itanagar, Papumpare Distt.	1979	Government Degree College
5	Indira Gandhi Government College	Tezu, Lohit Distt.	1986	Government Degree College
6	Bomdila Government College	Bomdila, West Kameng Distt.	1988	Government Degree College
7	Rang-Frah Government College	Changlang, Changlang Distt.	1996	Government Degree College
8	Donyi Polo Government College	Kamki, west Siang Distt.	1996	Government Degree College
9	Wangcha Rajkumar Government College	Deomali, Tirap Distt.	1997	Government Degree College

10	Government College	Yachuli, Lower Subansiri Distt.	2007	Government Degree College
11	College of Horticulture and Forestry	Pasighat, Itanagar, Papumpare distt.	2001	Under Central agriculture University, Imphal
12	Don Bosko College	Jully, Itanagar, Papumpare	2002	Private Degree College
13	North East Homeopathic Medical College	Vivek Vihar, Itanagar, Papumpare	2002	Private Professional and Technical College
14	Rajiv Gandhi Polytechnic	Itanagar, Papumpare Distt.	2002	Government Polytechnic Institute
15	St. Claret College	Ziro, Lower Subansiri district	2003	Private Degree College
16	Doying Gumin College	Pasighat, Dist.-East Siang	2004	Private Degree College
17	Hills College of Teacher Education	Naharlagun, Dist.- Papumpare	2006	Private Professional & Technical College
18	Tomi Polytechnic College	Basar, Dist.- West Siang	2006	Private Polytechnic Institute
19	St. Francis De Sales college	Aalo, Dist.- West siang	2007	Private Degree College

Source: Directorate of Higher And Technical Education, Arunachal Pradesh, 2008-09

Table 2. List of Higher Technical Institutions in North Eastern India with Location and courses on offer

Name of the Institution & Programmes offered	State
Assam Engineering College, Kamrup, Assam, Courses : B.E / B.Tech :Mechanical Engineering	Assam
Dibrugarh University, Dibrugarh Course: M.E / M.Tech : Petroleum Exploration & Prod.	Assam
Jorhat Engineering College, Jorhat Courses : B.E / B.Tech :Civil Engineering	Assam
National Institute of Technology Silchar Courses : B.E / B.Tech :Civil Engineering	Assam
Tezpur (Central) University, Napam, Tezpur, Course: M.E / M.Tech : Design & Technology	Assam
NERIST Nirjuli, Itanagar Degree courses in Civil, Mech., Electrical, Electronics and Commun., Computer Sc. and Engg., Agricultural Engg. and Forestry (4-year course after Base Module)	Arunachal Pradesh
Government College Of Technology, Imphal Courses : B.E / B.Tech:Computer Sc.& Engineering	Manipur
Shillong Engineering & Management College	Meghalaya

Status : Private Courses : Computer Sc. & Engineering, Electronics & Comm.Engineering, Information Technology	
Mizoram Engineering College, Aizawl Courses : B.E / B.Tech: Computer Science & Engg	Mizoram
Sikkim Manipal Institute of Technology Gangtok Courses : B.E / B.Tech : Computer Sc./Engineering	Sikkim

*In addition to the above mentioned Institutions, few new NITs (National Institute of Technology) have come up in the region offering the same conventional courses. As they are still in the process of establishing themselves, they were not covered in this study.