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Higher Education in India: A Developmental Perspective

Higher education in India has expanded enormously in terms of infrastructure and the number of students. However, it has been able to cover around ten percent of the population. A large majority of the population is either left out or they are not able to get access. One of the reasons for such a situation is that the higher education has rather become costly in terms of the personal cost. The higher education is an investment that has multiple benefits such as higher education, specialization, social value for the marriage of the person, prestige in the society and the knowledge per se. The problem may be properly understood when there is adequate understanding that the value for the general education as a academic value of prestige is properly placed for example, people would prefer to study commerce education, art education, law or fine art instead of competing for the science, technology or other fields such as medicine. This large number going into the general areas have created number of problems. The various positions created are more a position for the general degree people than the vocational or professional degree people. The IAS has been a mix of general and professional people giving rise to an administration of more ineffective to relative effective administration. People educated in public administration rarely come for competition to occupy the IAS. Sometimes, the IPS officers are allocated the position of IAS officer creating a situation of more significance.

The higher education has created a big teaching force in the colleges and universities properly qualified and trained for the purpose. This group is over burdened with the teaching, learning, extension and research activities with lesser concerns for the social work. It has resulted in more questions raised about the relevance of higher education. The general education obtained in higher education has provided a matrix for the society to fill all the available positions and spaces in society. The National Policy of Education 1986 stated that

the degrees must be delinked with the jobs except for the professional courses of engineering, medicine and other courses of such nature. This policy has got more reflected in the society resulting in a mediocrity of the quality of services. The in service education for the service class has been rather neglected. The person becomes more experienced by doing many mistakes and correcting some on being conscious. This has raised the public expenditure for ensuring more quality. The higher education staffs are involved in the election activities. It has made the university staff and students more conscious of the election and election duties. However, the teachers and students gain less from this experience. Some teacher think election work is a problem necessary to be attended urgently. This sort of attitude brings lesser result. Higher education is considered as islands of excellence. In the sense, some of the higher education institutions are doing really well creating a feeling of satisfaction, more productivity and creative endeavor that brings more collaboration from even the foreign countries. In India there are 374 Educationally Backward Districts that need better higher education. The higher education in India has to some extent provided the access to higher education to the relevant age group of the population.

The cost of higher education in comparison to the cost of higher education in foreign countries is far less. The choice of the courses or programmes, although, competitive, is available in India for the students with better success. The facilities in higher education institutions are gradually increasing creating a budget crisis for the institution and the state. The assessment of higher education to be fair one may say that the quality is thinly spread across the country. There is a relatively more craze for management education in better institution. The clientele for management education are in general the engineers, commerce and economics graduates, and science graduates. This situation has predefined the type of managers in the industries, financial bodies and general services such as hotel management, hospital management, public transport management, textile etc. By and large, this group has been able to perform better resulting in a better service class in the society. The gross domestic product has gradually increased resulting in more per capita income and better goods and services. The favoured choice of these management graduates are serving in the multinational companies or the collaborators from foreign countries. There is a significant group (managers) that tends to migrate to other countries apart from the engineers, scientists, tradesmen. In this sense, the management education in India has improved in terms of quality in preparation, placement and networking. The management institutions are considered as premier institutions in rural as well as urban area for they are small in number and more devoted to the better service.

The higher education in India is more towards catering to the masses, equalization of opportunities for the weaker sections of the society and tries to be egalitarian in nature and approach. However, the problems have become more or less solved due to purposive interventions for example; the numbers of Scheduled caste students in the Universities are far less in comparison to the Scheduled tribe students. The Knowledge Commission suggested that more universities and colleges need to be created. In many states, the private universities have increased in number in significance for example, Rajasthan, Gujarat, Chattisgarh, Uttar Pradesh, Punjab and Haryana etc. This private participation in higher education is a welcome sign but the rates of growth of these institutions need to be properly monitored for their quality and progress. The NAAC, Bengaluru has been very slow in accreditation resulting in more institutions of higher education surviving for a longer time without any evaluation. The state government is the only body that supervises the higher education in general. It has its own limitations. The Central government has placed too much faith in the University Grants Commission, New Delhi to take care of all these new universities. The list is growing without any recognition from the UGC, New Delhi. Some mechanism has to be worked out to observe that minimum standards are needed to start the higher education institution. The Department of Higher Education, Government of Gujarat, along with the e-Knowledge consortium placed the accreditation responsibilities with The Maharaja Sayajirao University of Baroda, Vadodara. The Maharaja Sayajirao University, Vadodara geared itself properly and accredited government and private colleges and institutions in the state through visit, discussion, reporting and evaluation.

This is a welcome measure that needs to continue with more government support and raise the quality consciousness in the state. The state further ventured to start an education portal that has created a database for the higher education institutions and their activities including the copy right of teachers.

Funding for Higher education:

The state government has been the major funding agency for the higher education in the state. The universities are rarely able to raise more funds to generate a corpus to sustain and improve the quality of higher education. However, some institutions have created a good amount as corpus that makes them more stable and uniform in their approach towards the policies and activities. Panda states that "there has been consistency in the policies and approach of the government towards higher education during the last 25 years. Although, sometimes, the differences in the political ideologies of the government in power has led to some conflicting situations like higher education as a commodity versus public service. The

situation is more alarming in the case of state government controlled institutions. Especially, when there is conflict in political ideologies of the governments in central and state for example the government of Gujarat has given more freedom for the private participation in the university education.

The Indian regulatory system, which is based on central planning model, is one of the most tightly controlled in the world. Government regulates who you can teach, what you can teach them and what you can charge them. It also has huge regulatory bottlenecks. There are considerable entry barriers; Universities can be set up only through Acts of legislation, approval procedures for starting new courses are cumbersome, syllabi revision is slow, and accreditation systems are extremely weak and arbitrary (Mehta, 2006).There is a need for decentralization of power with regard to the academic activities to a reasonable level of distribution for example, the Academic board (Board of Studies in Education) meets once a year. The general major agenda is approval of examiners at various levels and revision of courses and programmes. There are many aspects of organization that does not come for discussion. The new system has empowered a committee for each of the courses and they will finalize the question paper and examination. This may sound better and quality conscious. But, the communication involved in this process has to be fast to be more effective. The Maharaja Sayajirao University of Baroda, Vadodara has a Memorandum of Understanding with the Maharashtra Knowledge Corporation Limited for processing of the digital data concerning the examination of various courses. It may facilitate faster processing. The cloud computing is rather costly but desirable when the University is completely networked. The optimum utilization of the hardware is possible when the system is faster and efficient.

The introduction of new courses as a challenge:

The Maharaja Sayajirao University of Baroda, Vadodara has introduced some new courses such as Bachelor of Design, Bachelor of Fashion Design, Bachelor of Environmental Education, Master of Nano technology etc. These courses are having appeal for the current development taking place in the society. However, for the University to establish linkages with the service sector may take little more time for functional utilization of the human resources. The main feature one could observe in these courses is that they are interdisciplinary in nature and they try to build an environment of mutual help and co-operation in organization.

With the digitization of the performance records it is possible to provide for the credit transfer to other universities that are acceptable by standards and organization. The mobility of students becomes more feasible. There are efforts made to provide for the transfer in

Universities within the state. It has been accepted easily. However, the interstate transfer is a matter more of concurrence and acceptance. Although, University Grants Commission, New Delhi has been emphasizing these issues, there is less of uniform standard in Higher education in India. The Maharaja Sayajirao University of Baroda, Vadodara has on a regular basis provided some general and professional in-service training to the newly appointed lecturers of the University that keeps them abreast of the development in general. The knowledge Commission Report (2007) has recommended the complete restructuring of the regulating agencies in the country with focus on their roles to enhance academic excellence rather than authority to exercise tight control.

Higher Distance Education and Satellite technology:

The launch of the EDUSAT has brought India into a comparative position with reference to the European Universities in Higher education. This ensures expansion of the higher education to larger group especially in the Educationally Backward Districts. There is a need to increase the emphasis on the providing of the facilities in the Educationally Backward Districts(374 in India).This will provide opportunity for establishing network for target-learning group and service provider, situated at remote places, through satellite based technologies. The cable network, the internet has limitations in hilly areas and forest areas. The satellite based technologies may provide some solutions for the problems of these target groups. This will reduce the cost of the sharing of human resources and providing the services at the nearby place. The emerging technologies are recent and updated that accounts for the quality and effectiveness in terms of reach and resolution of the images and quality of print. The service provider being local will have more reach to provide for the essential communication services along with training, teaching and to some extent on line evaluation. The major limitations of the University is providing of the programmes both in Hindi, or regional languages and sometimes in English. The satellite based programmed will enable the central studio to provide for the larger number of people in many languages of their choice on installation of the software and interpreter required for the purpose. Recently, NCERT, New Delhi has created a nodal centre in CIET, NCERT, New Delhi for the transmission of programmes, training and maintenance and support for the EDUSAT. Around 103 institutions at the school and college level have successfully created the websites that may be networked through this centre (Mani 2013).The CIET website provides the details of the technology and the preparation made for the purposes of utilization of the EDUSAT services. Prof. R. L. Phutela was appointed as the first nodal centre Coordinator. He has been actively co-coordinating the activities in terms of preparation. The IGNOU, New Delhi is the biggest

distance education institution in Asia. It has a very large network of student across the country to provide for the education. It has a fully fledged central studio at New Delhi created through the funding of the Japanese government. The preparations going on for the networking is a mega venture that needs proper study, preparation, monitoring and support and evaluation.

Networking and University Education:

The Vishveshwariah Technological University, Belgaum tried to participate successfully in the testing of the facility of uploading and downloading to the EDUSAT. With this success, an e-resource centre was created in an engineering college at Mysore (JCE).This e-resource centre gets linked with the most of the engineering colleges in Karnataka. This network is used for transfer of data, information, training and communication. The Assam state has also a project to inter connected the principals of engineering colleges in the North Eastern states. Furthermore, the schools of Assam are also getting computerized resulting in more technology awareness and utilization for education and training. The Guru Nanak dev University, has the facility to upload and down load data to the satellite. There are more than twenty universities in India that are almost completely networked. They are as follows:

- Annamalai University, Chidambaram
- Assam University, Gwahati
- Banaras Hindu University, Varanasi
- Banasthali Vidyapith, Jaipur
- Bangalore University, Bengaluru
- Indian Institute of Science, Bengaluru
- Jadavpur University, Kalyani
- Jawaharlal Nehru University, New Delhi
- Kurukshetra University, Kurukshetra
- North Eastern Hill University, Shillong
- Pandit Ravishankar Shukla University
- Panjab University, Chandigarh
- Pondicherry University, Pondicherry
- Punjabi University, Patiala
- The Maharaja Sayajirao University of Baroda, Vadodara
- Nagpur University, Nagpur

- Tata Institute of Social Sciences, Mumbai

- University of Calcutta, Kolkata

- University of Delhi, New Delhi

- Guru Nanakdev University, Amritsar

- University of Jammu, Kashmir

- University of Hyderabad, Secundarabad

- University of Madras, Chennai

- University of Pune, Pune

- University of Rajasthan, Jaipur

The above universities are networked under the www.jccc@ugcinfonet.in for sharing of resources such as books, journals, thesis and other print or virtual material of significance to two or more universities. The universities that are under the network programme are Indhira Gandhi National Open University, New Delhi. It will have facilities to upload the information from the studio and download , organize teleconference, teleconferencing facility(two way communication) for example, the Diploma in Higher Education get this facility from the Studio at Ahmedabad, Gujarat, training etc.

Undergraduate Education:

The total number of undergraduates in higher education (colleges and universities) forms the bulk of students group for the higher education. The efforts to improve undergraduate education have been sustained from the beginning with the active support of UGC, New Delhi and MHRD, New Delhi. The programmes such COSSIP, Vocational education programmed at undergraduate level in select colleges with more funding, the developmental grant provided for infrastructure development and course development and implementation are examples of good support. Recently, UGC, New Delhi has given adequate funds to Homi Bhabha Centre for Science Education, tifr, Mumbai for providing in service training to science teachers at the undergraduate level in the country. It also has programmes for the placement of their teachers in the science higher education programmers in other institutions. These efforts are some examples of good work that has exemplified for continuation. The Maharaja Sayajirao University of Baroda, Vadodara has been

getting funds from the UGC, New Delhi for creating infrastructure such as building classrooms, laboratory, hostels for women, and creating centres of research focusing on improving quality of under graduate education for example Dr. Sarabhai science centre, Basha Bhavan etc. The Maharaja Sayajirao University of Baroda, Vadodara has given adequate emphasis on the undergraduate education and post graduate teaching and research. The fees charged is nominal. Facilities such as hostel, library, internet and laboratory are made available at reasonable cost. In the entire Gujarat state, The Maharaja Sayajirao University of Baroda, Vadodara is the unitary university with English as medium of instruction. The entire campus is networked with the help of funds made available by alumni of the Technology faculty. The Hi-Wi facilities are also created in some parts of the university. The alumni of the Architecture have built a new building for themselves for teaching and learning purposes with the help of The Maharaja Sayajirao University of Baroda, Vadodara. The children's university is created at Gandhinagar to cater to the needs of children and training of staff for the instruction purposes. The Teacher Education University, Gandhinagar is created for the purposes of improving the quality of teacher education in Gujarat state.

Ten universities in Maharashtra along with the Maharashtra Knowledge Corporation Limited in collaboration with I-CONSENT and Homi Bhabha Centre for Science Education, tifr, Mumbai have started open source facilities in science, technology and education. They share their training, resources and material development in local language namely Marathi. A post graduate college at Chandrapur, along with the Y. Chavan Open University, Nashik have developed instructional material in Marathi for B. Ed. and M. Ed. programme. The Nashik tried to provide facilities for action research and collaboration centre for M. Ed. students. These activities have helped more participation of students in higher education. MKCL; Pune developed an e-B. Ed. programme under the leadership of Prof. M. N. Deshmukh. Homi Bhabha Centre for Science Education, tifr, Mumbai organized a workshop at Aurangabad under the Indo-US space parternership for providing education, training, and resources for space education in India. The network established with Education

Communication Unit, ISRO, Ahmedabad with Aurangabad workshop was a relative success.

The Consortium for Educational Communication, UGC, and New Delhi has been trying to network many universities and provide the resources to mobilize learning, training and instruction. In India, more than fourteen teleconferencing experiments have taken place with relative success. The Indian Agricultural Research Institute, New Delhi has a tie up with the International Labour Organization. It has one of the biggest database on agriculture, research, training and education in India and Asia. The Commonwealth Association for Learning, Vancauver, Canada has been making more efforts to develop learning resources, training, and education in India. The Commonwealth programme has tied up with leading industries and universities in India to develop software in various areas for example, Jyothi Industries, Vadodara, C-DAC, and Pune.

Universities and Foreign Collaboration:

The University Grants Commission, New Delhi and NAAC, Bengaluru have been giving more emphasis on foreign collaboration. Many universities have been tieing up with foreign universities in different programmes for exchange of teachers, students under the Erasmus Mundus programme, training of teachers under the different scholarships, short term training, seminar, conference and design and development programmes are encouraged with foreign collaboration. There are attempts made by foreign universities to run select courses or programmes in Indian universities for their purposes and bring up quality in resources and training.

Many universities are growing and sustaining with the state government grants and local support. In a way the universities are the local higher education bodies catering to a limited area. The state or national character has been gradually disappearing. The admission tests try to provide some opportunity for the outside participation in higher education. However, the admission policy of the universities are more local oriented for example, The Maharaja Sayajirao University of Baroda , Vadodara has completely gone online for admission but the quota for the students studied in this university goes to eighty percent. The colleges in Madhya Pradesh have fixed seventy percent of admission is for the

students from Madhya Pradesh state. This sort of university or local policy for admission gets more local support. The open admission of state or national character will bring in more quality students to education in universities. Most of the colleges in Gujarat get a list from the state with the help of Centralized admission system of selection or testing. This has also facilitated more mobility of students and creating an awareness of sharing and quality. The University policies of admission may be made more open to larger population for more participation. The foreign students are coming in large numbers to Indian universities for education due to the liberal approach and climate obtained in the universities. Many foreign students from countries such as Palestine, Bangladesh, Pakistan, Sri Lanka, Britain, United States of America, and Africa have one of the favorable preferences as India for higher education. The allegation that the fees for foreign students are more than the local students is justified. More facilities may be provided to them at reasonable cost.

Small Private Universities: In the recent period there are several small private universities have come up with specific purpose with five to ten departments for example, to cater to science and technology- Nirma Institute for Science and Technology, Ahmadabad(Recently recognized by UGC), Navrachna University, Vadodara, Institute of Planning and Design, Ahmadabad, etc. These private universities (around 150) in the country have come for recognition to UGC, New Delhi. Most of these universities are recognized Under Section 3 of the UGC Act as the Deemed to be University. It has a governing body that acts as senate as well as syndicate for the university. The university property belongs to the trust. The ownership rests with the founder of the university or their representative. These universities are financially independent and they do not receive any grant from the University Grants Commission, New Delhi. They are autonomous in their functioning. Some of the universities have very active interaction and collaboration with the industry supporting them. One such university that has gained more fame is Birla Institute of Technology; Pilani. An international research institute has created a niche for example, Tata Institute of Fundamental Research, Mumbai, Indian Institute of Science, Bengaluru.

In the recent period, UGC and NAAC have joined hands in classifying the universities with letters of accreditation as A, B, etc. Further, some universities are recognized as Centres of Excellence getting a grant of nearly 100 crores of rupees. This island of excellence is nurtured as research institutions that need to nurture and guide the research in the country including the frontier areas of science and technology. However, the CSIR network of research institutions take up the bulk of the research for defense and frontier areas of science and technology. The lead universities come to the status of collaborators. Many a time, the funding bodies have tight control over the universities and institutes of research. This definitely brings in the needed quality audit in to picture. The liberal ideas of policy are not properly translated into the institutional objectives resulting in more of a limited approach to the contribution to policy. There need to be more clear ideas in this regard by instituting a thinking group at the national level to provide the necessary linkages and observe that the products of these institutions get intellectual property rights faster in terms of copy right. The Indian copy right is seldom respected by the businessmen in the country leading to many troubles and conflict in court and outside in the society. Whereas the copy right obtained by the United State of America is almost universal and highly respected for its implementation. It may be noted that the Indian scientists, educationists getting copy right are very less even from the private universities. The Annamalai University, Chidambaram, TamilNadu is an exception.

Universities as Innovative Bodies: Innovation or Research has been one of the functions recognized as an important function for the university. But, the funding for the research is very less. The management charges of the university for the projects goes to around 21 percent of the total cost of the project making the principal investigator at a loss to fill the gap in the budget and the final financial statement given to the university and funding agencies. There are no body that lends money for research. Many nationalized banks refuse to give loan to projects without the guarantor. Either the salary, land or property is taken as lien for the money given as loan.

Many of the project at best may not give even the ten percent of the loan or investment after its completion. The inflation taken into account in two years period of research or five years the rough estimate may be addition of the cost of ten percent of the total budget of the project which the principal investigator and /or co-investigator have to bear in terms of cost.

The projects of lab to land type are sometimes more productive. The yield may be more resulting in the principal investigator in a comfortable position to place the project in society. Another problem in major project of Rs.60 crores to Rs.100 crores is the escalation in the cost of instruments in science and technology including the transport cost. Generally, the transport cost is taken by the company but in the recent period the policy of companies supplying the instruments is that the cost goes to the customer or the institution. The shipping cost has to be paid as soon the supply has reached the shore. The money that is charged for keeping the instrument before delivery in the port gradually increases resulting in a confused and chaotic situation in the institution and the principal investigator has to personally arrange for the money to save the burden. Sometimes, the bill needs to be paid in foreign currency and the Reserve Bank of India has to permit for the exchange of money from Indian rupees to foreign currency for the specific purpose. These procedures are good in terms of control but difficult in terms of implementation. The goods such as books, journals and other materials of print also face the same problem of exchange. The costs of foreign journals have steadily increased resulting in many institutions depending on the internet subscription to journals.

The third party arrangements for the transport and delivery have its own danger but many people have preferred to reduce the problems of hassles in the goods transport and delivery. The Indian instruments and chemicals or sometimes, the vaccines are not used or returned due to various reasons. This accounts for many problems in the Indian industry. Sometimes, Indian instruments are baught as a stop gap arrangement in the institution till such time the foreign instruments are delivered and installed. This sort of short term policy has made the institution and research personnel viable commercially and reduces the time gap for the project to completion. It has long term consequences

of the devaluation of the Indian scientific instruments. The relative competition in electrical and electronic goods produced by china has wider market and more acceptances in comparison to Indian instruments. This has put the Indian industries in the backstage in commerce. The use of multiple scientific instruments, training package given, the assurance for the replacement of the damaged parts and in time delivery and servicing conditions offered by foreign companies makes them more attractive and beneficial to customer.

The Minor research projects range from Rs.15,000 to 50,000 rupees in the social sciences. The project cost is almost commensurate with the budget and sometimes the principal investigator has to add nearly half of the amount to survive. The Science and Technology also faces the same problem. All the things used for the project has to be submitted to institution. The institution cannot sell it. Thus, the benefits of the project rarely go to the institution in terms of profit. The research institutions could give consultancy but cannot sell their product including the publications that has come in print.

This policy appears good, but the wider dissemination of the good ideas is restricted resulting in more time gap for research reaching the other institutions or public for good. Research in India has to take off with more strength and vigor .It could happen when more support is provided by the state and central governments to the researchers and institution. The rules need to be more rationalized keeping in mind the current market trend and made flexible to make the research an attractive Endeavour.

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