Reconstruction of Higher Education in India

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1. Introduction

1.1. Major Revolution

In the modern world with a high obsolence rate, every system must undergo periodically mini-revolutions. If that does not happen, the system must necessarily experience a major revolution. Higher Education in India has successfully resisted all attempts for reform that was:

- i. Contemplated in two National Policies [1968, 1986]
- Recommended by the Higher Education Commission 1948, headed by Dr.S.Radhakrishnan and numerous Committees and Commissions thereafter.

If it is to meet the emerging challenges and remain competent in:

- i. Communication of knowledge
- ii. Creation of new knowledge and
- iii. Extension of knowledge

and serve the needs of the nation, it has to necessarily undergo a major revolution. Higher Education needs a far reaching structural reconstruction – I make this observation in the strictest sense of the term, after deep consideration and in all seriousness.

1.2. Unequal to the Task

The present structure of Higher Education in India is not only outdated, but is also anachronistic and is therefore inherently weak and unequal to the task. Any effort at improvement of the system, keeping the structure as it

is, will not yield the desired results. What is needed is a major remoulding. If it is to become contemporaneous with the practices in higher education in the rest of the world. The reason for this statement briefly is as follows:

- All over the world, higher education is in university institutions: they
 are big compuses with a critical mass of student and staff strength and
 can sustain large libraries, modern laboratories and advanced centres of
 studies with adequate infrastructure. An institution like MIT has 3000
 faculty members and 30000 students.
- In India Higher Education is
 - Fragmented
 - Scattered

and takes palace in nearly 16000 tiny institutions called affiliated colleges, many of which are a trace better than Higher Secondary Schools.

- They do not have libraries worth the name
- They hardly subscribe for even a modest number of national journals, not to speak of international journals.
- Most of them have a faculty strength varying from only 100 to 200.
- The percent of faculty with Doctorate qualification is pitiably low: nil
 in many cases.
- These institutions of higher learning perform only class room teaching, preparing students for examinations and they function like tutorial colleges.
- The affiliating system, long given up even in the country of its origin, does not exist anywhere in the world, excepting India;
 Pakistan and Bangaladesh.
- Unfortunately, the entire higher education in India takes place only in the ill equipped, understaffed, tiny, affiliated colleges as can be seen from the following:

- 89% of the undergraduate students are in the affiliated colleges.
- 66% of the post graduate students are in the affiliated colleges
- 82% of the faculty is in the affiliated colleges.
- We have the peculiar and unhappy situation of substantial P.G. education
 [66%] in colleges that have no research whatsoever. Only 9% of the
 research scholars are in the affiliated colleges, which are now close to
 16000 in number. Can any one knowledgeable in higher education
 understand, much less accept, P.G. education leading to:
 - i. M.Sc., M.A.
 - ii. M.Phil
 - iii. Ph. D

in institutions that have:

- i. no sanction for professor position [affiliated colleges are entitled to have only different grades of lecturers]
- ii. no research scholars
- iii. no semblance of any research : much less basic research.

But this academic wonder is happening in India, and goes on - growing strong, multiplying, unchecked and unrepented. Cosequently, it is not only our U.G. education that is of poor quality, but substantial part of our P.G. education is also poor in quality.

It may be hard to believe, but true, that out of the 13150 colleges in 2001 - 2002, only a third, i.e., 5238 satisfy the minimum requirement specified by the U.G.C. and have been recognized by the U.G.C., under section 2(f) of the U.G.C. Act.

2. Too Few Universities

India has, as of 2001-2002 [U.G.C. report]:

213 Universities

52 Deemed to be Universities

This number is very small – really small - for the size of a country like India and for meeting the emerging needs of research as can be seen by comparing with the following [information from website]:

- Japan with a population of 12.7 crores has 684 universities-public and private
- ii. The U.S.A. with a population of 27.6 crores has 2364 universities offering four year degree programmes and above.
- iii. U.K. with a population of 5.98 crores has 104 universities and 231 autonomous institutions that can award degrees.
- iv. Germany with a population of 8.2 crores has 330 universities

Even among the 213 universities we have, the major universities are burdened with the .academic administration of affiliated colleges. For instance:

- i. Andhra University has 405 affiliated colleges
- ii. Osmania University has over 390 affiliated colleges
- iii. Anna University (a technical university) has 232 affiliated colleges

The position is nearly the same in the case of most of the major affiliating universities. The responsibility of an affiliating university involves:

- prescription and periodic revision of syllabi and curriculum
- setting question papers, valuing lakhs and lakhs of answer books, and publication of results.
- looking into unending grievances from staff and students of affiliated colleges
- fighting increasing number of court cases

It is my considered opinion and by no means an exaggeration to say that our universities, with a few exceptions – and they are the saving features – **do not**

meet to-day even the humble expectations that the enlightened members of the academic community have of them.

Besides the acute paucity of funds, lack of autonomy and burden of affiliation, the general universities also suffer from the obsolete, and outdated composition, powers and functions of the university authorities like the Board of Management, Academic Council and the Senate.

3. Research the Desideratum

In all the advanced countries, universities and university level institutions constitute the strong centers of research. It is a universal phenomenon with universities because:

- i. Creation of new knowledge is as much their function as communication of knowledge.
- ii. They alone have a continuous flow of young and fresh minds that are highly conducive to occurrence of talent and creative effort.
- iii. They possess the kind of atmosphere and the congregation of scholars needed for enquiry and investigation in search of new knowledge.

Unfortunately, the share of Higher Education in research in India is pitiably low as seen from the figures given below [Table-1]:

Table –1: Allocation of Funds for Research [1998-99]

i.	Central Sector: Laboratories and Research Institutions	62.5%
ii	State Sector: Research Institutions	8.0%
iii	Public Sector: Laboratories	5.0%
iv	Private Sector: Laboratories	21.6%
V	Higher Education Institutions	2.9%

The share of Higher Education must at least be 10.0%. It can also be seen from the progressive allotment of funds for research. While there has been continuous increase in other sectors, it has remained almost stagnant as far as research in Higher Education is concerned [Table-2].

Table –2: National Allocation for Research to Different Sectors: 1997-98 to 2000-01

[Rupees in crores]

SI. No.	Category of Institutions	1997-98	1998-99	1999- 2000	2000- 2001
i.	Central Institutions	6885	8706	10151	11835
ii	State Institutions	927	1027	1178	1351
iii.	Private Institutions	2438	2790	3365	4059
iv.	Higher Education Institutions	364	339	396	415

It can be seen from Table-1 and Table-2 that the role of Higher Education in research is not anywhere in the domain of significance. In other words, **Higher Education Sector**, which should make a substantial contribution to promote innovation and the development of new technologies is not yet an important partner in this effort. This situation calls for serious remedial action.

4. Competitiveness, the Prime Need

We have consciously opted for liberalization and the relentless impact of globalization is likely to have an increasing influence on our economy in future. In order to meet the challenges of global market, we have to keep our competitiveness in good repair. Our position today is no where near being satisfactory. In a recent survey, we are ranked 45 out of 53 countries with USA being no.1; Taiwan no.3 and Singapore no.4. In the use of professional

managers, we rank 50 almost the last among 53 countries. It is a measure of the **top heaviness of bureaucracy visa viz professionalism** in our country. If we are to **improve our competitiveness**, we have to make great strides in the following:

- i. Our ability for innovation and development of new technologies
- ii. Utilisation of professional managers and experts in policy formulation, decision making and implementation.

In a conference of scientists designated as 'Science Summit 2000' organised at the initiative of Bharat Ratna C. Subramaniam, the following information was given by Dr.P.Rama Rao, former secretary, D.S.T. In the technologies used in our industry the share of indigenous and foreign technology is as follows:

i. Foreign technology used without alteration	50 %
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ii. Foreign technology modified and adapted

to suit our need 45%

iii. Indigenous technology 5%

It is certain that in the days that lie ahead, none will give us modern technology. As already mentioned we have to substantially improve our capacity for innovation and development of new technologies. This requires the creation of a new era of university research. The National Laboratories may be doing a commendable job; but they are no substitutes for university research. The unique advantage of universities is that they have a continuous flow of fresh and young minds.

5. Private participation

It is our ambition to become a developed nation by 2020. We have to consider the quantum of manpower with higher education needed for achieving this objective. The advanced countries are moving towards mass higher education. The following information [Table-3] about the percent of age group

entering higher education in some of the advanced countries may prove the point [2000]:

Table –3: Age Group Entering Higher Education

U.S.A	80%
Canada	88%
Australia	80%
Finland	74%
U.K.	52%

In general, the advanced countries have more than 50% of the age group going in for university level education. India with nearly 300 universities and 16000 colleges has only 7% of the age group entering the portals of universities. This number has to be augmented if we are to become a developed nation by 2020. Even assuming a modest figure, it may have to be 25% by 2020. Considering the increase in population and the requirement of higher percentage for the age group, there will be need for a massive increase in opportunities for higher education. The Government, by themselves, will not be able to meet this need. It is necessary to welcome and encourage the participation of private sector but on a selective basis to ensure quality.

All over the world, the trend is towards increasing participation of private enterprise in Higher Education.

- Japan has 512 private universities out a total of 684.
- In USA, private universities account for 1752 out of a total of 2364.
- More than 80% of the universities in Philippines is private.

An act for permitting and regulating the establishment of Private Universities was drafted and introduced in the Rajya Sabha nearly ten years back. It has not gone through the Lok Sabha. The MHRD may take it up and bring it before the Lok Sabha. It is urgent in view of the fact that certain State Governments have

already permitted private universities in a haphazard way. The Government of India may bring an Act:

- i. to permit and regulate the establishment of private universities
- ii. to provide a 'Broad Framework' even for the universities to be established by the States in order that there may be certain well established norms governing the structure of universities.

6. Education as an Industry

Higher Education has become an economic good and marketable commodity. There are registered companies that conduct **World Education Fair or World Education Market.** A registered French company conducts, World Education Market every year. In the market conducted in 2001 at Vancouver it was reported that 1700 institutions from 62 countries participated.

Advanced countries make systematic efforts to attract foreign students. It was reported that in 2000 there were 1.8 million international students studying in different countries. It has been estimated by an Australian study group that it will be around 7.2 million by 2025.

- The U.S.A. has over 5 lakhs of students and earns around \$ 13.5 billion (2003).
- Australia has 200,000 students and has an income of AU \$ 4.2 billion which amounts to 5.5 % of its GNP in 1999.
- The U.K. earns 5.6% of its GDP (1999) from foreign students.
- Nine universities, three each, from Australia, U.S.A., and Western Europe have established a Global University Alliance [GUA] to export education.
- Nineteen universities from 5 countries have formed a consortium by name UNIVERSITAS 21 [U21]. The members are from Australia, New Zealand, U.S.A., South Ease Asia, and Western Europe.

Instruction materials in the form of self instruction texts, audio-video cassettes, films, slides and computer software provides enormous scope for exports. The developing countries are the main source of students studying abroad or recipients of imports of instruction materials.

The Higher Education System in India may, in general, be in an unsatisfactory state: but considering the size of the country and the number of institutions, there are still reasonable number of universities and colleges that touch levels of excellence. India can also quickly upgrade sufficient number of existing institutions. Knowledge provision is one area in which India should not shrink from entering into competition. With 3000 years of cultural evolution and pursuit of learning and the natural advantage that it confers in knowledge related efforts India has certain native advantages.

7. Areas of Strength

I may perhaps make a few specific observations about our areas of strength also. We have the resources, the institutions and the faculty. We also have a long teaching and research tradition. We do not have to create most of them totally afresh. We need reorganize on a massive scale what we already have, to add dynamism, flexibility, competitiveness and strength.

- We have over 3000 years of cultural evolution, with a continuous tradition of pursuing higher knowledge though the opportunity was confined to a few.
- We have a long tradition of training in abstract thinking and in mathematical sciences. Arya Bhatta, Bhaskara down to Srinivasa Ramanujan, C.V. Raman and Bose are the products of this tradition.
- Even in modern education, we have nearly. 150 years of experience starting with the establishment of universities in Kolkata, Mumbai and Chennai.
- India is the only developing country to merit a Nobel Award even during the earlier part of the 20th century.

- In every field of knowledge we have to-day men and women, comparable to the best in the world.
- Our standing in Science and Technology is ahead of most of the developing countries and is ahead of some of the advanced countries that are small.
- We have institutions of higher learning, though very few in number, that will compare with the advanced seats of learning in developed countries.
- Our weaknesses if any are mainly the chains and shackles in the form of our rules and regulations, procedures and precedents, inherited from a colonial regime, perpetuated and further reinforced by our own bureaucracy. It needs more than ordinary will to break them and forge them into a new mould. Even an advanced country like Australia has brought about, in succession, four Acts to prepare itself to compete in the world education market and it is doing it successfully. If we are to sign GATS if there is still time beyond January 2005 we must necessarily make a thorough analysis of the perceived and experienced obstacles at the level of the Institution, University and the Government and bring about changes with imagination and courage.
- We have enough recommendations and guidelines in the various reports prepared to lead us to bring about the changes.
- The AIU itself has conducted a Round Table on "Internationalization of Indian Higher Education" in 2001 and the proceedings and recommendations of the Round Table have ample material to help us formulate a line of action.
- If we shrink away from competing, we will stagnate and decay. If we enter the competition, we may struggle but sustain, succeed and excel.
- There are many who talk about 'Threats in Higher Education in the Context of Globalization'. No doubt, threats there are, but more of them are only in our hesitation and vacillation: in our rules, regulations, checks

and balances – in reality more checks than balances – conforming to precedents and protocols. Opportunity is what the Higher Education Market offers.

8. Steps in Restructuring Higher Education

8.1. Urgent Reforms

The reconstruction required may be effected in three steps. Higher Education System in India is characterized by extreme rigidity and total lack of flexibility. No tall structure is built by brittle materials. As the first step the following reforms which have been recommended in every conference and in the report of every Committee or Commission on Higher Education may be implemented urgently.

- i. Introduce **Semester System** in all the educational institutions.
- Bring major reform in the examination system by adopting
 Continuous Internal Evaluation and well defined Academic
 Auditing.
- iii. Adopt Credit System
- iv. Devise means for pooling the resources of a Cluster of Institutions.

There is nothing new in any of the above. These are in vogue in all the advanced countries and most of the developing countries. These reforms as already stated have been recommended since the late 1960's, but have not been introduced and implemented.

8.2. Short / Medium Term Reforms.

The affiliating system is an anachronism and a curse on our Higher Education System. As early as the very beginning of the 20th century, Lord Curzon then Viceroy expressed his strong dissatisfaction over the continuance of the affiliating system long after it was discontinued by London University from where it was adopted in India. He went to the extent

of calling it a slavish imitation of London university. It has converted the colleges in India into coaching centres for examinations and the teachers into mere tutors and wage earners for the classes engaged. It does not exist anywhere in the world except the Indian subcontinent. Steps must be taken to liberate the Higher Education System from the emaciating effects of this curse.

- Autonomy must be granted to as many deserving colleges as possible. All P.G. institutions must become autonomous.
- 2. Colleges, marginally falling short of autonomy requirements, must be helped to fulfill the requirements and gain autonomy.
- 3. In each major university, having a number of affiliated colleges, an autonomous Board of Examination under the full charge of a Pro Vice-Chancellor must be established. The V.C. and the Board of Management of the University must be only concerned with the University Departments, and Autonomous Colleges.

8.3. Long Term Reforms

As was mentioned earlier, the real weakness of the Higher Education System is in the structure itself. Higher Education must be in universities and the ill equipped, understaffed, affiliated colleges and the affiliating systems must vanish from Indian soil. We must have a large number of universities. We must set a target for 2020 and fulfill them in the next 15 years in three successive Five-year Plans for Higher Education.

- 1. We must pass the Private Universities Act.
- 2. India must enact a Basic Law similar to the Grund Gesetz of Germany, specifying on a national level, a Frame Work for the structure of a university.
- We have at present a scheme of funding substantially five universities identified as institutions with a potential for excellence, to upgrade their P.G. Studies and Research. We must increase this

number to about thirty or more and enhance the support from its present level. These universities must also be enabled and required to make major changes in their management system including affiliating responsibilities.

- 4. We must aim at having atleast 2500 university level institutions by 2020 adopting the following steps:
 - The Centre and State Govts must set up on a planned basis more universities.
 - ii. Private universities must be encouraged to be established. A knowledgeable committee must work out the safeguards to ensure quality and healthy management.
 - iii. As many of the deserving colleges must be granted Deemed to be university status.
 - iv. As many of the deserving colleges must be given autonomy with a provision that they must quality for Deemed to be University status within a specified time.
 - v. In the case of colleges that do not qualify to become Deemed to be Universities or Autonomous Colleges by 2015, a five year scheme must be prepared to transform them into junior colleges offering job oriented Diploma and Advanced Diploma programmes after +2. The affiliating system must cease to exist after 2020. This long surviving anachronism must vanish from the Indian scene.
 - vi. The Government must, in all seriousness, draw up a plan and Programme of Action and allot necessary funds under the heading 'Reconstruction of Higher Education'. It is realized that the demand of funds for Universal Primary Education and Secondary Education would be high and compelling. At the same time it must be stressed that the highest of education for a few is as important and as fundamental in the modern

world as the basic education for all. One should not be pitted against the other while providing funds.

- vii. There are at the centre, a large number of autonomous bodies consisting of experts as members to guide the course of Higher Education in different fields of knowledge. They are:
 - University Grants Commission [U.G.C]
 - Indian Medical Council [IMC]
 - Indian Council for Medical Research [ICMR]
 - Indian Council for Agricultural Research [ICAR]
 - All India Council for Technical Education [AICTE]
 - National Council for Teacher Education [NCTE]
 - Others

We also have such accrediting bodies as NAAC: NBA and DEC. At the state level there is hardly any expert body and every issue is decided at the Secretariat which, in India today, has only a cluster of administrators who have all powers but no expertise in any professional field of knowledge. This is the single most weakness in our management system and must be remedied urgently.

It must be remembered that State Governments are closer to the Higher Education activity which is mainly in the state institutions. They are planned, funded and monitored by the State Governments. Unless there is an enlightened approach to, and efficient management of Higher Education in the States, any amount of effort on the part of the Central Government or centrally sponsored autonomous institutions listed earlier including additional funding will not help. In order to guide and counsel the State Governments in conformity with the Policies of the Government of India or

National Policies, we need one or more autonomous bodies of experts in the states. These bodies will also help the development of Academic Leaders, a community that we do not have. At present, we have outstanding academics – teachers and researchers of international standing – but no academic leaders of repute in the States whom the Government would approach and inevitably consult.

The State Council for Higher Education was contemplated for this purpose, but it has not taken off. A high power committee must be appointed to submit a report within a year for making the State Council more effective or for creating necessary mechanism consisting of competent professionals for planning, funding and guiding the State Government in all matters related to Higher Education both general and professional. This body must work in close collaboration with the National Autonomous Institutions.