CHAPTER – V
HIGHER EDUCATION SYSTEM IN INDIA

INTRODUCTION

While delivering the Convocation Address of the University of Allahabad, in 1947, India's first Prime Minister, Pt Jawaharlal Nehru had observed that:

"A University stands for humanism, for tolerance, for reason, for the adventure of ideas and for the search of truth. It stands for the onward march of the human race towards higher objectives. If the Universities discharge their duties adequately, then it is well with the nation and the people"

For achieving these objectives, Universities perform functions geared towards: Cultivating new knowledge, interpreting knowledge and pursuing truth; identifying the gifted youth and helping them develop right interests, attitudes and values; providing society with competent expertise in all the applied fields useful for society; promoting social equality and justice through diffusion of education; fostering in society the attitudes and values needed for developing the human personality. For achieving these objectives, the university has to encourage free and disinterested thinking, challenging vested interests and established ways and maintaining a balance between commitment in action and detachment in thought (Akhtar, 1998).

University is a home of learning and it is upon the standard and efficiency of teaching and the degree of capacity of these seats of higher knowledge that the standard and efficiency of the mental and moral acquisitions of the society depends. If India is to confront the confusion of our times, she must turn for guidance, not of those who are lost in the exigencies of the passion hour, but to her men of science, to her poets and artists, to her discoverers and inventors. These intellectual pioneers
of civilisation are to be found and trained in the universities, which are the sanctuaries of the inner life of the nation (Mukarjee, 1976). These intellectual pioneers of civilization are to be found and trained in the universities, which are the sanctuaries of the inner life of the nation. It is through education that we must obtain a sense of perspective, a synoptic vision and a co-ordinated view of the different items of knowledge. Education is not knowledge or information. It is, in fact, a training of mind and a training of spirit, it should aim at imparting both knowledge and wisdom.

In discharging their functions, our Universities have also to take care to guard the Indian society against the danger of ignoring the pre-eminent place of culture in the healthy development of the nation. In the pursuit of its socio-economic policies, the nation is sometimes apt to concentrate on the economic problems and is likely to forget the significance of cultural pre-requisites of a democratic way of life. Undoubtedly it is the primary function of the University to promote and transmit knowledge in all its branches and to help to create a vigorous and progressive class of experts and technicians in the several branches of knowledge. But while pursuing this important function, the Universities must also incessantly try to discharge their functions of promoting and transmitting the essential features of culture (Mukrejee, 1976).

5.1 HIGHER EDUCATION IN INDIA

In ancient India, there were big centres of higher education in Nalanda and Takshila in the North, Vallabhi in the west, Kanchi in the south, Nadia in the east, Vikramshila and Odantapuri in central India. Ujjain was famous as the seat of study of astronomy and veterinary sciences. The universities at Taxila and Nalanda were imparting spiritual skills and philosophy (Akhtar, 1998).

Upto, and in, Medieval period, universities were entirely theological institutions that were meant to maintain order and tradition. Even when there were great industrial changes and social activities were
transforming the societies, the universities remained insulated from these developments, in this period. During this period, major centres of higher education in India were at Delhi, Jaunpur, Lucknow, Allahabad, Ajmer, Rampur, Lahore, Banaras and Bidar and at these places the emphasis was on religious studies, philosophy, logic, traditional medicine and arts (Akhtar, 1998).

University education in India in the modern sense began in 1857 when the three 'Presidency' universities were set up at Calcutta, Bombay and Madras. The establishment of these universities has influenced the whole course of educational development in the country and, although a number of changes and reforms have been introduced in the educational system since 1857, the broad organizational pattern of university education remains more or less what it was a hundred years ago.

The British also announced their policy to transfer education to Indian control as a part of their system of diarchy in 1921. The two issues created a social and political consciousness for education and as such a search for a national system of education began. The crucial issues were (UNESCO, 1980):

- What should be the bases and goals of the national system of education?
- What is it which is undesirable in the British system of education that makes it unfit for India?

The Zakir Hussain Committee report (popularly known as the Wardha Report, 1937) is the first landmark in delineating the national educational goals and the value system to be generated by education. Some of their pace-setting decisions were: “Any scheme of education designed for Indians will in some respects radically differ from that adopted in the West, for unlike the West, the nation has adopted non-violence as the method of peace, for achieving all-round freedom. Our children will, therefore, need to be taught the superiority of non-violence over violence.”
The dawn of independence set the Indian minds thinking to get rid of the hangover of the British educational policies. The needs of the nationalist leaders were different from the erstwhile colonial masters who had structured the Indian education system so as to serve their own interests. Now the indigenous system of education was needed to take the new nation onto the path of self-reliance, economic and social development. Hence, the post-independence policies and programmes and their implementation was markedly different from the legacy of higher education left by the British (Aggarwal, 1984).

5.2 GOALS/ROLE OF HIGHER EDUCATION IN INDIA

That there has been over the years a good measure of interaction between the value and belief systems on the one hand and the educational policies on the other, is evident. The special emphasis on equality of opportunity in the educational system, which has remained a major goal, at least since independence, can be traced to the perception of the social and political forces in the country of the need to correct which the Education Commission called ‘a major weakness’ of the Indian society in the past, namely the lack of equality and social justice (Report of Education Commission, 1964-1966).

Value Belief System: This perception, along with other influences, had led to the declaration of equality as a major goal of the polity, and this has also influenced the goals and policies in education. Similarly, the emphasis on equal respect for all religions can be directly traced to the tradition of tolerance and acceptance of divergent religions, theologies and philosophies. As per the Indian Education Commission (1964-66), the expanding knowledge and the growing power which modernization places at the disposal of society must, therefore, be combined with strengthening and deepening of the sense of social responsibility and an appreciation of moral and spiritual values. The commission further pointed out that in an attempt to integrate these moral and spiritual values through education, we should draw freely upon our own traditions as well as traditions of other countries and cultures. The Indian educational planners are also
quite conscious of the role of education as an instrument for transforming society in desirable directions. With this end in view, the educational goals have emphasized the inculcation of certain values and attitudes, particularly in relation to work and to the application of science and technology, as they have considered that these are desirable changes needed by society to solve its problems and achieve its potential in future.

**Self-reliance** : Self-reliance is another major goal in Indian thinking which has arisen from past experience of and reaction against colonialism and foreign domination. The emphasis on scientific research and advanced training in various fields can be related to this goal.

**Individual Excellence** : At the same time, the pursuit of individual excellence has been a goal of Indian society since time immemorial. In fact, in our epics and ancient literature, there are many illustrations of individuals seeking after gurus so that they can perfect their knowledge from whatever sources available, and in seeking such knowledge they were willing to sacrifice all they had and to undergo many hardships. Austerity and simplicity in individual living was another major characteristic of Indian society which did not place emphasis on material acquisitions. However, with the large increase in population and poverty, has come to be realized that economic development is vital in order to provide a certain minimum standard of living to every individual.

**Education and Socio-economic Justice** : The constitution of India in the Preamble has promised to provide social, economic and political justice to the citizens. Education has been instrumental in creating awareness among the poor, weaker and the down-trodden to empower themselves. Higher education, on the other hand, teaches the dominant sections of the society about their responsibilities towards the weaker sections. Therefore, higher education has a unique role to play in the social economic and political development of the country.

**Role in Economic Development** : India has adopted the system of economic and social development through a system of five-year plans. The Fifth Five Year Plan (1974-79) declared : “Education plays a crucial role in
economic development and social modernization. As a key factor in production, it supplies the requisite number and quality of persons needed for various tasks and, by inculcating among the mass of the people appropriate attitudes, skills and personality traits, it creates the proper climate for development. By creating a well informed and educated citizenry, it ensures the effective working of the basic institutions on which the economic and social well-being of the country depends. Education also provides the individual with the major means for personal enrichment and social and economic advancement.

University Education Commission (1948-49) has given the objectives of higher education as; India is rich in natural resources and human potential, university should educate and train students to bring these two resources together and raise our living standards; Universities should produce leaders with intellectual analytical and imaginative insight; Intellectual adventure should be promoted; life has meaning, an integrated way of life leads to human betterment. No amount of factual information would make ordinary men into 'educated' men, unless something awakened in them, an innate ability to lead a higher life; Higher education should promote a new social order based on democracy, justice, liberty, equality and fraternity: and university education commission should aim at reconstruction of India. (Sharma, 1996).

According to the Indian Education Commission (1964-66) the universities have a crucial role to play in the life, welfare and strength of a nation. In the modern world, the functions of universities are to seek and cultivate new knowledge, to provide right kind of leadership in all walks of life, to provide society with competent men and women trained in all vocations, and professions, to strive to promote equality and social justice and to foster the attitudes and values needed for developing good life in individuals and society. Besides these functions the education commission stated that Indian universities would have to shoulder some special responsibilities. For instance, they must learn to serve as the conscience of nation, develop programmes of adult education and to that
end evolve a network of part-time and correspondence courses, to help the institutions in their attempts at qualitative self improvement and to strive to improve all-round standards by development of teaching and research, besides creating at least a few centres comparable to those in any other part of the world. These objectives were to be realised through well conceived and comprehensive planning spread over the next twenty years.

**National Policy on Education (1968)** formulated on the basis of the report of the Education Commission (1964-66), stated that a radical reconstruction of education is essential for economic and cultural development of the country, for national integration and for realizing the ideal of a socialistic pattern of society. This will involve a transformation of the system to relate it more closely to the life of the people. A continuous effort is required: (i) to expand educational opportunity; (ii) a sustained and intensive effort to raise the quality of education at all stages; (iii) an emphasis on the development of science and technology; (iv) and the cultivation of moral and social values. The educational system must produce young men and women of character and ability, committed to national service and development. Only then will education be able to play its vital role in promoting national progress, creating a sense of common citizenship and culture and strengthening national integration.

**National Policy Framework (1978)** on higher education states that university system has an important responsibility to the society as a whole as well as to the educational system itself. The significance of the traditional functions, of acquisition, preservation, dissemination and extension of the frontier of knowledge, the balanced education of individuals, and the training of high level personnel for all walks of life is obvious, but a modern university, especially in a developing country like ours, has to undertake several other functions also (Aggarwal, 1984).

**National Policy on Education (1986)**, stated that higher education is to provide people with an opportunity to reflect on the critical social, economic, cultural, moral and spiritual issues facing humanity. It
contributes to national development through dissemination of specialized knowledge and skills. It is, therefore, a crucial factor for survival. The national strategy of education has to ensure the availability of highly educated, trained, and motivated manpower for dealing with the challenges which are inherent in the modernization and globalization of the economy. India has to be able to compete with the most advanced countries in many fields of production to hold its own. The National policy requires the system of higher education to be socially relevant in terms of the major goals of development, national integration and equity (Clark 1992).

According to the University Grant Commission itself, a University has to: serve as the conscience of the nation and, from this point of view, it should encourage individuality, variety and dissent within a climate of tolerance; Inculcate and promote basic human values and the capacity to choose between alternate value system; preserve and foster our great cultural traditions and blend them with essential elements from other cultures and people; promote a rational outlook and scientific temper; enrich the national languages and promote their use as important means of communication and for national development and unity; promote the development of the total personality of students and inculcate a commitment towards society through involvement in national service programmes; act as an objective critic of society and assist in the formulation of national objectives and programmes for their realization; Promote commitment of the pursuit of excellence; promote the development of science and technology and of an indigenous capability to apply it effectively with special emphasis on national problems; contribute to the improvement of the entire educational system so as to subserve the community; shake off heavy load of their early tradition which gives a prominent place to examinations and strive to improve standards all-around by a symbiotic development of teaching and research; create at least a few centres which would be comparable to those of their type in any other part of the world and thus help to bring back the ‘Centre of gravity’ of the academic life within the country itself (Akhtar, 1998).
Report of Justice **Punniya Committee (UGC, 1992-93)** broadly put the role of higher education as under:

(i) as an essential input for meeting the manpower requirements for important and crucial areas of national development and for the integral part of national effort at human resource development.

(ii) as a critical input to ensure social justice and equity for providing upward mobility and access to higher levels of economic and social activities for the weaker sections; and

(iii) as an important input for improving the quality of life by making higher levels of knowledge available to a wider base of population and for preserving our cultural heritage.

The report further states that in view of this context the role of higher education will continue to be a very important element of national endeavour and will fully justify support and intervention by the state to quality higher education to meet contemporary social needs and demands. Now this can also be an ideal recipe for a vast country like India with its own characteristic circumstances.

### 5.3 DEVELOPMENT OF HIGHER EDUCATION

#### 5.3 (i) Policies & Programmes

The Planning Commission and the central government do the planning of higher education by fixing the priority of allocation to higher education vis-a-vis other sectors both in the Five-years Plans and in the Annual plan. The Department of Education in the Ministry of Human Resource Development may issue regulations in consultations with the UGC under the UGC Act of 1956. The regulations have statutory force and play a significant role in setting the pace and direction of the activities in higher education. The UGC provide grants and funds to universities and colleges, for a number of projects, programs, schemes, and goals set by central agencies including the commission. Selective funding is effective in transmitting goals and obtaining compliance. Direct intervention of the UGC involves expert visiting committees to review
progress of the university, examine the five-year plan prepared and programs proposed by the university, and to make appropriate recommendations. State governments also monitor progress when making grants to universities and colleges. Meetings of the Coordination Committees and the Committee of Vice-Chancellors provide an opportunity to check the progress of various programs and schemes taken up by the universities in the light of goals set by central agencies and state governments (Clark 1992).

After independence the first action of a great significance to be taken by the Government of India in the field of higher education was the appointment of the University Education Commission (1948-49) under the Chairmanship of Dr. S. Radhakrishnan. The report of the Commission is document of great importance as it has guided the development of university education in India since independence. The Commission was appointed by the Government of India to report on Indian University Education and suggest improvements and extensions that may be desirable to suit present and future requirements of the country (Aggarwal, 1984).

Major Recommendations of University Education Commission (1948-49) were to teach that life has a meaning. To awaken the innate ability to live the life of soul by developing wisdom. To acquaint with the social philosophy which should govern all our institutions, educational as well as economic and political. To train for democracy. To train for self-development. To develop certain values like fearlessness of mind, strength of conscience and integrity of purpose. To acquaint with cultural heritage for its regeneration. To enable to know that education is a life long process. To develop understanding of the present as well as of the past. To import vocational and professional training. In regard to teacher training and standard of teaching the recommendations were made that there should be four classes of teachers Professors, Readers, Lecturers and Instructors. Promotion from one category to another to be solely on grounds of merit. Standard of teaching. The standard of admission to the
university course should correspond to that of the intermediate examination i.e. after the completion of 12 years of study at a school and in the intermediate college. To avoid overcrowding at universities and colleges, the maximum number in the arts and science faculties of a teaching university be fixed at 3,000 and in affiliated college at 1,500. The number of working days be substantially increased to ensure a minimum of 180 in the year, exclusive of examination days. Professional training and research (a) A Ph.D student should not become a narrow specialist, but his grasp of his subject should be characterized both by breadth and depth. (b) University teachers should give the community punctuality, efficiency and devotion to duty in relation to their teaching work, and new ideas and newer methods in relation to their research work.

The **Indian Education Commission (1964-66)** recommended the 10+2+3 pattern, that is 10 years of general education. 2 years of higher secondary education when students would bifurcate into vocational and academic streams, followed by a degree course of 3 years' duration. This structure was reaffirmed by the National Policy of Education of (1968) and is generally followed.

Major recommendations of the Commission were: **Education and national objectives**: The most important and urgent reform needed in education is to transform it, to endeavour to relate it to the life, needs and aspirations of the people and thereby make it a powerful instrument of social, economic and cultural transformation necessary for the realization of the national goals. For this purpose, education should be developed so as to increase productivity, achieve social and national integration, accelerate the process of modernization and cultivate social, moral and spiritual values. **Stress on Science Education**: Education must become an integral part of school education and ultimately some study of science should become a part of all courses in the humanities and social sciences at the university stage. We pay great emphasis on making science an important element in the school curriculum. We, therefore, recommend that science and mathematics should be taught on a compulsory basis to
all pupils as a part of general education during the first ten years of schooling. Every primary school should have a science corner or a room to keep specimens, models and charts with the necessary storage facilities. A minimum of one laboratory-cum-lecture room should be provided in every higher primary school. **Vocationalization**: Another programme which can bring education into closer relationship with productivity is to give a strong vocational bias to secondary education and to increase the emphasis on agricultural and technological education at the university stage. **Social and National Service**: Social and national service should be made an integral part of education at all stages.

**NPE 1968** gave special reference for university education to formulate the policies for its development in which, the number of whole-time students to be admitted to a college or university department should be determined with reference to the laboratory, library and other facilities and strength of the staff. Considerable care is needed in establishing new universities. They should be started only after an adequate provision of funds has been made for the purpose and due care has been taken to ensure proper standards. Special attention should be given to the organization of post-graduate courses and to the improvement of standards of training and research at this level. Centres of advanced study should be strengthened and a small number of 'clusters of centres' aiming at the highest possible standards in research and training should be established. There is need to give increased support to research in universities. The institutions for research should, as far as possible, function within the fold of universities or in intimate association with them.

In 1978 a policy frame was drafted to look upon the development of higher education in India. The Policy Frame prepared by the University Grants Commission outlines the basic philosophy and strategies for development of universities and colleges with a view to fulfilling its statutory obligation for improvement of standards of higher education and research in the university system. The policy framework suggested
adoption of measures which would reduce pressure on the university system, such as effective vocationalization at secondary stage; delinking most of the jobs from degrees, and changing the present recruitment policies which virtually make a degree minimum qualification for any good job; exercising great restraint in the establishment of new institutions, on sound academic considerations and adequate resources; adopting a policy of selective admissions to full-time institutions of higher education at first degree and post-graduate levels on the basis of merit with reservation of at least half the seats for weaker sections; enabling talented but economically weaker students to pursue their studies on a whole-time basis by ensuring full cost of their education through appropriate bursaries, for which funds may be raised from public and private bodies; providing facilities for expansion of higher education through channels of non-formal education such as correspondence courses; and opening board and university examinations to private candidates to encourage self-study.

National Policy on Education (1986), states that in higher education in general and technical education in particular, steps will be taken to facilitate inter-regional mobility by providing equal access to every Indian of requisite merit, regardless of his origin. The universal character of universities and other institutions of higher education is to be underscored. In the areas of research and development, and science and technology, special measures will be taken to establish network arrangements between different institutions in the country to pool their resources and participate in projects of national importance. The institutions which will be strengthened to play an important role in giving shape to the National System of Education are the University Grants Commission, the All India Council of Technical Education, the Indian Council of Agricultural Research and the Indian Medical Council. Integrated planning will be instituted among all these bodies so as to establish functional linkages and reinforce programmes of research and postgraduate education. These, together with the National Council of Educational Research and Training, the National Institute of Educational
Planning and Administration and the International Institute of Science and Technology Education will be involved in implementing the Education Policy.

Further the NPE (1986) stressed higher education should respond to the critical social, economical, cultural, moral and spiritual issues facing humanity at large. In the context of the unprecedented explosion of knowledge, higher education has to become dynamic as never before, constantly entering uncharted areas. In view of mixed experiences with the system of affiliation, autonomous colleges will be helped to develop in large numbers until the affiliating system is replaced by a freer and more creative association of universities with colleges. State level planning and coordination of higher education would be done through councils of higher education. Courses and programmes was to be redesigned to meet the demands of specialisation better. Special emphasis was laid on linguistic competence and flexibility in the combination of courses. Audio-visual aids and electronic equipment was introduced, development of sciences and technology curricula and material, research, and teacher orientation received attention. Research in the universities would be provided enhanced support and steps will be taken to ensure its high quality. In the interest of greater coordination and consistency in policy, sharing of facilities and developing inter-disciplinary research, a national body covering higher education in general, agricultural, medical, technical, legal and other professional fields was set up. De-linking was applied in services for which a university degree need not be a necessary qualification. Concomitant with de-linking, an appropriate machinery, such as a National Testing Service, was established.

5.3. (ii) Expansion of Higher Education During Five-Year Plans

Since its inception in 1951, the National Planning Commission has become a powerful agency for developing a national system of education. Its Five-Year Plans have decided the priorities and points of emphasis for the expansion and improvement of facilities at different stages of education. For instance, the grants made by the Central government have
accelerated the expansion of schemes of higher education and the introduction of the three-year degree course scheme in the universities. Again, they have greatly enlarged the scope of technical education, have helped the States to expand facilities for women's education, to popularize science education at all levels of teaching. With financial assistance from the Central government, it has been possible to work out systematic and comprehensive schemes of educational development on all India basis and implement them in an organized manner to the extent that available resources permitted.

First Five-Year Plan (1951-52 to 1955-56) stated that the problem of re-organization of university education is really three-fold; the reform of the existing system to enable it to yield the best results it is capable of yielding, the building up of a new system (or systems) more suited to our national needs and the working out relationship of various systems, while they exist side by side. In spite of their grave defects, the existing universities are the only repositories we have of the tradition of organized knowledge and the course of wisdom is to improve their working while attempt to build a system or systems better suited to our needs are made. Another very important problem is the serious overcrowding in most of the colleges, which makes individual attention, so necessary at this stages, simply impossible. We must develop and apply selective tests on a large scale so that nobody is allowed to go up for higher education who is not fit to profit by it.

Second Five-Year Plan (1956-57 to 1960-61) observed that during recent years the rapid increase in the number of students in universities and colleges has affected the standards of education. At the end of the First Plan the total enrolment was estimated to be 720,000 as compared to 420,000 five years ago. The total provision for university education in the Second Five Year Plan was about Rs. 57 crores, of which Rs. 22.5 crores were provided in the State plans and Rs. 34.4 crores at the Centre, the latter provision including an allotment of Rs. 27 crores for the University Grants Commission. The greater part of the expenditure would
be on consolidation and increased provision for technical and scientific education in the universities. In addition to this the programme of technical education provided Rs. 13 crores for engineering and technology at the university and higher stages and Rs. 10 crores for scholarships. Further, Rs. 4.6 crores were provided for agriculture education and Rs. 10 crores for health education at the university and higher stages under programmes in these fields, besides Rs. 20 crores were provided for scientific and industrial research in the programme of the Council of Scientific and Industrial Research and other associated programmes.

Higher Rural Education: the Ministry of Education proposed to establish 10 Rural Institutes in the Second Five Year Plan and made a provision of Rs. 2 crores for this purpose. For locating these institutes, leading centres already engaged in rural work were selected. For following up the programme the Central Government constituted a Council for Rural Higher Education.

**Third Five-Year Plan** (1961-62 to 1965-66) statement observed that with the expanding base at the elementary and secondary education, the demand for higher education had greatly increased over the past decade. The number of universities had increased from 27 in 1950-51 to 32 in 1955-56 and to 46 in 1960-61, and about a dozen more universities were likely to be added during the Third Plan. The number of colleges (exclusive of intermediate colleges) rose from 772 in 1955-56 to 1,050 in 1960-61. During the Third Plan about 70 to 80 colleges were added every year. The rapid expansion in the number of universities and colleges in recent years had led to a number of problems. These had been reviewed in the report of the UGC for 1959-60. The Commission had stressed that if deterioration is to be avoided, increase in the number of students should be accompanied by corresponding expansion of physical and other teaching facilities. In the Third Plan larger facilities were being provided for diverting students to vocational and technological education.

**Fourth Five-Year Plan** (1969-70 to 1973-74) and higher education: The additional enrolment in the Fourth Plan was estimated to be about
one million. Of this, 0.15 million students were to be provided education through correspondence courses, evening colleges and part-time classes. During the Fourth Plan, the main emphasis was on consolidation and improvement of higher education through the strengthening of staff and library and laboratory facilities. Postgraduate courses occupied a key position in the university system. Facilities for postgraduate education and research was increased and their quality improved... The Indian Council of Social Science Research had been established to promote research in social science.

In the **Fifth Five-Year Plan** (1974-79) again the main emphasis in university education was on consolidation and improvement. Provision was, made to provide additional educational facilities to weaker sections of society and in the backward areas. Facilities through evening colleges, correspondence courses and private study were expanded. Postgraduate education and research continued to be strengthened through the development of centres of advanced study, science service centres, common computer facilities and regional instrumentation workshops. Programmes of faculty development, like summer institutes, seminars and orientation courses were stepped up.

During the **Sixth Five-Year Plan** (1980-85) emphasis was to guarantee to all equality of opportunity for education for improving the quality of life and their participation in the tasks for promoting general well-being of the society. To afford to all young people and adults, irrespective of age, the means for ample self-fulfillment within the framework of harmonious development which reflects the needs of the community to which they belong. To provide for a continuous process of life-long education for physical, intellectual and cultural development of people and for inculcating in them capabilities to cope with and influence social change. To establish dynamic and beneficial linkages between education, employment and development with due regard for the economic and social aims of the community. To promote respect for, and
belief in values of national integration, secularism, democracy and dignity of labour.

**Seventh Five-Years Plan (1985-90)**: During the Seventh Plan, the Commission provided Rs. 133 crore, which is 23 percent of its total plan expenditure for research and development. Co-operative research facilities have been established by UGC in high priority areas through the Inter-University Centres and steps were under way to establish two more Centres. Active participation of universities in industrial research had not materialised on a large scale. However, some universities had established effective linkages with industry. UGC is supporting 111 departments so far under the scheme of "Strengthening of Infrastructure in Science & Technology" (COSIST). One of the pre-conditions for support under the scheme is that the grant getting departments should change over to a method of teaching more conducive to students learning and creativity and adopt new procedures for experimental work, project and field work. This was expected to sensitise Postgraduate students to research methodology and training. Since 1984 the Commission has been conducting national level tests for selection of Junior Research Fellows (JRFs). For Science subjects such tests are organised in collaboration with CSIR. The Memorandum of Understanding (MOU), signed between UGC and CSIR in 1991, provides scientists in universities access to the research facilities in CSIR and vice-versa. The seventh Five-year plan (1985-90) envisaged a growth rate of 4 percent in student enrolment and in the number of institutions of higher education. A developing country like India-or for that matter any country-can ill afford waste in terms of human resources. There is, therefore, a dire need for creating a framework and programme of action to reduce the degree of mismatch between higher education and man-power needs of the country. With the view to raise the level of the professional competence of the faculty, 48 Academic Staff Colleges (ASC) have been set up during the Seventh Plan for organising orientation programmes for newly appointed teachers.
Eighth Five-Year Plan (1990-95) observed that the inferior quality of undergraduate education has automatically lead to poor performance of the university system both in regard to its teaching and research programmes. The Working Group on Higher Education for the Eighth Plan (1990-95) has recognized the need to identify a minimum of 100 colleges in the first instance with a view to upgrade them as colleges of excellence wherein quality of education can be monitored under controlled conditions.

Ninth Five-Year Plan (1997 - 2002) and higher education: the Ninth Five-Year plan was being launched in the 50th year of independence when the country is in the process of major economic and technological changes based on the policy of liberalisation and privatisation and at the same time, emphasis in policies was laid on rural development and the reduction of poverty in the ninth plan of the country. To be able to perform their roles and functions, higher education institutions will have to reflect on their own current structures and their ability to function with efficiency and effectiveness as autonomous organisations. The priorities of in the ninth plan were; Relevance and Quality of Education; Access and Equity; University and Social change; Adult continuing education and Outreach; Women's Studies; Management of Education; Finance: to improve the infrastructure facilities in the university so as to achieve at least the threshold level for those who have not reached it. This scheme is an important programme of the UGC of improving the standard of higher education in the country. The UGC provides general development assistance to all eligible Central universities, Deemed universities, and State universities which are included under section 2(f) and 12 (B) of the UGC Act, within the framework of norms and broad outlays specified by the UGC. Two-thirds of the outlay would be released based on the procedure indicated. However, one third of the outlay will be finally decided on the basis of performance of the individual university which would be evaluated on the basis of the performance appraisal performa filled by the universities.
The Commission had also suggested that the question of delinking degrees from jobs should be considered by the Central Government on the basis of educational requirements of the various occupations and the in-service training facilities available in these occupations. While this was a matter for the central government to examine and while universities hardly had any control over the socio-economic imperatives of development and the situation in the job market, the Conference considered specific measures for establishing a better fit between education and manpower needs, and between expansion, equality of opportunity and maintenance of standards.

**Rural Institutes**: According to Committee on Rural Higher Education 1967-69 the aims of rural education were to provide courses in higher education specially suited to rural needs; and short courses of varying duration in certain fields of special relevance to the rural population. To undertake problem-oriented research in the fields in which the rural institutes provide courses of study. To serve the rural community through extension education by the application of scientific knowledge and techniques to the rural problems (Aggarwal, 1984).

A supplement to the existing pattern of institutions of higher education in urban areas, Government have assisted in the establishment of eleven 'Rural Institutes' at the post-Secondary level on the recommendation of a Rural Higher Education Committee which was appointed in 1954. Their aim is to encourage the development of a type of higher education that will be purposefully related to the needs of the rural areas. In these Institutes several new types of courses have been initiated - a three-year diploma course in rural services, a two-year certificate course in agricultural sciences, a three-year certificate course in civil and rural engineering, a one-year sanitary inspector's course and a one-year preparatory course to initiate matriculates into the three-year diploma course in technical fields.

According to National Policy on Education 1986 the new pattern of the Rural University was consolidated and developed on the lines of...
Mahatma Gandhi's revolutionary ideas on education so as to take up the challenges of micro-planning at grass root levels for the transformation of rural areas. Institutions and programmes of Gandhian basic education was supported.

5.3 (iii) Current Status of Higher Education

As per the latest edition of Universities Hand Book Published by Association of Indian University (January 2002) the National Policy on Education (1986) characterises higher education as a 'crucial factor for survival' providing the Indian people with "an opportunity to reflect on the critical, social, economic, cultural, moral and spiritual issues." This characterisation also adequately defines the concerns of the Association of Indian Universities. Based on the recommendations of various commission and committees set up by the government of India from time to time i.e. University Education Commission (1948-49), Indian Education Commission (1964-66), National Education Policy (1968), National Policy Framework (1978), National Policy of Education (1986), UGC Reports for restructuring and consolidation of higher education system. The existing system of higher education has been given in the following paragraphs.

Structure of Higher Education: Higher education includes the education imparted after the 10+2 stage – ten years of primary and secondary education followed by two years of higher secondary education. The first degree, the bachelor's degrees, is obtained after three years' study in the case of liberal arts, and four years in the case of most professional degrees (four and half in case of medicine and five/six in case of law). The Master’s programme is usually of two years' duration. The research degrees (M.Phil and Ph.D) take variable time depending upon the individual student. The postgraduate degree programmes except engineering involve 2 to 3 years of study after first degree. The M.Tech programme however, has been restructured and involves 3-semester duration. MD. MS. and MDS courses take 2 years after MBBS/BDs. The M.Phill programme, is of one-and-half year duration. It is a preparatory
programme for doctoral level studies. Ph.D programme is research study for 2 years, while DSc and DLit are awarded by some universities after PhD for original contributions. In addition to the degree courses, a number of diploma and certificate courses are also available in universities. Their range is wide and they cover anything from poetics to computers. Some of them are undergraduate diploma courses and others postgraduate courses. The duration varies from one year to three years (Association of Indian Universities, Report, January, 2002).

**Indian Universities**: At present there are 273 university-level institutions in India (including 52 deemed universities). Of these, 162 are traditional universities (including 34 institutions for specialised studies in disciplines) while the others are professional/technical institutions. Of these, 40 provide education in agriculture (including forestry, dairy, fisheries, and veterinary science), 18 in medicine, 33 in engineering and technology, 3 in information technology, 1 in journalism, 6 in law and 10 are open universities. Specialised institutions include: Sanskrit universities (9), women’s universities (5), population sciences (6), regional languages (7), music and fine arts (3), statistics and yoga (one each).

**Types of Universities**: The Indian universities are basically unitary and affiliating. The unitary universities are confined to a single campus and have provision for both postgraduate and undergraduate instruction, and also have a strong emphasis on research. Affiliating universities generally have a central campus which has departments or schools that impart post-graduate instructions and conduct research. They also have a variable number of colleges affiliated to them and these may be distributed over a number of districts, in accordance with the jurisdiction of the university. In addition, there are two other types of university level institutions- 'Deemed-to-be' Universities and Institutions of National Importance. Deemed-to-be Universities (also referred to as Deemed Universities) are institutions that are conferred the status of a university by virtue of their long tradition of teaching, or specialisation and excellence in a particular area of knowledge. The institutions of
Colleges: There are four types of colleges: government colleges, privately-managed colleges, university colleges, and professional colleges. The government colleges are few, only about 15 to 20 percent of the total. They are managed by the state government concerned, and the teachers therein enjoy the privileges of government servants. However, as in the case of other colleges, the university to which these colleges are affiliated conducts their examinations, lays down the courses of studies, and awards the degrees. The professional colleges are mostly in the disciplines of medicine, engineering and management. There are a few other disciplines too. They are sponsored and managed, some by the government and some by private initiative. In the States of Karnataka, Maharashtra, Andhra Pradesh and Tamil Nadu, there has been a phenomenal increase in colleges. They do not get any funds from the State and, in almost all cases, have been charging heavy fees covering capital cost, running cost and much else. A recent Supreme Court Judgement has laid down a number of guidelines for admissions and fees charged by such colleges. In 1988-99 the faculty-wise distribution of colleges was: arts, science and commerce, 7494; engineering/technology, 565; medicine (including pharmacy, ayurveda, unani, homoeopathic, and nursing), 785; management institutions 350; teachers training and physical education 818; in addition to agriculture/veterinary science, law, music/fine arts, hotel management, computer science/information technology, etc. Upto 1999-2000, there were 11,831 colleges including 1520 women’s colleges.

The National Policy on Education, 1986, advocates autonomy for colleges (and also university departments) with the objective of bringing about decentralisation of academic administration and promoting
innovation and higher standards. This autonomy relates to the framing of courses, conduct of examinations, innovations in pedagogy and admissions. The number of such autonomous colleges was 131 at the end of March, 2000 (Association of Indian Universities, Report, January, 2002).

Enrolment: According to Rao (2000), at the beginning of the year 1998-99, the total student enrolment in universities and colleges was 70.78 lakhs. The enrolment in the University Departments was 11.69 lakh and that in the affiliated colleges was 59.09 lakhs. Eighty per cent of the total enrolment was concentrated in the three faculties of Arts, Science and Commerce while the remaining 20 per cent was absorbed by the professional faculties like Law, Engineering/Technology, Medicine, Education, Agriculture and Veterinary Science, etc. The total enrolment of students as per AIU Report (2002) is 77,33,612 including 27,41,612 women students.

Educational Programmes: The educational programmes generally involve study of a fixed number of course with little flexibility, at least at the Bachelor's level. In the case of the liberal arts, a student usually takes four subjects in the first year, three in the second, and one (Honours degree) or three (General or Pass degree) in the third. There may be restrictions on the subjects that can be chosen. For example, subjects of the science stream cannot be taken with those of arts and humanities (exception Mathematics and Geography), and within the science programme it is usually not permissible to take Mathematics and Physics with Botany or Zoology. The professional courses (except Medicine) follow the semester pattern.

Admission: Admission in non-professional colleges is usually not difficult, except in the case of some selected colleges in metropolitan towns where there is strong competition. At the postgraduate level, admission is restricted and only the better students can get admission. Certain institutions, because of their reputation, are more sought after than others. In a recent development, some universities have started their
own tests for admission to postgraduate classes. Admission to M.Phil courses, which were started in the 70s, as pre-PhD courses, is competitive. For the M.Phil there is a good deal of emphasis on course work, though a dissertation is also required. Students are admitted to Ph.D courses on satisfying their supervisors as regards their competence and genuine interest. The admission is approved by the board of studies, in some cases on the recommendation of a Research Degree Committee. During the last decade there has been a considerable spurt in Ph.D admissions, mainly because Ph.D/M.Phil was made the minimum qualification for appointment as lecturer or for further promotion. Now some universities e.g. Panjab University, Chandigarh has started entrance test for Ph.D as well.

**Academic Year**: The academic year usually begins in June or July and ends in March or April. Institutions located in mountainous areas (about one or two percent of the total) follow a different schedule, beginning in March and going on to December. In most universities which follow an annual examination pattern the academic year is divided into three terms. A few universities follow the semester system. There is no organised system of teaching during Summer Vacations. The accepted norm is that of 180 actual teaching days during the academic year, but it is not always attained.

**Examination System**: In case of universities, following the annual pattern, an end-of-year examination is held between March and May and the results are declared about two months later. Supplementary, examinations are held in October or November. Universities following the semester-system have examinations in November-December and March-April. Most examinations are conducted by the universities; however, with a view to decentralisation and to reduce the responsibility of the university, some affiliating universities have reduced the number of university examinations for a degree. For example, at the Bachelor's level in the liberal arts, the examination at the end of the First Year may be conducted by the college, and the ones at the end of the Second and Third
Year by the university. Centralised evaluation has also been adopted by some universities to save time in the evaluation of scripts. Internal assessment of the work done by the student throughout the year carries 10 to 25 percent of the total marks at the undergraduate level, and 20 to 40 percent at the postgraduate level in some universities. The engineering, medicine and management institutions have generally adopted the internal assessment system completely, including letter grades and credit point system.

Medium of Instruction: In case of the professional courses, and subjects in the science faculty, the medium of instruction is almost exclusively English. In the Arts, Humanities, Social Sciences and Commerce faculties it is both English and the regional language. At the postgraduate level instructions are usually in English. However, in some courses regional languages are being allowed.

Distance Education: Correspondence education was started in Indian universities in 1962. In 1982 the first open university was established at Hyderabad in Andhra Pradesh, and in 1985 the Indira Gandhi National Open University (IGNOU) was established at Delhi. Other open universities have since been set up in the States of Rajasthan, Maharashtra, Bihar, Gujarat, Uttar Pradesh, Madhyas Pradesh Karnataka and West Bengal. Correspondence Course Institutes for the benefit of part-time or working students, exist in 74 universities including 10 open universities.

5.4 ADMINISTRATION AND FINANCING OF HIGHER EDUCATION

5.4 (i) Administration: Role of Centre/State Governments

In Indian Constitution the state power has been divided between the Centre (Union) and the States (Units). Three lists have been made. The first list (Union List) contains 97 items over which the centre alone has legislative jurisdiction. List II (State List) contains 66 items over which the states have exclusive legislative jurisdiction. List III or the Concurrent List contains 47 items over each of which both the centre and the states can
exercise their legislative jurisdiction. However, where there is a conflict of laws in this 'Concurrent field' the laws made by the Union prevail over those promulgated by the states. The relevant entries in so far as 'education' is concerned are as follows:

**List 1 (Union List)**

Entry 64: Institutions for scientific or technical education financed by the Government of India wholly or in part and declared by Parliament by law to be institutions of national importance.

Entry 65: Union agencies and institutions for:

(a) professional, vocational or technical training, including the training of police officers; or

(b) the promotion of special studies of research; or

(c) scientific or technical assistance in the investigation or detection of crime.

Entry 66: Coordination and determination of standards in institutions for higher education or research and scientific and technical institutions.

**List II (State List)**

Entry 11: Education including universities subject to the provisions of entries 63, 64, 65 and 66 of List I and entry 25 of List III.

Entry 32: Incorporation, regulation and winding up of corporations, other than those specified in List I, and universities; unincorporated trading, literary, scientific, religious and other societies and associations; cooperative societies.

**List III (Concurrent List)**

Entry 20: Economic and social planning.

Entry 25: Education, including technical education, medical education and universities, subject to the provisions of entries 63, 64, 65 and 66 of List I: Vocational and technical training of labour.
Broadly speaking, education as such has been left to the jurisdiction of the states, but the centre has also assumed powers for certain aspects of higher education as given in the Union List.

An important responsibility of the Central Government is to help evolve National Policy in Education and advise the State Governments in their educational programmes. The Ministry of Human Resources Development through the Department of Education performs the following functions: Planning: The MHRD determines targets and prepares the educational plans to be implemented by the country as a whole: Educational Reforms: Whenever it is felt that reforms are necessary in the system of education, the Central Government set up commissions to study the problems at various levels and to provide recommendations and suggestions. The State governments are then requested to implement the recommendations after they are further considered by the experts. Organisations: The Central Government has set up institutions like the NCERT, UGC and the like to provide guidance to the States to carry out educational plans and programmes: Direction: The Central government also directs and guides the State Governments, local bodies, voluntary organisations and private bodies so as to encourage education on right lines: Equality of Opportunity: the Central government takes steps to provide equal educational opportunities to weaker, minority, disadvantaged and disabled sections of the society. It sponsors various schemes and projects from time to time for this purpose. Keeping liaison with international agencies like UNESCO, UNICEF, World Bank etc. is also the responsibility of centre government.

The important responsibilities of the state government are providing higher education to all persons; opening colleges and training institutions; framing the curriculum and syllabus; appointment of teachers and supervisory staff; providing financial aids to universities and colleges; holding examinations etc.
5.4 (ii) Administrative Bodies of Higher Education

In order to discharge its functions with efficiency and due regard to national needs and aspirations, the central government has set up a number of advisory bodies which deal with different sectors of education. The most important of these is the Central Advisory Board of Education (CABE) with the Union Education Minister as its Chairman, and the State Ministers of Education and a number of educational experts in various fields, as members. Its advice is sought in all vital problems concerning the educational policy of the country. Until 1949, it was the only body which considered national problems in education and tendered advice to Central and State Governments. In the post-Independence period, however, the volume of educational activity has increased to such an extent that it was felt desirable to constitute a number of other advisory bodies to deal with different stages and sectors of education – for example, education at the elementary, secondary and higher levels; education of girls and women; basic, technical, vocational and special education; education in rural areas etc.

University Grants Commission: The establishment of the UGC through an Act of Parliament in 1956 was the first major legislative measure initiated by the Government of India (GOI) under the constitutional provision reserving to it the powers for coordination and determination of standards in universities. UGC is the apex body in the field of higher education. The primary responsibility of the Commission is to promote and coordinate university education in the country and to ensure that the standards are maintained in teaching, research and examinations. In performing these functions, the UGC allocates and disburses grants placed at its disposal by the Central Government to the Universities, after an assessment of their needs. The Commission provides the development and maintenance grants to universities established under the Acts of Parliament and only development grants to those established by state legislatures.
The major initiatives taken by the UGC in improving the quality and standards of higher education are:

- Improvements in the quality and standards of teaching, examinations and research through programmes like setting up Centres of Advanced Study and Research, improvements in college teaching, strengthening research and infrastructure, etc.

- Periodic review and renewal of curricular content of courses in various disciplines and special schemes for introduction of emerging areas of education and training.

- Establishment of common facilities for research networking of resources for information and documentation.

- Induction of electronic media in higher education.

**All India Council for Technical Education (AICTE)**: The AICTE was set up in 1948 as an advisory body to assist the Central Government in the planning and development of technical education at the post-Secondary level. Education in engineering and technology, architecture, management and pharmacy is within the purview of the AICTE. In 1988, the ACITE was constituted as a statutory body under an Act of parliament.

The major function of the AICTE is the planned and coordinated development of technical education in the country. In the performance of its functions, the AICTE works in close coordination with the UGC as far as technical education programmes offered by the universities are concerned.

The AICTE coordinates and supports the development of engineering colleges, management education institutions and polytechnics engaged in the training of technicians. Development support is provided by the AICTE to universities (through the UGC) and engineering colleges and polytechnics for their expansion, as also for improvements in their quality and standards.
Among the major programmes supported by the AICTE are review and renewal of the curriculum for the education and training of engineers and technicians. Modernisation of the laboratories and workshops, removal of obsolescence, establishment of community polytechnics, technology forecasting, manpower planning, training of teachers, preparation of norms and standards for programmes of education and training in various disciplines at different levels, and extending the benefits of technical and training to the backward and rural areas.

A significant feature in the development of technical education in the last two decades or so is the emergence of "self-financing" institutions in the private sector which do not depend on government grants, but recover their costs from students in the form of fees. Some of these institutions had their origin in what was then known as "capitation fee" institutions which were set up by private agencies in response to the increasing social demand for professional and technical education, especially in medicine and engineering. Most of them were charging exorbitant fees, and the facilities provided, in many cases, were much below the essential requirements. The Central and State Governments discourage this trend, and legislative measures are being envisaged to regulate the levels of fees that could be charged. There have also been legislated, and the Supreme Court, dealing with a number of cases on the subject, has directed that the Government and its agencies should lay down the principles on the basis of which institutions could levy fees.

National Council for Teacher Education: The National Council for Teacher Education (NCTE) was set up in 1973 by a Government Resolution as a national expert body to advise Central and State Governments on all matter pertaining to teacher education. The Council was made a statutory body by an Act of Parliament in 1993.

The primary function of the Council is to ensure planned and coordinated development of teacher education and determination and maintenance of its standards. For the performance of this function, the Council lays down norms for specified categories of courses and
guidelines for granting recognition to teacher training programmes offered by various institutions, including universities and colleges.

**Association of Indian Universities**: The Association of Indian Universities (AIU) is a voluntary organisation of Indian universities and is registered under the Societies Registration Act. It coordinates the polices and activities of the universities considering the nation as a whole as unit of analysis. All the universities and other equivalent institutions of higher education are members of AIU. It is a forum for university administrators and academics to come together to exchange views and to discuss matters of common concern. It acts as a bureau of information in Higher Education and brings out a number of useful publications, research papers and weekly journal known as *University News*. The AIU is substantially financed from the annual subscription of the member universities, The Government of India sanctions grants for meeting a part of the maintenance and development expenditure including the Research Cell set up to undertake research activities concerning the university system. The Research Cell undertakes various activities including research studies, workshops, training programmes, question banks, tournaments and data-base, etc.

**National Council of Rural Institutes**: The National Council of Rural Institutes (NCRI) was set up on 19 October 1995 at Hyderabad with the following aims and objectives to:

(i) promote rural higher education on the lines of Mahatma Gandhi’s ideas on education so as to take up challenges of micro planning for transformation of rural areas:

(ii) consolidate network and develop institutions engaged in programmes of Gandhian Basic Education and Nai Talim:

(iv) encourage other educational institutions and voluntary agencies to develop in accordance with the Gandhian philosophy of education.

(v) State Councils of Higher Education: At state level the Departments of Education in the state government are responsible for planning,
development, and management of higher education. Likewise, the NPE (1986) envisages state-level planning and coordination of higher education through State Councils of Higher Education (Department of Education 1992). In pursuance of the recommendations in the Policy (1986) and Programme of Action, UGC issued guidelines to State Governments and Universities for establishment of SCHE's. The guidelines provide for the composition, powers and functions of the Councils.

In view of the fact that it may not be possible for small states, particularly in the North Eastern region, to establish separate councils of Higher Education, such states will be encouraged to set up Joint Councils of Higher Education. For the North Eastern region, this responsibility could either be entrusted to the North Eastern Council (NEC) or a council of Higher Education for all the states.

5.4 (iii) University Governance

The universities, established by Acts of Parliament are referred to as Central University and number is 18 including one open university. The State universities are established by Acts of State Legislatures. Some States have a common universities Act for all the universities. Each university is governed by the statutory bodies such as the Academic Council, the Senate/Court, and the Executive Council/Syndicate. Nominees of Central Government (in the case of Central universities), are represented on the governing bodies of these institutions (Association of Indian Universities, Report, January 2002).

Visitor, Chancellor and Vice-Chancellor: The Governor of the State is generally the Chancellor of the universities in that State. In case of universities in the Union Tertiary the Vice President of India is the Chancellor of that universities. He functions as the head of the university and presides over the Senate. He appoints the Vice-Chancellor on the recommendation of a Search Committee. The Vice-Chancellor is the Chairman of the Executive Council/Syndicate and the Academic Council and also presides over the Senate in the Chancellor's absence. The Vice-
Chancellor is the principal executive and academic officer of the university. The President of India functions as the Visitor. The Visitor appoints the Chancellor and Vice-Chancellor. A Vice-Chancellor holds office for a term of three to five years and is generally not eligible for more than two terms in the same university.

**The Senate**: The Senate or Court, which normally meets once a year, often has more than one hundred members representing a variety of interests. Government officials, registered graduates, legislators, representatives of local bodies, university teachers and principals/managers of colleges are among those represented. As a body representing varied interests, the Senate exercises the same control over the budget, considers and annual report and accounts, and passes resolutions thereon.

**The Executive Council/Syndicate**: The Executive Council/Syndicate is the principal governing body which meets several times a year. It may consist of fifteen to twenty members and include government officials concerned with education, who are nominated by the Chancellor or elected by the Senate/Academic Council. The Executive Council/Syndicate is responsible for the supervision of the executive action of the university and is the appointing authority for the teaching staff. It is responsible for the management of the colleges, hostels, libraries, and laboratories. Along with the Academic Council, it controls the rights of affiliation of colleges and has the power to recommend the suspension or withdrawal of such affiliations.

**The Academic Council**: The Academic Council consists of university professors, principals/professors of affiliated colleges, Director of Higher Education and representatives of teachers and students. The functions of the Academic Council include prescribing courses, determining curricula and examinations, establishing admission regulations and exercising general control over all academic matters (Association of Indian Universities, Report, January 2002).
5.4 (iv) Financing of Higher Education

As higher education is the joint responsibility of central and state governments, both help to fund it. Central universities receive their grants from the central government and its agencies, such as the UGC. The deemed universities and institutes of national importance are also substantially funded from the center, State universities are primarily financed by state governments. They also receive funds from the UGC. Colleges in the states receive grants from the state governments. They also receive funds from the UGC. Generally state universities are under severe financial strain as the yearly increase in maintenance grant falls short of needs. Development grants vary from state to state. In most, sufficient funds are not available for development and expansion of state universities which rely on the UGC for support. The UGC provides development grants to state universities on the basis of plans the latter submit. The UGC has two basic grant patterns. For some academic programmes, the Commission meets the entire cost for a fixed term, usually five years, on condition that state governments finance the activities beyond the period. In the second pattern, usually for infrastructural development, the commission pays 50 to 75 percent of total costs, the remainder coming from state government. In all, about three quarter of university expenditure is met by the government: Central and State, about 17 percent by fee, the residual by endowments, donations, and so forth.

Expenditure on higher education as proportion of Gross National Product (GNP) grew from 0.2 percent 1950-51 to 0.8 percent in 1965-66. Thereafter it fell in 1970 to 1971 to 0.6 percent, recovering in 1975 to 1976, and reaching once again the high level of 0.8 percent. In 1981 a further decline set in 0.3 percent only to rise again in 1984 to 85.

Indian Education Commission (1964-66) made these recommendation in connection of higher education: the State Governments should place adequate financial resources at the disposal of universities and simplify rules and procedures for operating them; the
UGC should give both development and maintenance grants to State universities; there should be some reasonable sharing of development expenditure on universities between the UGC and State government; the UGC should take steps to resolve problems faced by some universities on account of the non-payment of grants on committed expenditure by State government; the system of grant-in-aid from the State governments should be reorganized on the basis of a suitable system of block grants; the finance of Universities should be placed on a sound footing on the basis of advice given by the UGC to the State governments and the universities after periodical review (Sharma, 1996).

The 1968 Policy on Education did not contain any section relating to resources. However, it stated that the reconstruction of education on the lines indicated would need additional outlay. The aim would be gradually to increase the investment in education so as to reach a level of expenditure of 6 per cent of national income as early as possible.

The National Policy on Education (1986) does refer to the need for investment in educational research to 6 per cent at the end of Seventh Plan (1989-90) and uniformly exceeding 6 per cent of the national income from the Eighth Plan onwards. However, it contains the following significant recommendations regarding resources: Resources, to the extent possible, will be raised by mobilising donations, asking the beneficiary communities to maintain school building and supplies of some consumables, raising fees at the higher levels of education and effecting some savings by the efficient use or facilities. Institutions involved with research and the development of technical and scientific manpower should also mobilise some funds by levying access or charge on the user agencies, including government department, and entrepreneurs. All these measures will be taken not only to reduce the burden on State resources but also for creating a greater sense of responsibility within the educational system. However, such measures will contribute only marginally to the total funding, hence the funding for certain priority sectors would come from the Government, but additional funding for
higher education will have to come from other sources, of which the following are identified: (a) mobilisation of donations; (b) raising fees; (c) efficient use of facilities; and (d) levy of cess or charge on the user agencies.

Department of Education (1992) opined that higher Education has a crucial role in training manpower for national development. It is, therefore, necessary to provide it with adequate support and finances to:

(i) maintain its infrastructure and establishment at an acceptable level;

(ii) to keep abreast with latest developments; and

(iii) meet future challenges

In this context, it has become necessary for the institutions of higher learning to consider measures for raising internal resources and improving their cost-efficiency. While there is a case for raising tuition and other charges, which have remained more or less static for more than half a century an elaborate and effective system should be established for providing free-ships, scholarships, and loans to students belonging to the weaker sections of society. Efforts should also be made to evolve rational norms for providing grants to universities which should take into account per capita cost, teacher-student ratio, proportion of teaching and non-teaching staff, types of courses offered, costing of services and extent of their subsidisation, ratio of graduate and postgraduate/research students, etc. There is need for a balanced distribution of resources between universities and research institutions.

Presently, central universities receive funds from the UGC as development (plan) grant and maintenance (non-plan) grant. Institutions of national importance, like the Indian Institutes of Technology, receive their grants directly from the Ministry of Human Resource Development (Department of Education), Government of India. State universities are funded by the State Governments in the form of block/maintenance grants as well as development grants. State universities also receive
development grants from the UGC provided matching components is given by the State Government according to a prescribed formula. In addition, universities also collect fees from students and a few universities receive some financial support from trusts, philanthropists and industry. Government and private colleges receive funds from the respective governments in the form of grants-in-aid for maintenance and development purposes. As a result, most of the colleges and universities operate with tight budgets and often incur deficits. The role of non-governmental sources in financing higher education continues to be limited (Association of Indian Universities, Report, January, 2002).

5.5 PROBLEMS OF HIGHER EDUCATION

Significant progress has been made in recent years not only in the development and strengthening of higher education in terms of improved student access, strengthened research and postgraduate programmes, more equitable representation of different social groups, renewed curricula and adoption of new teaching and delivery methods, but in enhanced institutional management and strategic planning capacity as well. The higher education system has been experimenting with management approaches to deal with challenges arising from internal factors, such as changes in academic disciplines and new instructional methods and external factors such as population growth, diverse clienteles and changing labour market requirements. Non-university institutions and establishment of open universities and distance learning system have been particularly important initiatives.

Despite the statement in the NPE, 1986 that the main emphasis will be on consolidation of, and expansion of facilities in, the existing institutions, the unplanned proliferation on institutions of higher learning continues unabated. Thus the number of universities had gone up from 149 in 1985-86 on 176 in 1990-91, the number of colleges from 5816 to 7121 and enrolment of students from about 36 lakh to over 44 lakh during the same period. The NPE, 1986, states that provision will be made for minimum facilities, admissions will be regulated according to
capacity and urgent steps will be taken to protect the system from degradation. However, in most parts of the country existing institutions of higher education are still constrained to admit students beyond their capacity without commensurate provision of physical and academic facilities. There is no institutional or other mechanism to ensure that admissions to universities and colleges are restricted to capacity. State governments have been unable to provide adequate funds to universities and colleges for provision of necessary infrastructure. At present as many as 55 state universities and 3000 colleges in different states are not eligible to receive assistance from UGC mainly due to lack of minimum facilities. As the number of state universities and colleges eligible for grants from UGC gradually increases and the resources available to UGC remain limited, UGC’s assistance to the state sector is being thinly spread. During the Seventh Five-Year Plan, UGC’s assistance to a state university averaged Rs. 2.5 crore only and to a college it averaged Rs. 4.5 lakh only. An analysis of the growth of colleges during the period 1986-87 to 1990-91 reveals that the 4 states of Andhra Pradesh, Madhya Pradesh, Maharashtra, and Karnataka accounted for nearly 60 percent of the increase in the total number of colleges during the period and that 65 percent of the increase was in Arts/Science/Commerce colleges. Increase in the number of colleges in some of the other states was negligible. This underlines the skewed pattern of growth in the collegiate system and the urgent necessity for planned and coordinated developed of higher education in states.

The National Policy of Education (1986), was formulated during a time when there was a conflict of opinion between educational thinkers about the importance of school education and of higher education. While Nehru had hinted at the utmost importance of higher education in his words, "if all is well with the universities, all would be well with the nation.” But the national policy observed ever since the development of higher education had remained uneven. The internal efficiency of the higher education system was extremely low. This evidenced not only poor quality of courses but also by the large number of drop-outs and failures
which together account for more than 59 percent of the students enrolled, representing a colossal waste of resources. A large number of those who pass the examination are classified under third division which is another index of low standards. There was a big goal to updating the curriculum for the universities and colleges. Consequently, arts and humanities continue to offer unilinear programmes of study, without trying to develop courses more closely related to life and the multi-faceted development of the personality and the reasoning and learning capabilities of students. In the case of science and technology education also, courses are designed essentially to explain concepts and basic principles at various levels of abstraction. Adequate supportive arrangements are, however, not always available in the laboratories in the form of kits, apparatuses and instruments to relate theory with practical reality. At that time the state of higher education was largely the result of overt and covert interference by external agencies. Universities, it was argued, must be truly autonomous and accountable. Generation of resources for higher education was another aspect. Responsibility for maintenance and development of physical facilities, enforcing discipline and looking after the contents and quality of education was another.

Access to higher education is another grave problem facing Indian higher education system. After independence, there was an unprecedented linear expansion of higher education in the country which slackened during the seventies. This has brought into sharp focus the problem of access to higher education and the dilemma faced by a number of universities even today of maintaining a balance between increase in capacity and the quality of education provided.

According to Raza (1991), the access to Higher Education in India was discussed as the disadvantage because India, with its vast cultural diversities and high degree of socio-economic disparities, suffers from a wide-range of regional imbalances in the higher education sector. Let us look at the national picture. The proportion of people with post-secondary level education in the age group of 25 and above was the proportion of
people with post-secondary level education in the age group of 25 and above was only two per thousand in 1971 and four per thousand in 1981 and now it could approximate to 6 in 1988-89. It is, no doubt, true that India has the third largest scientific and technical man-power in the world, but it is also true that the proportion of such man-power per ten thousand population comes to 6 in India as compared to 115 in the USSR and 190 in Japan. The choice becomes still more difficult if it is a taken into consideration that provision of opportunities to one person in professional education costs as much or even more as for imparting elementary education to 100 pupils or for removing illiteracy of a thousand persons.

Problems of **Quality Versus Quantity** is standing in India's way. There are about four million students in its Universities and Colleges. The demand for higher education is due to the socio-economic transformation that is taking place in the country. The Indian economy has neither the resources to expand higher education at the present rate nor the capacity to absorb the large number of graduates in gainful employment. A kind of Iron Law of Educational Growth whose logic is very simple, universalisation of elementary education leading to generalisation of secondary and the latter to a corresponding growth of higher education is evident. There is a lot of criticism about the deplorable fall in the intellectual standards of the universities.

**Wastage** : Failure rate in Indian Universities is as high as 50 percent. Time, money and effort are needlessly wasted because of the 'open door policy'. In U.K. the wastage rate is only 14 percent. Educational guidance is not provided to the candidates.

**Imbalances** : 70 percent of Indian students study humanities and social sciences, only 30 percent study physical science and related faculties. Colleges within the same university area have unequal standards. The chief means of teaching in the colleges is the formal lecture. Tutorial and supervisory arrangements are generally lacking, except in some very good colleges, and the student, particularly in the
undergraduate classes, has very little opportunity of discussion in his subject with his teacher and fellow students. Attendance at lectures is compulsory, and as prescribed by each university, students have to attend 75 percent or more of the lectures delivered during a session. Students who do not attend the required number of lectures may not be allowed to sit for the final examination.

**Student Activism** : Youth is a restless period in life. Owing to social, psychological, emotional and economic reasons the student unrest is on the increase in India. Very often, it takes violent and ugly turns. Students rarely involve themselves in ideological disputes. Most of their agitations stem from petty, personal grievances – real or imaginary.

**Medium of Instruction** : Gandhi and Tagore championed the introduction of Indian languages as the medium of instruction at all levels. English medium is supposed to have denationalising effect. Lectures are delivered in faulty English. Students have more difficulty with English than with the subject matter. In this futile struggle Indian Universities waste their talents. The elite favour and the continuance of English warn that regional loyalties will undermine fellow feeling and may lead to balkanization of India. Until Hindi becomes familiar in all parts of India, the teaching of English cannot be given up.

**Intellectual Slavery** : In India the colonial heritage has stifled the spirit of independent inquiry. Scholars readily subscribe to official views and hesitate to voice their dissents. Indian academicians are over eager to imitate foreign systems and models. Most professors are reconciled to the position of well paid employees. A college teacher is rarely absorbed in a university department. Distance is carefully maintained and aloofness is encouraged between the University and a college affiliated to it. The volume of knowledge doubles every ten years. New skills and knowledge are required to be up to date. Unlike in the West, the contribution of our Universities to Science, Arts or Literature is very meager. Research facilities do not exist in many colleges. University teachers do very little research work, college teachers do even less. Many teachers are content
with their present qualifications and record. Only a few voice their views on academic or national problems.

Irrelevant Courses: Higher education is not linked to manpower needs of the country. The courses offered are obsolete. Vested interests block progressive reforms. Indian universities are pale imitations of those which existed in nineteenth century England. Imaginative and socially rewarding courses are not planned and introduced. Practical and applied courses to regenerate rural India and emancipate the underprivileged are seriously lacking. If there is more co-operation from the industrialists and agriculturists, the university can successfully complete its social obligations.

Uneconomical: Financial crunch in higher education is universal, more so in Indian universities because of insistence on equality of educational opportunity, social justice and the consequent problems of quantity versus quality. The universities have become uneconomical. Cost benefit considerations are ignored. Educational policy-makers are more optimistic than the most optimistic forecasters. Expansion targets are never fulfilled. Every college and university should examine: (i) whether it is utilising the available resources to the maximum extent possible, and (ii) whether the quality of its output can withstand the rigours of the competitive world.

Faulty Examinations: The present system of examinations is inconsistent and arbitrary. It only tests the memory of the student and it ignores the slow but thoughtful learner. Marks in examination are not true indicators of a student's mastery of his subject. In the words of University Education Commission (1948-49), "If we are to suggest one single reform in the University education, it should be that of examinations. The crippling effect of examinations on the quality of work in higher education is so great that examinations reform has become crucial to all progress and has to go hand in hand with the improvement in teaching (Sharma, 1996). The validity and reliability of examinations
have often been questioned and many attempts have been made to reform the present system along the lines suggested by various commissions.

5.6 PROMOTION OF EXCELLENCE IN UNIVERSITY EDUCATION

According to Raza (1991) when we talk about excellence in higher education, many questions arise, particularly with reference to the criteria for evaluating excellence. What are the essential pre-requisites for promoting excellence? Should one judge excellence by counting the number of national and international award winners working in an individual brilliance? The pursuit of excellence can best be achieved through deep commitment to this cause and adopting appropriate strategies with respect to the aspects; updating of curricula on a continuing basis; strengthening of university-college linkages; man-power planning; university-industry interaction; information system and awareness; educational and research programmes.

Though the UGC has made serious efforts to improve the functioning of the universities and colleges through the above guidelines/reports, the implementation has not been satisfactory. Various factors are responsible for the slow progress, viz (Department of Education, 1992).

- Absence of appropriate mechanisms at the Central and State level to oversee the implementation of UGC’s guidelines and recommendations;
- Reluctance of education institutions and the academic community to change;
- Excessive politicisation of universities and indiscipline on campus.

5.6 (i) Improvement of College and University Education

According to Kothari Commission 1964-66 the improvement of teaching and evaluation, one of the most important reforms needed in the higher education was to improve teaching and evaluation. The present conditions in this regard was quite unsatisfactory. If university teaching was to be vitalised, changes were needed on the number of formal
classroom and laboratory hours should be reduced and the time thus saved should be devoted to independent studies, assigned reading, writing of essays, solving of problems and small research projects. Libraries should be improved. Memorising should be discouraged, emphasis should be laid on original thinking. The content and quality of lectures should be considerably improved and every one hour of instruction should receive three or four hours of study time to digest the lectures. A rule may be made that no teacher should be away from his institution during term time for more than seven days in a year. Developmental assistance to colleges should be given and the quality improvement programmes should be initiated by colleges.

**COSIP/COHSSIP :** A review of the scheme brought out the fact that colleges had undertaken a number of innovative measures under these schemes such as new teaching methods, fabricating of equipment, audio-visual and other teaching aids and inter-disciplinary approach to teaching. The distribution of teaching plans and guided readings led to an improvement of study habits. Colleges also introduced courses with practical orientation, job-oriented courses, programmes of creative writing, book review etc. Similar measures were taken by a number of universities under the University Leadership Project (ULP). The schemes, however, effected a small fraction (a few hundred out of seven thousand colleges) of the college system. The Commission in the 7th Plan proposed to give a broad-based support- 'institution building' support to selected colleges in order to raise their all-round performance.

**Measures for Improving Standards :** The question of improving standards of teaching and research had been exercising the minds of scholars and scientists alike and accordingly the scope of work of the Panels had been made to reflect a special responsibility for suggesting improvements in courses of study, syllabi, methods of teaching and evaluation. The following important decisions based on the recommendations of the various subject panels and other expert committees. *(a) Scholarships :* The Commission agreed to provide
scholarships on the same level as the NCERT's National Talent Scholarship to students in Science, Humanities and Social Sciences to pursue B.A/B.Sc and M.A/M.Sc courses. A small number had already been identified, but from 1984 onward, the number was expected to reach 100 in Social Science and Humanity. (b) **Summer Schools**: Summer Schools for gifted students in different subjects, including those who may not have been identified for financial support under the Talent Search Scheme, were also proposed to be organized each year with support from the UGC. These schools would have special educational programmes using new methods of teaching, audio-visual aids and video cassettes. (c) **Special seminars and workshops for teachers**: The Commission agreed to strengthen its existing programme of seminars and workshops to concentrate both on research preparation and on updating the knowledge and other competence of teachers. At the time 250 (approximately) seminars/conferences/workshops were held every year in different branches of knowledge. (d) **Support for Journals**: In order to promote the publication of Journals of high quality and keeping in view the escalation in the cost of printing and paper, the Commission agreed to support the publication of journals, including journals in regional languages. The journals would be identified with the help of subject experts. In science, journals particularly to raise the professional competence of teachers were being started with the help of the Commission in the areas of Physics Education, Chemical Education, Biology Education and Mathematics Education. Arrangements were made so that one copy each will be available to all science colleges, to be paid out of UGC grants for books and journals, A few science education centres and cells were also being set up.

**Guidelines for Improvement**: The UGC has circulated the following guidelines/reports to the State Governments and Universities with a view to bringing about improvements in the functioning of the higher education system relating to terms and conditions of affiliation of colleges by a university; Minimum number of actual teaching days, programme of examination reform and workload for teachers;
performance appraisal and code of professional ethics; for university and college teachers; academic calendar in universities and colleges (Department of Education, 1992). Draft Regulations on Minimum Standards of Instructions: The UGC also framed after several years of consultation with state governments and universities draft Regulations defining the minimum standards of instructions for grant of any degree by a university. The regulations mainly for the award of the first degree generally provided that no student shall be eligible for admission to the first degree course unless he has successfully completed 12 years' schooling. The duration of B.A/B.Sc of B.Com (Hons.) course would be three years; the degree awarded at the end of two years may be designated as B.A/B.Sc or B.Com degree. No student who had not successfully pursued the first degree course of three years duration would be eligible to seek admission to the master's course. The regulations also relate to the minimum number of working days, examination reform, qualifications of teachers and physical facilities etc. This would remove a great deal of confusion regarding nomenclature and duration of degrees which had given rise to the question of mutual equivalence of the degrees of the universities.

Teaching Days and Work-load of Teachers: The Commission formulated guidelines prescribing that the number of actual teaching days in an academic year in a university/deemed to be university/constituent/affiliated college of the university should not go below 180 days, excluding holidays, preparation days and examination days etc. The time-table should be spread to accommodate the various academic activities over at least an eight-hour working day.

A document which provided general guidelines regarding the work load of teachers, and how the 40 hours week may be reflected in teaching, evaluating, preparing, research, and other support activities over at least an eight-hour working day had also been circulated. It was hoped that these documents, when discussed in the academic bodies of the
universities would lead to decisions which would improve the working of the universities and raise these academic standards.

National Educational Testing: The Commission has decided to set up a 'National Educational Testing' unit which will, in the first phase, hold an examination for the award of junior research fellowships but subsequently it may develop tests which may be used for the selection of university and college lecturers, and for admission at the postgraduate level to central or other participating universities. There may also be tests for selection of undergraduates in various subjects in which induction of talent is felt necessary.

The Commission expected that the development of tests at the national level in the different areas would help overcome the problem of comparability of marks awarded by different universities, and, of course, select the best talent for research. In course of time, the tests would become more objective and reliable and they could even act as a pace-setter for the improvement of syllabi and methods of teaching and evaluation in the university system, in general.

5.6 (ii) Autonomy and Academic Freedom

The University Education Commission 1949 found that the autonomy of Universities was one of the important issue. This question has never been discussed in India so much vehemently as after the attainment of freedom. It has been a great misfortune of university education in India that its control and authority has somehow passed in many universities into the hands of caucuses formed on the basis of either casteism or provincialism or any such other anti-academic mentality which has vitiated the atmosphere of such universities. Recent enquiries in some of the leading universities in this country have conclusively proved the existence of such groups having deep-rooted vested interests and primarily functioning for the sake of exploiting certain situations for personal benefits or for the benefits of a particular power-faction. These factors have been responsible for bringing politics of a very lower type into the universities.
Kothari Commission 1964-66 which emphasised on universities autonomy for the major responsibility of the universities towards the promotion and development of an intellectual climate in the country which encourages criticism, ruthless and unsparing but informal and constructive. All this demands that the teachers exercise their academic freedom in good measure enthusiastically and wisely. The proper sphere of university autonomy lies in selection of students, determination of courses of study and method of teaching, appointment and promotion of teachers and the selection of the areas and problems of research. While considering the question of universities autonomy, the Commission has recognised three levels at which it must work: (i) Autonomy within a university, (ii) Autonomy within the university system, and (iii) Autonomy in relation to outside agencies.

The more important recommendations of the Commission in regard to university autonomy were that the representatives of non academic elements on university bodies should be given representation mainly for the purpose of presenting wider interest of society as a whole but not to impose them. The universities should give considerable autonomy to their departments. Wider administrative and financial powers need to be delegated to a Committee of Management, set up in each Department under the Chairmanship of Head of the Department. The autonomy of colleges must be recognised and respected to the same limit as is granted to the university (Shukla & Rai, 1983).

According to Development of Higher Education in India: A Policy Frame 1978, the academic freedom was defined as to be an objective critic of society is an important responsibility of the university system. This can be discharged satisfactorily only if the academic freedom of the teachers and students to express their views freely and fearlessly is adequately protected. This freedom also deserves to be exercised more widely and ably.

**Autonomous Colleges** : In pursuance of the NPE, 1986 and POA, 1986 UGC revised the Scheme of Autonomous Colleges to provide for
criteria for selection of colleges, procedure for grant of autonomy, pattern of governance of autonomous colleges, and mechanism for monitoring and evaluation of the Scheme. The UGC guidelines provide for financial assistance of Rs. 4-6 lakh per annum to under-graduate colleges and Rs. 7.00 lakh per annum to colleges offering under-graduate and post-graduate courses. In accordance with these guidelines 80 colleges in seven States have been granted autonomy since 1986. UGC has established a Cell to monitor the progress of the scheme on a continuing basis.

The POA 1986 had envisaged the establishment of 500 autonomous colleges in the 7th Plan. Though the number of colleges granted autonomy since 1986 falls short of the target mentioned in the POA, it is more than four times the number during the preceding twenty years. Of the 100 autonomous colleges in the country, the three states of Tamil Nadu, Madhya Pradesh and Andhra Pradesh account for 90 colleges. The need for pursuing the implementation of the scheme in the remaining States with greater vigour is evident. It would appear that the initial enthusiasm for this scheme has waned due to the opposition of a few States to the scheme on the ground that it is elitist, apprehensions expressed by the teaching community regarding increase in their work-load, arbitrariness by Managements, irregularities in conduct of internal examinations, paucity of funds, and operational difficulties in implementing the scheme.

In 1991, UGC had appointed an Expert Committee to review the implementation of the scheme of autonomous colleges. The major recommendations of the Committee were (Department of Education, 1992):

- The scheme should be continued during the 8th Plan period in view of its objectives.
- An appropriate mechanism should be established at the State level for effective monitoring of the Schemes.
- Immediate action should be taken for amendment of the Acts/Statutes of the universities to make an enabling provision for conferment of autonomous status on colleges.

- State Governments should not transfer the teachers from Government autonomous colleges; should also sort out the problems of increased work-load of teachers for these colleges, besides fulfilling the system of block grants for maintenance purposes.

- The State Governments and the universities should hold regular meetings with Principals of autonomous colleges for coordination and resolving of issues.

- The Universities should accept the decisions of the autonomous colleges regarding new courses and flexibility in combination of courses.

- The autonomous colleges should prepare perspective plans for development, activate Finance Committees as well as Planning and Evaluation Committees.

- The Commission accepted the report of the Committee in its meeting held on 6th June, 1991.

The following action is proposed for implementation of the scheme of autonomous colleges during the 8th Plan (Department of Education, 1992):

(a) the recommendations of the UGC Expert Committee on Autonomous Colleges should be implemented at the earliest;

(b) the number of autonomous colleges should be increased substantially;

(c) a Council of Autonomous Colleges was established in every State in 1991-92 to review the progress of the scheme and to resolve the operational difficulties in its implementation; and
(d) UGC should establish a separate mechanism for evaluation of the performance of autonomous colleges.

**Autonomous Departments**: UGC's scheme for grant of autonomous status to Departments in Universities has not made much headway. The experience of the few Departments which have been granted autonomy has not been systematically analysed. The following action should, therefore, be taken in regard to this scheme (Department of Education, 1992):

1. UGC should initiate a review of the functioning of Autonomous Departments during 1992-93;

2. Departments receiving financial assistance from the Commission under the Special Assistance Programmes (SAP) and the Scheme of Strengthening of Infrastructural Facilities in Science & Technology (COSIST) had to be granted autonomy in a phased manner by 1997.

3. Departments offering professional and technical courses, such as, Engineering, Technology, Computer, Management, Law, etc. and other emerging areas were to be targeted for grant of autonomy during the Eight Plan.

The progress of the scheme of autonomous departments should also be reviewed by the Cell established in UGC for review of the scheme of autonomous colleges.

**5.6 (iii) Restructuring of Courses**

Higher Education Programmes have to be redesigned to meet the growing demands of specialisation, to provide flexibility in the combination of courses, to facilitate mobility among courses, programmes and institutions, to update and modernise curricula, to integrate work/practical experience and participation in creative activities with the learning processes, and to facilitate reforms in the evaluation procedure. The existing structures did not permit these reforms.
UGC sought to redesign courses by: (i) issuing guidelines for restructuring of courses at first degree level in the faculties of Arts, Social Sciences and Sciences in universities and colleges during the 5th and 6th Plans; and (ii) by establishing 27 Curriculum Development Centres (CDCs) to prepare model curricula in Science, Humanities and Social Sciences during the 7th Plan.

The scheme of restructuring of undergraduate courses was last revised by the Commission in 1983. Upto the end of the 7th Plan only 9 universities and 290 colleges had restructured undergraduate courses in accordance with these guidelines. The Bachelor's degree programme of Indira Gandhi National Open University (IGNOU) has been designed on the lines suggested by UGC and consists of inter-disciplinary foundation courses, core courses and application oriented courses. The lack of momentum in implementation of the scheme could be attributed to non-availability of specialised teachers, limited opportunities for practical training and the absence of clear linkages between these courses and improved job prospects.

The UGC provided about Rs. 3.5 crore to universities and colleges during the 7th Plan period for implementation of the scheme of restructuring of courses. The 27 CDCs established by the Commission in different universities in the country since 1986 have undertaken a very comprehensive exercise to prepare model curricula in 27 subjects. These have been circulated to all the universities for adoption/adaptation. However, no mechanism has so far been created to monitor action taken in this regard at the university level.

**Introduction of Vocational Courses**: In order to achieve the objective of redesigning of courses and introducing vocational courses the following recommendations were made (Department of Education, 1992):

(i) The massive effort involved in developing model curricula by CDCs should be made full use of by the university system and a mechanism should be immediately created in UGC to monitor the
adopting/adaptation of the revised curricula by universities and colleges;

(ii) UGC should ensure up-gradation of the model curricula at least once in five years;

(iii) UGC's existing guidelines for restructuring of undergraduate courses, which were formulated more than a decade ago, were to be comprehensively revised by 1993-94 with a view to incorporating latest developments, particularly in the field of Science & Technology, emerging employment trends, and concerns regarding value education;

(iv) An effort should be made to expose all students at the first degree level to the world of work by including application-oriented courses in the curriculum and providing for opportunities for project and field work;

(v) The Committee set up by the Commission to prepare model curricula for Vocational subjects at the undergraduate level for students from the +2 vocational stream had to be completed its work at the earliest so that the courses recommended by them could be introduced by universities in the academic session 1993-94. The introduction of vocational courses ought to be preceded by a realistic assessment of the requirement of qualified teachers, laboratory/workshop etc. to ensure that students who offer these courses graduate with the knowledge and skills required by the market;

(vi) Given the difficulties and cost of providing workshop and training facilities in universities and colleges for vocational courses, arrangements had to be worked out by individual institutions with external agencies for imparting practical training to students who offered such courses;
(vii) In future the emphasis would be on development of integrated Honours Courses in vocational subjects rather than optional vocational courses which did not enhance job prospects sufficiently;

(viii) In view of the popularity of the modular courses introduced by IGNOU with provision for accumulation of credits and multiple entry and exit, and the need for encouraging mobility between the conventional and the open universities, a concerted effort was to be made by the conventional universities to develop courses on a modular basis in the 8th Plan;

(ix) As admissions to all post-graduate courses are sought to be made on a selective basis and restricted to capacity, postgraduate departments of all universities should gradually switch over to the semester, grading, continuous evaluation and credit systems;

(x) UGC may consult the States with a view to making adoption of the semester, grading, credit and internal evaluation systems by new universities and colleges should be a condition precedent for eligibility of grants from UGC.

(xi) The rigidity in age and other requirements for admission to postgraduate courses should be gradually dispensed with to enable working people to enroll in such courses in greater numbers. This would in turn lead to postgraduate courses being re-oriented to the world of work. However, the increase in age limit for admissions to post-graduate courses should not result in any relaxation in the age limit for eligibility for elections to the students' Union.

(xii) The recommendation of Gnanam Committee on restructuring of Boards of Studies in universities should be implemented as and when considered and approved by the CABE.

(xiii) In view of the fact that autonomous colleges and departments were seen as major vehicles for restructuring of courses, teachers in such institutions/departments should be given incentives and special orientation/training through refresher courses to equip
them with necessary skills to design vocational courses and revise curricula.

(xiv) Encourage establishment of community colleges dealing with vocationalisation of subjects related to service sector on line with community polytechnics.

The Commission’s scheme of restructuring of courses has two important aspects viz: (a) to make the first degree course more relevant to the rural environment and to the development needs of the community and (b) to link education with work/field/practical experience and productivity. The restructured courses were to have three components: (i) foundation courses, (ii) core courses and (iii) courses of applied nature. In spite of the fact that the Commission provided 100 percent assistance under this scheme, it was important to consider steps that would enable more and more universities to utilize assistance available from the Commission for (a) seed money, (b) orientation of teachers and (c) preparation of course materials, teaching aids etc. and play the role of a catalyst in this regard.

5.6 (iv) Problem of Access

The unprecedent growth of higher education has created problems of maintaining balance between the desired increase in capacity and maintaining quality of higher education. UGC and other commissions have recommended:

(a) Determination of intake capacity of courses and institutions in accordance with the existing facilities and regulation of admission in order of merit.

(b) Checking the establishment of new universities and colleges except in backward areas was also to be considered only after a survey of its educational needs.

(c) Vocationalization of the secondary level of education and its impact on university admissions.
(d) Restructuring of courses of study at the first degree level to give them greater relevance to general education as well as emerging opportunities of employment.

(e) Provision of facilities for greater enrolment through correspondence courses and the starting of an open university.

(f) Equalization of education opportunities for weaker sections of the society.

(g) A radical reform of teaching methods so as to go beyond the use only of the lecture method, employ devices such as tutorials, term papers, projects and seminars to lead to self study and development of creativity among students and to utilize modern technology to make teaching more effective.

According to NPE 1986, the Open University and Distance Learning system was initiated in order to augment opportunities for higher education, tackle the problem of universal access and as an instrument of democratising education. The Indira Gandhi National Open University was established in 1985 in fulfillment of these objectives. This powerful instrument will have to be developed with care and extended with caution.

**Equalization of Education Opportunity** : As part of its efforts towards universal access and equalization of educational opportunities for all, the UGC decided that scheduled caste/tribe students should be helped not only individually through remedial courses but also institutionally. There should be an improvement of infrastructural and other facilities in all those educational institutions which enroll a fairly large proportion of students from the weaker section of the society, 20-25 such colleges had been identified for special support, which would be provided after visiting committees determine their needs as also their capability to make use of support.

**5.6 (v) Financing of Higher Education**

**Financial Crunch in Higher Education** : The resource crunch in higher education is there but it should not lead to the panic solution of
deliberate restriction of entry to the institutions of higher learning. Not only would such a step be iniquitous, but it would also be counter-productive in the long run. Institutions of higher learning are indispensable to the functioning of a modern society and are the defining structure of the ‘post-industrial society’ as observed by the well-known sociologist Daniel Bell. They are the factories for production and transmission of knowledge, which sustain the growth of society and provide a vision of the future. Moreover, Indian tradition places a very high value on higher learning. As F.W. Thomas observed, "there is no country where the love of learning has so early an origin or has exercised so lasting and powerful an influence". Moreover, as emphasised by the Kothari Commission, higher education is a source of trained manpower which keeps the engines of growth moving. What is necessary, however, is to take a realistic view of the emerging scenario and to develop a rational scheme for funding and cost-efficiency of higher education so that higher education remains a viable and vibrant element of the national society.

**Resource Mobilisation by Universities**: According to Rao (2000), the UGC encouraged universities to mobilise resources by participation/contribution of society in their development and to encourage and enhance the flow of resources coming from the society for university development.

**Donations**: As pointed out earlier, income from endowments and other sources had come down from 11.6 per cent in 1950-51 to 3 per cent in 1980-81. It was necessary to consider why income from other sources has come down and what needed to be done to mobilise the same. It might be necessary to have some taxation concessions, at least for capital expenditure relating to education. It would be recalled that Radhakrishnan Commission (1949) recognized the need for tax concessions.

**Raising of Fees**: According to estimate, the tuition fee of students in India contained a subsidy of Rs. 1270- per student per year. Multiplying this by the number of students, the subsidy worked out to
Rs. 45 crores. This amount was in fact likely to be higher since some courses were more costly. According to Committee appointed by the UGC to go into the question of fee to be charged for courses in engineering and technology, the level would need to be Rs. 8000 per student per year as against Rs. 1600 per student per year prevailing at the time. The step of raising of fees needed to be coupled with the following supplementary measures (UGC, 1997):

1. free places for students from disadvantaged groups like scheduled castes and scheduled tribes and students below the poverty line; and

2. loan scholarships for students

any proposal to raise fees was likely to evoke stiff opposition from student unions, which in many cases, were supported by political organisations. It would be necessary to build up a consensus in this regard.

**Levy of Cess or Charge on User Agencies** : This was a proposal which needed to be worked out in detail. However, it did not constitute a net additional resources to the system, but only involved transfer of resources from one sector to another.

5.6 (vi) Faculty Improvement

It was widely recognized that the teacher had an important and vital role to play in the improvement of standards, as without his active participation, it was not possible to have any qualitative change in education. It was for this reason that the Commission supported faculty improvement programmes, schemes of providing visiting professors and fellows, and schemes which would enable teachers to take time off their normal teaching and engage themselves in writing up the results of their students and research. Book writing programmes were also supported. It may be interesting to point out that survey done under the auspices of the National Commission for Teachers in Higher Education, found that approximately 7 percent College Teachers had M.Phil and 15 percent Ph.D
degrees; mostly obtained under the F.I.P. Scheme. In the universities, 47 percent Lecturers and 76 percent Readers and 84 percent Professors were holding the Ph.D degree. A more comprehensive programme of teacher orientation and training was recognized to be necessary in order that the teaching/learning situation may perceptibly improve, and this was proposed element in the UGC’s 7th Plan. The Commission also prescribed by Regulation the minimum qualifications for appointment to various teaching posts in universities and affiliated colleges. These were the minimum qualifications prescribed by the Commission in the sense that anyone with lower qualifications was not eligible to be appointed but if a university intended to raise the qualifications, it might do so. These qualifications came into effect from July 1, 1983. It was henceforth imperative that the universities made corresponding changes, if necessary, in their Statutes, Ordinances to observe the Regulations.

In pursuance of NPE, 1986 and its POA, 1986 Central Government and UGC have taken several steps to improve the status and motivation of University and college teachers. These include revision of their pay scales, creation of avenues for career advancement linked with performance, incentives for research, provision of training opportunities, etc.

In 1987-88, UGC formulated a Scheme of Academic Staff Colleges (ASCs) for organising orientation programmes for newly appointed lecturers and conducting refresher courses for in-service teachers. UGC has established 48 ASCs in different universities so far. In 1988-89 UGC initiated a programme for identifying University Departments for conducting subject-oriented refresher courses for in-service teachers and had identified 200 University Departments for the purpose. Nearly 13,000 teachers had attended orientation and refresher programmes in ASCs and university departments.

In 1991, the Scheme of ASCs was reviewed by an Expert Committee up by UGC. While recommending the continuation of the scheme, the Committee made the following major suggestions (Department of Education, 1992):
In order to ensure proper development of both orientation and subject refresher programmes, short and long-term plans for academic staff colleges may be prepared on a regular basis and proper policy directions may be given from time to time.

The innovations being carried out by academic staff colleges and reading and reference material developed by them should be properly coordinated so as to avoid duplication and help sharing the benefits of each others efforts.

The progress of academic staff colleges should be regularly monitored through quantitative and qualitative information. Based on such analysis, necessary feedback may be given to academic staff colleges for their future development.

A mechanism should also be created for networking of academic staff colleges. For carrying out these activities, a consortium of academic staff colleges may be set up in close collaboration with NIEPA. The details of Consortium may be jointly worked out by UGC and NIEPA; for this purpose NIEPA and UGC may enter into a memorandum of understanding.

UGC, on the recommendations of an expert committee set-up in 1991, had decided to continue the scheme of ASCs during the 8th Plan. In order to improve and strengthen the programmes of teachers training the following proposals were made (Department of Education, 1992):

- Before considering further expansion of Academic Staff Colleges, UGC and the universities concerned should take measures for consolidation and strengthening of the existing ASCs;
- Efforts should be made to initiate training and orientation of teachers in Engineering and technical subjects;
- UGC should undertake a five yearly review of the performance of ASCs;
- Keeping in view the popularity of IGNOU's Diplomas in Distance Education and Higher Education, suitable distance education
programmes should be designed for upgrading knowledge and skills of teachers in institutions of higher education.

- Efforts of UGC and IGNOU for training of teachers should be integrated and coordinated. For instance, ASCs could organise contact programmes for those teachers who are enrolled in IGNOU’s Diplomas in Distance and Higher Education.

5.6 (vii) Examination Reforms

In December 1982, the UGC formulated the minimum programme of examination reforms and advised the universities to take suitable steps in this regard with examinations beginning in 1983-84. This included suggestions regarding the demarcation of the syllabus into well-defined units and areas of content with a topic-wise break down; replacement of over-all choice by internal options and the holding of examinations only after the requirement of a minimum number of lecturers/tutorials/laboratory sessions was fulfilled. Universities were also asked to take effective security measures for the conduct of examinations in order to establish the credibility of examinations which eroded in a number of university centres. It was a matter of gratification that a large number of universities responded favorably to this but there was a need for concerted follow-up action in this regard, and to persuade other universities to take action in this direction.

5.6 (viii) Science Education in University

Some of the notable steps taken by the UGC up to the end of 7th Five Year Plan for promotion of science education and research included:

(i) Of the general development grants (Rs. 103.00 crore) provided to Universities, Rs. 42.00 crore was for development of science infrastructure;

(ii) Under the scheme of COSIST, 111 University departments had been provided Rs. 37.40 crore for strengthening of teaching and research;
(iii) Upto the end of 7th Plan, 200 University departments in Science & Technology had been provided Rs. 26.80 crore under the Special Assistance Programme (SAP);

(iv) Inter-University Centre in Nuclear Science, Astronomy, Astrophysics, MSD Radar, and Crystal Growth had been established at a cost of Rs. 26.00 crore.

In addition to the above, the Commission has provided support for introducing courses in emerging areas like, Bio-technology, Ocean Development, Electronics, Computers, etc., as well as for research in super-conductivity, up-keep of University Services Instrumentation Centres and fellowships/salary to Research Fellows, Research Associates and Scientists.

While UGC was to continue to provide support on the above lines to science education and research, the following recommendations were made for promotion of science education:

(i) In the long-term a special Sub Plan had to be prepared by UGC, in consultation with Department of Science & Technology and State Governments, for equipping deficient science laboratories in Universities and Colleges in a phased manner by 2000 A.D. Steps were also to be taken for removal of obsolescence and replacement of fragile equipment.

(ii) In the short-term, UGC was to consider equipping at least one science college in every district of the country with a modern laboratory during the 8th Plan.

(iii) There was an urgent need to provide special training to science teachers to keep them abreast with the latest developments in their areas of specialisation, UGC was to work out a strategy in collaboration with the Department of Science and Technology, for meeting the training needs of science teachers on a priority basis.
5.6 (ix) Research in Universities

According to the University Education Commission 1949, special emphasis was given on postgraduate training and research in the fields of Arts and Science. Seeing the miserable and wretched state of this field, the commission lamented the state of affairs and opined that vast and unlimited opportunities existed in the field of research in India. Hence research scholars were to be encouraged by providing all facilities to them. Admissions to the M.A and M.Sc classes were to be made on all-India basis and conditions for the closest touch between the students and teachers were to be promoted. For the degree of Ph.D students were to put at least two year's study work. In the case of candidates for Ph.D. degree, a \textit{viva voce} test besides the thesis were to be held in order to test their general knowledge and their authority on the subject they had worked upon. Admission to Ph.D too was to be made on all-India basis. Research Fellowships were to be granted to capable students during the period of their research work. Students of M.Sc and Ph.D were to be granted scholarships and free seats by the Education Ministry (Rawat, 1996).

According to Policy Frame 1978 every institution providing postgraduate instruction must, have competent staff actively engaged in research and adequate research facilities in terms of laboratory equipment and research journals. It, therefore, follows that the responsibility for postgraduate education must, by and large, be directly assumed by the universities themselves. While a few colleges have outstanding research and teaching departments, most of them are poorly equipped for postgraduate instruction. Their situation should be reviewed in terms of the norms established by the UGC, and those having the potentiality of coming up to the norms within a few years should be assisted to do so as soon as possible, while the others should discontinue postgraduate instruction to the interest of standards. Collaborative efforts by colleges, which may not individually be viable units of postgraduate.

According to National Policy on Education 1986, research is a means of renovation and renewal of educational processes must be
undertaken by all higher technical institutions. It should primarily aim at producing quality manpower capable of taking up R&D functions. Research for development will focus on improving present technologies, developing new indigenous ones and enhancing production and productivity. A suitable system for watching and forecasting technology will be set up.

The Review Committee 1992 on NPE 1986, contributed policy towards research in higher education for its promotion. (i) University-Industry linkages should be established on a priority basis in metropolitan areas, cities and regions with a concentration of industry; (ii) UGC should initiate a scheme of providing incentives to universities which are successful in establishing effective linkages with industry; (iii) Efforts should be made to increase the flow of research funds to the university sector; (iv) Inter-institutional links between universities in India and "state of the art" research institutions abroad should be established to facilitate basic research in priority areas; (v) Sophisticated and expensive equipment, which is used by different departments within the same University, should be put to optimal use rather than duplicating such facilities in each department; (vi) Journals are essential for good quality research. Due to the steep depreciation in the value of the Rupee in the past 2-3 years, many universities are unable to continue subscription to essential journals. There is an urgent need to augment resources to ensure continuance of subscription to journals, particularly in Science, Technology and emerging areas; and to work out modalities for exchange of journals between universities situated in close proximity; (vii) Full advantage should be taken by the universities of the facilities available at the National Centre for Science Information at Indian Institute of Science, Bangalore and the Information Centres in Humanities and Social Sciences at M.S. University of Baroda and SNDT Women's University, Bombay; (viii) A high powered Committee should be constituted by UGC, with representatives of DST, CSIR, ICSSR, ICHR, etc. to assess the quality of research in our universities; and (ix) The Commission has nurtured about 200 Science and Technology
departments under SAP and COSIST. These schemes should be merged during the 8th Plan and departments which have been assisted under these schemes should serve as focal points for coordinating research in frontier areas and training scientists in other universities/colleges in research methodology, etc. (x) New Inter-University Centres for research should be established in Humanities and Social Sciences.

Bodies for Research Development

**Indian Council of Agricultural Research** : The Indian Council of Agricultural Research (ICAR) was established through a Government Resolution for promotion of agricultural education and research in the country. The council functions under the supervision of the Ministry of Agriculture. Under the auspices of the Council, a number of research institutions and Agricultural Universities have been set up in the country. The ICAR provides funds to these institutions for their development.

**Indian Institute of Advanced Study** : The Indian Institute of Advanced Study (IIAS), set up in 1965, aims at free and creative enquiry into the fundamental themes and problems of life and thought. It is a residential centre for research and encourages promotion of creative thoughts in selected subjects like Humanities. Indian culture, Comparative Religion, Social Sciences and Natural Sciences and in other areas as the institute may from time to time decide. The institute provides facilities for advanced consultation and collaboration besides exhaustive library and documentation facilities. The IIAS awards fellowships for advanced research every year. The institute holds three seminars each year on themes of national significance when outstanding scholars and experts are invited to join the members of the academic community of the institute to examine theoretical issues and contemporary problems. Visiting Professionals, both from India and abroad, are invited from time to time to deliver series of lectures at the institute.

**Indian Council of Philosophical Research** : Indian Council of Philosophical Research (ICPR) was set up by the government to promote research in philosophy and allied disciplines. In order to achieve its aims
and objects, the council awards fellowships, organises seminars, conferences, workshops and refresher courses, provides financial support to organise seminars/workshops, travel grant to scholars to present their papers at conferences/seminars held aboard, sponsors major and minor projects and brings out publications and a triennial Journal of Indian Council of Philosophical Research. The ICPR offered four senior fellowships, 11 general fellowships, 17 junior research fellowships, four residual fellowships and one short-term fellowship up to November 1998.

**Indian Council of Historical Research** : The Indian council of Historical Research (ICHR) was established in 1972 with a view to providing funds for historical research and to foster objective and scientific study of history. It has been promoting historical research including the history of art, literature and philosophy and allied subjects such as archaeology, numismatic, epigraphy and the historical study of manuscripts. The council awards fellowships, study cum-travel grants and publication subsidies. It also endeavours to make available source material as well as result of historical research through an ambitious publication programme. It also brings out a journal. The *Indian Historical Review* which includes interpretative papers and reviews. It organises seminars and academic conferences and gives financial assistance for travel within and outside the country for conducting historical research. The council also maintains a large and continuously expanding library for the use of historians and researchers. Documentation library for the use of historians and researchers. Documentation services are also provided. The most important function of the ICHR is to provide assistance to scholars/institutions for research and publications. National fellowships are awarded to eminent historians who wish to work on projects of special historical importance.

**Indian Council of Social Science Research** : The Indian Council of Social Science Research (ICSSR) was established in 1969 with the objective to support and sponsor purposive and meaningful research in social sciences in India. The council provides maintenance and
development grants to 27 research institutes spread over the entire
country. The council has also established six Regional Centres or
indemnification and development of talent through various programmes.
During 1998-99, 130 new research projects were proposed to be
sanctioned and 90 reports were to be received for projects sanctioned
earlier.

There are, at the national level, a multiplicity of other councils
established by the Government of India as statutory mechanisms for
developing and regulating various professions. To the extent the
preparation for all these professions is done by the universities through
education and training, they have to satisfy the regulator's prescriptions
of standards of professional preparation, though most of them are not
involved in the resource allocation processes. Some such counsels are:

- Central Council Research in Ayurveda and Siddha;
- Rashtriya Sanskrit Samsthan;
- Indian Council of Medical Research;
- Rashtriya Veda Vidya Pratishthan; etc.

**UGC for e-research** : With e-education topping the priority list of
UGC, college and university teachers will now be able to present their
research projects in multi-media and put them on Internet with help from
the UGC, at an individual level, a teacher can prepare a three-minute CD
on any of the topics related to his subject.

In the next stage, two to three teachers can present their research
work in multi-media more elaborately. Thirdly, a group of faculty
members can work with a software company to put their work on the net.
To enable this, the UGC will connect all universities and colleges by
providing free VSNL connections for five years (Mohan, 2002).

At a lecture at Panjab University, Chandigarh, UGC Chairman
Professor Arun Nigaverkar highlighted some points for e-research:

- All universities and colleges to be inter-connected.
Free VSNL connections to all colleges.

UGC to provide journals on-line.

Projects presented in multi-media to be treated as research work.

5.6 (x) Other Measures to Improve Efficiency

In order to improve the internal efficiency of the institutions of higher education, it is necessary to provide opportunities for professional development of University and College administrators. Recognising this, the Department of Education, M.H.R.D. (1992), suggested the establishment of autonomous departments and units to decentralise administrative, academic, and financial powers in universities; and setting up of effective grievance redressal machinery.

The UGC had recently reorganised its internal functioning on the basis of the recommendations made by the Administrative Staff College of India (ASCI), Hyderabad. The Commission has also undertaken a comprehensive review of its schemes with a view to consolidating, reducing of overlap and duplication, and strengthening of priority schemes. It was recommended that all universities should undertake similar reviews by the year (1993-94) to bring about greater efficiency in their functioning. It was also necessary for each university to set up an internal mechanism to review its working on a continuing basis.

According to Rao (2000), for improvement in efficiency the UGC provided grants for setting up computer centres in 125 universities up to November 1998. Also, assistance was provided for upgradation of computer facilities in the computer centers of various universities. In addition, the commission provided assistance to 3,137 colleges up to November 1998 for installing computer facilities. Universities were also assisted by the UGC for introducing Computer application paper at PG level in all subjects wherever there was relevant need for it. As many as 13 universities were assisted under the scheme up to November 1998.

National Assessment and Accreditation Council (NAAC): NAAC established in 1994, was expecting the Quality Assurance is to reimburse
the National Assessment and Accreditation council to have their universities/departments assessed by the NAAC for accreditation. For this purpose, the UGC will retain the amount required for payment to NAAC from the total grant and release the same to NAAC when the activity is undertaken by the University. **Meta-Evaluation of NAAC** : Working towards its mission, NAAC has assessed and accredited 173 institutions-140 colleges and 33 universities so far – with the internationally accepted methodology of self-study and peer review. For a vast system of higher education with about 10,750 institutions, this is a small number, a mere 1.6 percent of the total number of institutions. But because of the efforts that have gone in for fourteen years in evolving an acceptable methodology of External Quality Assurance (EQA) for such a complex system, and the field experience of six years, there is enough data to reflect on. The field experience has provided a broad basis to take a critical perspective and identify the aspects that need to be fine-tuned or eliminated from the evaluation process followed by NAAC. The time for that task to materialise came by the end of the academic year 1999-2000 when NAAC completed accrediting 118 institutions. By then the stakeholders gave clear signals about using the outcome of assessment for their decisions and that made the need for evaluation all the more important.

**Centralized Facilities** : On the basis of the recommendations of an expert committee, the Commission decided to set up Nuclear Science Centre as an inter-university national research facility. The Centre would promote research and advanced studies in related areas of Physics, Chemistry, Biology and Medicine, etc. and its facilities would allow research to be done at the very frontier of science. Setting up of similar centres in other subjects some in collaboration with other agencies such as CSIR, Department of Ocean Development, the IIT system etc. was brought under consideration.

**Use of Satellite in Higher Education** : The Commission took the initiative and government has agreed to provide one hour every afternoon for telecasting programmes in the field of university and college education. Careful preparations were made to start
the programme from July 15, 1984. The programme at first would be in English and would be meant as enrichment of undergraduate studies. Some programmes will be meant for teacher-improvement. Six training and software preparation centres to undertake research and development in this direction were set up.

**Quality of Medium of Instruction** : The question has been engaging the attention of the universities and the Government for some time. The University Grants Commission has appointed committees to study the problems likely to arise from a change in the medium of instruction and various education commission have also studied the problem and had recommended that the change from English to Indian languages as medium should be preceded by an adequate preparation of teachers for the purpose and production of suitable textbooks and other literature needed in various languages. It was further recommended that, when the regional language is made the medium, English should continue to be a subject of study for all the students and care should be taken to see that the standard of English is maintained.

**Information Technology** : UGC has been providing assistance to universities for setting up computer facilities and establishment of Computer Centres. Upto 1990-91, 105 Universities had been provided with Computer Systems and 948 Colleges with personal computers. The Commission has also been assisting Universities under the UGC-DOE Joint Programme for running several manpower development courses in the field of Computer Science.

UGC had decided to set up Information and Library Network (INFLIBNET) with a view to promoting and establishing communication facilities so as to improve capability in information transfer and access; for linking Libraries and Information Centres in Universities, Institutions of National Importance, etc.
INTERNATIONALISATION OF INDIAN HIGHER EDUCATION

According to Natarajan (2001), internationalisation has been occupying the attention of national governments, international agencies and institutions of higher education during the past two decades, particularly since the general acceptance of globalisation worldwide. There has been an intensification of emphasis by nations and international agencies on international cooperation, collaboration and exchange, and by institutions of higher education on internationalizing research and teaching.

(i) Globalization of Higher Education: Threat or Opportunity and Meaning for India

The phenomenon of globalization, which transformed world trade, communications and economic relations in the latter part of the 20th Century, is having a similarly profound effect on education at the start of the 21st Century. Student options for higher (tertiary) education, in particular, are no longer constrained by national boundaries. Innovative forms of transnational education—Internet-based distance learning, branch campuses, educational franchising have greatly expanded opportunities for students to study and learn outside their country of origin. In addition, there is now increasing global competition for the best and brightest students, as more and more countries recognize the economic potential of higher education as a service export sector. For the first time in history, large segments of the world's student population truly have access to a "global marketplace" of higher education (Arnold, 2001).

For higher education leaders in India, this new environment holds both threats and opportunities. The threats are obvious: as more and more Indian students look to Australia, Britain and the U.S. for both undergraduate and post-graduate studies, the quality of Indian universities will continue to suffer. Lacking computer facilities and Internet access, many of India's resource-starved institutions—such as mofusil colleges in remote rural districts—will be on the wrong side of the
digital divide. Even India's elite institutions – the IITs and IIMs will find it increasingly difficult to attract and retain world class faculty members in the face of attractive offers from foreign universities, research institutes and multi-national corporations. So, there is a substantial risk that Indian universities and their students could end up as serious losers in the global higher education "game" (Arnold, 2001).

(ii) International Influences in Indian Higher Education: Historical View

If one scans the horizon of Indian higher education institutions today, the legacy of prior waves of international, if not global, influence can be seen in virtually every field. The impact of British higher education is felt not only in the basic structure of Indian higher education – the system of examinations, structure of post-secondary education, scheme of universities and affiliating colleges – but also in the range of colonial era institutions that are still among the most elite in India today. St. Stephens College in Delhi and Presidency College, Calcutta, are but two examples of prestigious undergraduate institutions that still bear the distinct imprint of their British heritage. Similarly, India hosts a wide variety of pre-Independence missionary institutions – colleges founded in the late 19th and early 20th Century by foreign missionaries of different faiths. St. Joseph’s College in Trichy, St. Xavier’s in Chennai, and Christian Medical College, Vellore, are notable examples. In the post-independence era, the Indian Institutes of Technology, consciously patterned after the Massachusetts Institute of Technology in the U.S., received substantial overseas help right from the outset. With support from four donor nations, the five IITs benefited from guest faculty from outside of India, the ability to send Indian faculty for training abroad, and contributions of modern laboratory equipment and facilities. Similar international links were established by the Indian Institutes of Management; IIM/Ahmenabad, for example, still maintains strong connections with the Harvard Business School. The Indira Gandhi National Open University (together with similar, state-sponsored Open
Universities), drew heavily on the UK experience with distance education and the Open University concept. In case of most of these institutions UNESCO, incidentally, did the liaison work.

(iii) India's Position in Today's Global Market Place: Current Realities

Regrettably, the current realities of globalization reflect a highly skewed relationship between East and West. Of the 514,000 foreign students currently studying in the United States, more than 54 percent are from Asia. Seven of the top ten "sending countries" of international foreign students in the U.S. are Asian, while not a single Asian country is represented among the top ten destinations for American students studying abroad. India alone accounts for more than 42,000 students in the U.S., compared to only 707 Americans who studied in India during the 1998/99 academic year. Worldwide student mobility data, compiled annually by UNESCO confirm similar imbalances in student exchange between India and other industrialized countries.

(iv) A Pathways to Higher Education: A Global Future

Even an extreme optimist cannot help but be disheartened by the myriad problems confronting the Indian higher education system – a vast and unwieldy system comprised of some 300 universities and deemed universities, more than 10,000 colleges and some 6.5 million students. Massification of higher education has overwhelmed large parts of this system, resource constraints are severe, and the quality of education available to most Indian students has deteriorated markedly in recent years. The situation is further complicated by the rigidities of India's centralized higher education bureaucracy, the political pressures on higher education institutions from regional, religious and caste-based groups, and the growing problem of corruption in various aspects of university life (e.g., admissions, examination, promotions). In such a beleaguered system, how can internationalization efforts possibly be effective one may ask.
Stronger partnerships also need to be developed between Indian universities and universities in other countries (Arnold, 2001).

Three "pathways" offer some promise for the future. The first path is labeled policy reform. It includes opening up space for private universities, easing or eliminating research restrictions on foreign scholars and graduate students, and encouraging foreign collaboration in the university sector in the same way such joint ventures now exist in private industry.

A second pathway for Indian internationalists has to do with partnerships. In fields such as engineering, management and computer sciences, for example, industry-university collaborations, can yield significant benefits for both sides.

The final pathways focus on innovation and leadership, two qualities in greatest need within Indian higher education today. Innovation can take a variety of forms, ranging from the use of Internet technology to develop joint on-line courses between Indian and foreign universities to institutional innovations.

(v) **World Conference on Higher Education and India**

India participated in the World Conference on Higher Education Convened by UNESCO, in Paris, between 5-9 October 1998 with a high level delegation led by the Minister for Human Resource Development. The conference deliberated upon the needs and challenges of the higher education in the twenty-first century, "Vision and Action". The Indian delegation made significant contributions to the World Declaration by suggesting modifications and amendments, most of which were accepted; one such waged received big applause was the world leaders of higher education reads as under: "Ultimately, higher education should aim at the creation of a new society-non-violent and non-exploitative-consisting of highly cultivated, motivated and integrated individuals, inspired by love for humanity and guided by wisdom". The rapporteur of the conference observed that India’s amendment was 'too beautiful to be rejected'.

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