

Source:- National Policy on Education (Report)
Chapter 11, page no. 61-70
CED code:- R. N00 (33)

11 HIGHER EDUCATION

1. THE PRESENT SITUATION

11.1.1 We have one of the largest systems of higher education in the world. However, the spread and developments in this area have been uneven. The infrastructural facilities of universities and colleges vary widely which accounts for variation in quality of teaching and research. The courses offered by the universities are generally of a traditional nature and few are related to the job market and environment. The credibility of the evaluation system is being eroded. Though university research is generally acknowledged to be cost-effective, it does not get an adequate proportion of the funds available to the research sector.

i 1.1.2 The university system should move to the centre stage. It should utilise its autonomy for innovations in teaching and pursuing high quality research. The emphasis on autonomy of colleges and departments, provision of means to interact across boundaries of institutions and funding agencies, better infrastructure, more rationalised funding of research, integration of teaching, research and evaluation, all these mirror this major concern.

2. THE POLICY, PROGRAMME AND STRATEGIES OF IMPLEMENTATION

11.2.1 The NPE; 1986 visualises that higher education should become dynamic as never before. The main features of the programmes and strategies to impart the necessary dynamism to the higher education system consist of the following:

- (i) Consolidation and Expansion of Institutions
- (ii) Development of Autonomous Colleges and Departments
- (iii) Redesigning of Courses
- (iv) Training of Teachers
- (v) Strengthening Research
- (vi) Improvements in Efficiency
- (vii) Creation of structures for co-ordination at the State and National levels.
- (viii) Mobility
- (ix) Finances
- (x) Review and Monitoring

3. MAJOR DEVELOPMENTS

11.3.1 The major developments in the field of higher education in pursuance of the National Policy for Education (NPE), 1986 and its Programme of Action (POA), 1986 include:

- i) Revision of pay scales of university and college teachers with financial assistance from the Central Government; provision for career advancement linked to performance appraisal and training; and formulation of a Code of Professional Ethics for teachers;
- ii) Introduction of National Eligibility Test (NET) for recruitment of university and college lecturers and selection of Junior Research Fellows;
- iii) Establishment of 48 Academic Staff Colleges by UGC in different universities in the Seventh Five Year Plan for organising orientation programmes for newly appointed teachers; identification of 200 University Departments for conducting refresher programmes for in-service teachers; so far 4600 teachers have participated in orientation programmes and 8400 have attended in-service training;
- iv) Conferment of autonomous status on 86 colleges in 7 States;
- v) Preparation and examination of a comprehensive report by the Gnanam Committee appointed by UGC to review the management structure of universities;
- vi) Setting up of Inter-University Centres for providing common facilities for research in Nuclear Science, Astronomy and Astrophysics, Atomic Energy, and Crystal Growth;
- vii) Circulation of model curricula developed by UGC's Curriculum Development Centres in 27 subjects in Science, Social Sciences and Humanities;
- viii) Formulation of UGC guidelines on setting up of State Councils of Higher Education (SCHE), and establishment of a SCHE in Andhra Pradesh; and
- ix) Expansion of the distance learning and open university systems.

11.3.2 Proposals for establishing an Accreditation and Assessment Council are in an advanced stage. However, the proposal for setting up a National Apex Body for Higher Education has not made much headway.

11.3.3 The implementation of the NPE, 1986 and POA, 1986 was constrained by lack of consensus on some important measures such as non-proliferation of institutions of higher learning; development of autonomous colleges; establishment of SCHEs; redesigning of courses; promotion

of student and teacher mobility; Resource insufficiencies and absence of effective monitoring and review mechanisms were also constraints.

4. CONSOLIDATION AND EXPANSION

11.4.1 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 of institutions of higher learning continues unabated. Thus the number of universities has gone up from 149 in 1985-86 to 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.

11.4.2 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.

11.4.3 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.

11.4.4 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

11.4.5 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% of the increase in the total number of colleges during the period and that 65% 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 development of higher education in States.

11.4.6 In the light of the experience of the implementation of NPE, 1986 and POA, 1986 the following action is proposed:

- (i) The establishment of State Councils of Higher Education (SCHE) as statutory bodies in all States during the Eighth Five Year Plan to en-

sure proper planning and coordination of the development of higher education. 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.

- (ii) Pending the establishment of State Councils of Higher Education, every State Government should, in partnership with UGC, undertake a survey of the existing facilities for higher education in the State and its projected needs upto the year A.D. 2000. The information collected in the survey, should be used to develop, by 1993-94, a computerised Management Information System (MIS) to identify areas of the State which are not properly served by existing universities/colleges, and institutions which are over-crowded and/or deficient in minimum facilities.
- (iii) To minimise expenditure on establishment of new colleges and universities it should be ensured that their campuses are compact and that they are established at places where infrastructural facilities like power, communication, road, transport, water, etc. are easily available.
- (iv) The optimum utilisation of the existing infrastructure in universities and colleges should be ensured by introduction of extra shifts, especially in metropolitan areas and large cities.
- (v) When the need for a College is established, its affiliation to a university is an academic matter and should be given on academic grounds alone, without any other considerations. The final authority for granting affiliation, its continuation, extension or dis-affiliation should vest solely with the appropriate university authorities. However, since affiliation may create eligibility for grant-in-aid, the university should consult the State Government concerned before granting affiliation to a private college. States should review the relevant legal provisions to give effect to these recommendations and universities should exercise greater vigour in adhering to UGC guidelines while exercising their powers of affiliation.
- (vi) Where the existing colleges fall short of satisfying the conditions of affiliation prescribed by

UGC their requirements should be carefully assessed and brought to the notice of the colleges and the State Government concerned so that they are provided threshold facilities, preferably during the Eighth Five Year Plan. The establishment of new colleges in States, which have a large number of colleges with sub-standard facilities, should be deferred until such time as the existing colleges can be provided with minimum facilities. Efforts should also be made to evolve a consensus among UGC, State Governments and Universities not to continue provisional affiliation of colleges beyond the initial period of five years.

- (vii) There is an urgent need to review, revise and update grant-in-aid rules in the light of recent developments in the field of higher education. It is felt that the criteria of 'deficit' as the basis for providing grant-in-aid to colleges should be reviewed and issues such as per capita cost, teacher student ratio, types of courses offered, internal resource generation, performance appraisal of teachers, etc. be taken into account for determining the quantum of grant-in-aid payable to colleges. For this purpose, UGC should formulate model guidelines in this regard.
- (viii) The recommendations made by the Gnanam Committee in regard to changes in the management structure of the universities should be implemented by all States as and when approved by CAGE.
- (ix) The movement towards entrance tests for admission to institutions of higher education will be encouraged and promoted by UGC and State Governments. The services of the National Evaluation Organisation (NEO) should be utilised by the university system for developing, designing and administering entrance tests for admission. During the next three years (i.e., by 1995) all universities should devise Entrance Tests for admission to post-graduate courses and prescribe ceilings for admission to postgraduate and professional courses, keeping in view the availability of teachers, libraries, laboratories, etc. It should be ensured that entrance tests for admission do not militate against students belonging to the weaker sections of society and rural areas who may not be proficient in the use of the English language and lack communication skills.
- (x) With escalation in the cost of equipment, books and journals, a system of sharing and pooling of

resources within university departments and between neighbouring universities/colleges, particularly in metropolitan areas and large cities, should be worked out within the next year (1993-94) by the UGC in consultation with the State Governments. To ensure better utilisation of equipment costing Rs. 2 lakh or more, their use should be monitored by introducing a system of 'Utility Audit' based on log book entries indicating the number of hours per day such equipment is put to use by faculty and students.

- (xi) Inter University Centres were set up for providing common facilities to researchers from all parts of the country. Scholars in universities/colleges should be provided with opportunities for taking full advantage of the expensive and modern facilities in these Centres.
- (xii) Given the necessity to arrest the declining trend in the flow of plan funds from UGC to state universities and colleges, the severe constraint of resources and the need to provide adequate infrastructure in newer central universities and the three central universities proposed to be established in the North-East, the Government should exercise restraint in setting up more central universities.

5. DEVELOPMENT OF AUTONOMOUS COLLEGES AND DEPARTMENTS

(a) Autonomous Colleges

11.5.1 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.

11.5.2 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 106 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 evi-

dent. 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.

11.5.3 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:-

- 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 Scheme.
- 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.

11.5.4 The following action is proposed for implementation of the scheme of autonomous colleges during the 8th Plan:

- (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 be estab-

lished 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.

(b) Autonomous Departments

11.5.5 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:

- (a) UGC should initiate a review of the functioning of Autonomous Departments during 1992-93;
- (b) 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) should be granted autonomy in a phased manner by 1997.
- (c) Departments offering professional and technical courses, such as, Engineering, Technology, Computer, Management, Law, etc. and other emerging ones should be targeted for grant of autonomy during the Eighth Plan.
- (d) 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.

6. DESIGN OF COURSES

11.6.1 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 present rigid structures do not permit these reforms.

11.6.2 UGC has 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.

11.6.3 The scheme of restructuring of undergraduate courses was last revised by the Commission in 1983. Up to 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.

11.6.4 The Commission provided about Rs. 3.5 crore to universities and colleges during the 7th Plan period for implementation of the scheme of restructuring of courses.

11.6.5 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.

11.6.6 In order to achieve the objective of redesigning of courses and introducing vocational courses the following recommendations are made:

- 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 adoption/adaptation of the revised curricula by universities and colleges;
- ii) UGC should ensure updation 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, should 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 should complete 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 may be worked out by individual institutions with external agencies for imparting practical training to students who offer such courses;
- vii) In future the emphasis should be on development of integrated Honours Courses in vocational subjects rather than optional vocational courses which do 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 should 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 people to enrol 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 are 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.

7. TEACHERS* TRAINING

11.7.1 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.

11.7.2 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 have identified 200 University Departments for the purpose. Nearly 13,000 teachers have attended orientation and refresher programmes in ASCs and university departments.

11.7.3 In 1991, the Scheme of ASCs was reviewed by an Expert Committee set up by UGC. While recommending the continuation of the scheme, the Committee made the following major suggestions:

- i) 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.
- ii) 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.
- iii) 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.

- iv) 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 has accepted the recommendations of the Committee and decided to continue the scheme of ASCs during the 8th Plan.

11.7.4 In order to improve and strengthen the programmes of teachers*training the following proposals are made:

- i) The recommendations of the UGC Review Committee on Academic Staff Colleges should be implemented at the earliest;
- ii) Before considering further expansion of Academic Staff Colleges, UGC and the universities concerned should take measures for consolidation and strengthening of the existing ASCs;
- iii) Efforts should be made to initiate training and orientation of teachers in Engineering and technical subjects;
- iv) UGC should undertake a five yearly review of the performance of ASCs;
- v) 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.
- vi) 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.

8. RESEARCH IN UNIVERSITIES

11.8.1 During the Seventh Plan, the Commission provided Rs. 133 crore, which is 23% 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 are under way to establish two more Centres. Active participation of Universities in industrial research has not materialised on a large scale. However, some universities have 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 grantee 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 is 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.

11.8.2 The following recommendations are made for promotion of research in Universities:

- 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.

9. PROMOTION OF SCIENCE EDUCATION IN UNIVERSITIES

11.9.1 Some of the notable steps taken by the UGC upto the end of 7th Five Year Plan for promotion of science education and research include:-

- 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 have 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 have been provided Rs. 26.80 crore under the Special Assistance Programme (SAP);
- iv) Inter-University Centres in Nuclear Science, Astronomy, Astrophysics, MSD Radar, and Crystal Growth have been established at a cost of Rs. 26.00 crore.

11.9.2 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.

11.9.3 While UGC would continue to provide support on the above lines to science education and research, the following recommendations are made for promotion of science education:-

- a) In the long-term a special Sub Plan should 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 should also be taken for removal of obsolescence and replacement of fragile equipment.

- b) In the short-term, UGC should consider equipping atleast one science college in every district of the country with a modern laboratory during the 8th Plan.
- c) There is an urgent need to provide special training to science teachers to keep them abreast with the latest developments in their areas of specialisation. UGC should 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.

10. INFORMATION TECHNOLOGY

11.10.1 UGC has been providing assistance to universities for setting up computer facilities and establishment of Computer Centres. Upto 1990-91, 105 Universities have 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.

11.10.2 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.

11. IMPROVING EFFICIENCY

11.11.1 POA, 1986 made several recommendations in regard to improvement in the functioning of higher education institutions and outlines responsibilities of Government, institutions, teachers and students in this regard. In pursuance of the recommendations contained in NPE 1986 and POA 1986, 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:

- (i) Guidelines on Terms and Conditions of Affiliation of Colleges by a University (1987);
- (ii) Guidelines on Minimum number of actual teaching days, Programme of examination reform and Workload for teachers in Universities and Colleges (1988);
- (iii) Report of the Task Force on Performance Appraisal of Teachers (1988);

(iv) Report of the Task Force on Code of Professional Ethics for University and College teachers (1989);

(v) Report of the Committee on Academic Calendar in universities and colleges (1989).

11.11.2 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.

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

11.11.3 The UGC has recently recognised 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 is recommended that all universities should undertake similar reviews within the next year (1993-94) to bring about greater efficiency in their functioning. It is also necessary for each university to set up an internal mechanism to review its working on a continuing basis.

11.11.4 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 constituted a Committee in January, 1991, to suggest measures for the augmentation of training facilities for university and college administrators. The Committee has completed its work and is expected to submit its report to Government soon.

11.11.5 Measures to improve the efficiency of Universities should focus on:

- a) Early implementation of the report of the Committee for augmenting of training facilities for university and college administrators;
- b) Establishment of autonomous departments and units to decentralise administrative, academic, and financial powers in universities; and
- c) Setting up of effective grievance redressal machinery.

12. CREATION OF MACHINERIES FOR COORDINATED DEVELOPMENT

(a) State Councils of Higher Education

11.12.1 The Policy envisages establishment of State Councils of Higher Education for :

- * State level planning
- * Coordination of plans and programmes within the State and with UGC for maintenance of standards.

In pursuance of the recommendations in the Policy 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. Despite persistent efforts on the part of the Department of Education and UGC to persuade State Governments to establish SCHEs, only one State i.e. Andhra Pradesh has set up a SCHE so far. Three more States are actively considering setting up of SCHEs. The slow progress of the scheme could be mainly attributed to the apprehensions of State Governments and Directorates of College Education regarding transfer of their powers and functions to SCHEs and the non-availability of resources for establishing these bodies.

11.12.2 Early establishment of SCHEs is critical for giving impetus to long term planning in Higher Education. The role envisaged for SCHE is spelt out in para 4.6. The Government and UGC would persuade State Governments to set up SCHEs during the 8th Plan.

(b) National Apex Body

11.12.3 The NPE, 1986 envisages establishment of a National Apex Body for bringing about greater coordination and integration in the planning and development of higher education system, including research. A proposal for establishing a National Council for Higher Education (NCHE) was prepared in consultation with concerned Ministries and Agencies. However, a consensus could not be reached on the structure and functions. Efforts would be made to operationalise a National Apex Body as early as possible.

(c) Accreditation and Assessment Machinery

11.12.4 In March, 1992 UGC resolved to set up a National Accreditation and Assessment Council as an autonomous body for the achievement of the objectives envisaged in the NPE. Government would take an early view on UGC's proposal.

13. MOBILITY

11.13.1 The NPE, 1986 visualises measures to facilitate inter-regional mobility by providing equal access to every Indian of requisite merit regardless of his rejoin and em-

phasises the universal character of a university. To achieve this objective, the POA recommended that the State Governments and Universities would be encouraged to admit students based on merit without any regard to domicile or nativity. Schemes to provide necessary support and guidance to institutions to admit students from other States would be evolved. In order that the all India character in the composition of the student enrolment and faculty strength is ensured, priority will be given to schemes for construction of student hostels, staff quarters, provision of scholarships, etc. Efforts will be made to move towards the objective of making recruitment of teachers on all India basis in consultation with the State Governments.

11.13.2 The scheme formulated by Government in 1987 for revision of pay scales of University and College teachers, inter-alia, provides that recruitment of teachers should be made on merit on an All India basis through open advertisement. In pursuance of this, UGC has evolved a national eligibility test for selection of lecturers in Universities and Colleges. The liberalisation of UGC's norms for providing financial assistance for construction of hostels in the 8th Plan should facilitate student mobility in the long run.

11.13.3 To further enhance the mobility of faculty and students, the following proposals are made:

- i) UGC and State Governments should encourage Universities to provide for an additional 10% seats on a supernumerary basis in each postgraduate department for children of employees with all India transfer liability and non-residents; and
- ii) To facilitate inter-state mobility of teachers, the Central Government should modify its mobility orders at the earliest to provide that teachers who move from one State University/College to another should be permitted to carry forward the benefit of past services for retirement benefits, as in the case of employees moving from Central Government/Autonomous Bodies to State Government/Autonomous Bodies and vice-versa.

14. FINANCES

11.14.1 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.

11.14.2 In this context, it has become necessary for the institutions of higher learning to consider measures for rais-

ing 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 the past forty five years, an elaborate and effective system should be established for providing freeships, 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.

11.14.3 A High Powered Committee would be set up to consider steps for mobilisation of additional resources for higher education, to bring about a better balance in the funding of institutions for higher education and research, and to improve the cost efficiency of the university system.

15. REVIEW AND MONITORING

11.15.1 The necessity for establishing effective mechanisms for a continuous review and monitoring of the Programme of Action was recognised. The following recommendations are made:

- i) The Commission should initiate the practice of reviewing one major scheme in every meeting and make recommendations for bringing about improvements;
- ii) The recommendations of the Commission should be made available to the CABE for review.
- iii) At the State level the SCHEs and SABEs would play roles corresponding to UGC and CABE.
- iv) At the institutional level, affiliating Universities should be entrusted with this task.