#### **CHAPTER 2.5**

#### HIGHER AND TECHNICAL EDUCATION

#### **HIGHER EDUCATION**

- 2.5.1 The importance of education, especially higher education, has been constantly growing and knowledge-based industries are now occupying the centre stage in development. Though the modern higher education system in India is almost 135 years old, its growth has been much faster after India became independent.
- 2.5.2 Over the past 50 years, there has been a significant growth in the number of new universities and institutions of higher learning in specialised areas. There are now 273 universities/deemed to be universities (including 18 medical universities and 40 agricultural universities) and 12,300 colleges (of which 4,683 are in the rural areas) (Table 2.5.1).
- 2.5.3 The Ninth Plan reiterates the objectives/policy directions of the National Policy for Education, 1986, and its Programme of Action, 1992. Broadly, the Ninth Plan emphasises on the following strategies to improve the higher education system:
  - a) Consolidation and expansion of institutions.

- b) Development of autonomous colleges and departments.
- c) Redesigning of courses.
- d) Training of teachers.
- e) Strengthening of research.
- f) Improvements in efficiency.
- g) Review and monitoring etc.
- 2.5.4 During the Ninth Plan, an outlay of Rs. 2,520.06 crore was allocated for the university and higher education sub-sector against which an expenditure of Rs. 2,270.92 crore was incurred. (Annexure 2.5.1).
- 2.5.5 The Ninth Plan period saw the emergence of separate universities for science and technology and health sciences, autonomous colleges with the freedom to design curricula, evolve new methods of teaching and research, frame admission rules and conduct examinations as well as Centres of Excellence and the National Assessment & Accreditation Council (NAAC). There are also institutions of higher learning recognised as deemed to be universities with their own sources of funding in addition to Government grants. The major

TABLE 2.5.1

Number of Institutions of Higher Education, Enrolment and Faculty

Year	Number of colleges	Number of universities*	Students (In 000)	Teachers (In 000)
1950-51	750	30	2,63,000	24,000
1990-91	7,346	177	49,25,000	2,72,000
1996-97	9,703	214	67,55,000	3,21,000
1998-99	11,089	238	74,17,000	3,42,000

**Note**: \* includes institutions that are deemed to be Universities, but excludes other institutions.

Source: UGC Annual Report 1996-97 & 1998-99 and Selected Educational Statistics, Ministry of HRD

emphasis in strategies relating to higher education during this period has been on an integrated approach, with an emphasis on excellence and equity, relevance, promotion of value education, and strengthening the management systems. Autonomous centres have been set up within the university system to provide common facilities, services and progra-mmes to universities and for the promotion of quality.

- 2.5.6 It is increasingly recognised that in the context of major economic and technological changes, the system of higher education should equip students with adequate skills to enable their full participation in the emerging social, economic and cultural environment. Universities are thus witnessing a sea change in their outlook and perspective. Also, information and communication technologies are leading to fundamental changes in the structure, management and mode of delivery of the entire educational system.
- 2.5.7 Many universities have already recognised the strategic significance of open and distance learning and offer correspondence courses. At the beginning of the decade, there were 64 universities offering courses through correspondence. The developments in the field of information communication technology and expansion of infrastructure for communication all over the country have created an unprecedented opportunity to serve the needs of continuing education and also to meet the demands for equal opportunity for higher education.
- 2.5.8 The Indira Gandhi National Open University (IGNOU) established in 1985, has 1.2 million students on its rolls and offers 72 programmes. The University has created a countrywide network of student support structures, with 46 regional centres and 765 study centres. It has also created a media network and teleconferencing system to electrnically link all distance-teaching institutions in the country. Many departments of correspondence courses in various universities were converted into independent open universities during the Ninth Plan period. There are, at present, nine open universities in the country, all started by different states during the nineties.

#### Box 2.5.1

#### Tenth Plan – Objectives, Key Issues and Focus

The main objective in the Tenth Plan is to raise the enrolment in higher education of the 18-23 year age group from the present 6 per cent to 10 per cent by the end of the Plan period. The strategies would focus on increasing access. quality, adoption of state-specific strategies and the liberalisation of the higher education system. Emphasis would also be laid on the relevance of the curriculum, vocationalisation, and networking on the use of information technology. The Plan would focus on distance education, convergence of formal, non-formal, distance and IT education institutions, increased private participation in the management of colleges and deemed to be universities; research in frontier areas of knowledge and meeting challenges in the area of Internationalisation of Indian education.

2.5.9 The issues of access and equity are central to the university/higher education system. Only about six per cent of the estimated population in the 18-23 age group is currently in the university system. Measures to increase enrolment, including that of the disadvantaged sections, will thus be given attention during the Plan.

#### Quality Improvement/Academic Re-forms/ Relevance of Curriculum

The basic issue of quality improvement 2.5.10 would be addressed through the modernisation of syllabi, increased research, networking of universities and departments and increased allocation of funds. Networking through local area network (LAN), wide area network (WAN), Information and Library Network (INFLIBNET) would also lead to increased academic activities and research. The university system would be expected to utilise the autonomy it enjoys for innovations in teaching and for pursuing high quality research. The emphasis would be on conferring autonomous status on more colleges, provision of the means to interact across geographical boundaries of institutions, improving the infrastructure, more rationalised funding of research, integration of teaching, research and evaluation, and mutual collaboration and cooperation among universities for optimum utilisation of available resources. There is a pressing need to improve the management and governance of universities to better enforce financial and administrative discipline. Decentralisation of the university system, greater powers to faculty/departments and nomination of students to university bodies on the basis of merit/excellence are, therefore, issues which would receive attention. The accreditation process should be made more transparent, time-bound and be progressively freed of Government regulations and control leading to a situation when the whole procedure would be based on a system of public appraisal/acceptance.

2.5.11 Financing of higher education is another critical issue. The fee structure in the universities is abysmally low and has remained static for more than three decades. The universities should, therefore, make efforts to rationalise the fees and attempt greater generation of internal resources. The extent to which universities can hike fees needs to be studied, including avenues for receipt of contributions, donations, gifts, and sponsorships from the alumni, trusts, private sector and industries. However, utmost care needs to be taken to ensure that the social obligation – ensuring that the poorer students are given adequate opportunity to pursue higher education — is not lost sight of.

#### **University Grants Commission (UGC)**

2.5.12 The UGC, the apex body responsible for the development of higher education in the country, has been providing financial assistance to all eligible central, state and deemed universities, both under Plan and non-Plan heads, for improving infrastructure and basic facilities. The grants-in-aid would be used for setting up central universities especially in states that do not have one, more autonomous colleges and providing support to private colleges. Attempt would be made to ensure that the socially, economically and geographically disadvantaged sections are able to access higher education. To encourage more women to pursue higher studies, the number of counselling/study centres, day care centres for children and hostels

will be increased during the Tenth Plan. Similar steps will be taken for scheduled caste/scheduled tribes (SCs/STs) students and minorities. Besides, the activities of distance/open universities will be supported to increase access for the northeastern and backward areas.

2.5.13 The UGC proposes to promote quality and relevance in higher education in the Tenth Plan by initiating complementary skill-oriented courses. The career development of students will be promoted through courses with a professional focus. A major programme of vocationalisation of education has already been initiated in 35 subjects at the undergraduate level. In the Tenth Plan, new courses, including vocational courses, relating emerging areas such as information technology, biotechnology, biomedicine, genetic engineering, applied psychology, tourism and travel, physical education and sports would be introduced in more and more universities. The UGC has been continuously updating curriculum and the process has been completed in 30 subjects in different disciplines. The Administrative Staff Colleges (ASCs) have proved to be good instruments for teacher training and orientation. Efforts will be made to widen and enhance the range and scope of ASCs and set up more ASCs to achieve a uniform regional spread. Steps have been taken from time to time for making accreditation of institutions mandatory. State Governments would be required to play a pro-active role in the accreditation process and help NAAC in its efforts to sensitise the stakeholders.

2.5.14 The UGC conducts a National Level Test (NET) to ensure minimum standards for those joining the teaching profession and taking up research in humanities including languages, social sciences, computer applications and electronic sciences. The Government and the UGC will continue to support NET and increase the number of research fellowships. Universities and colleges are to be provided with Intranet and Internet connectivity to develop an IT orientation in higher education and will also be encouraged to set up LAN and WAN so as to enable connectivity within the campus and among colleges/universities.

2.5.15 Under the ongoing scheme of strengthening scientific research, the UGC would continue to assist university departments, which have achieved excellence in research in different disciplines of science, especially in the emerging areas of biotechnology, biomedicine, genetic engineering, nuclear medicine, social science, humanities etc.

2.5.16 In view of the resource crunch faced by the UGC and the higher education system, it is proposed to give incentives to universities/colleges, which make efforts to increase/raise internal resources.

#### **Distance Education and IGNOU**

2.5.17 The non-formal system (distance and open learning) accounts for only a 13 per cent of the total enrolment in higher education. Out of 7.7 million students enrolled in university and colleges, the distance education/correspondence courses covered only one million students. The distance and open learning system provides flexibility in terms of combination of courses, age of entry, pace of learning and methods of evaluation. The coverage of open universities would, therefore, need to be extended to the backward regions, remote inaccessible tribal areas of the northeast and some of the eastern states. At present, there are nine state open universities and 64 Institutes of Correspondence Courses and Directorates of Distance Education in conventional universities. The enrolment of distance learners in open and distance education System is expected to rise significantly in the Tenth Plan period. IGNOU has expanded its regional centres and network of study centres in the Ninth Plan period. It now has 46 regional centres and 691 study centres. It has been vested with the twin responsibilities of acting as an Open University and offering need-based education, training and extension programmes, with special focus on the disadvantaged sections of the society and acting as the national nodal agency to determine and maintain standards in distance education.

2.5.18 IGNOU has established the Distance Education Council (DEC) to act as the nodal agency for distance education system at the tertiary level. The university has adopted an integrated multimedia instructions strategy consisting of print material and audio-video programmes, supported by counselling sessions at study centres. It manages a dedicated 24-hour satellite TV channel, Gyan Darshan, which beams educational programmes from school to tertiary level 24 hours a day. Preparations are on to launch 40 FM educational radio channels (known as Gyan Vani) under a Memorandum of Understanding with Prasar Bharati. During the Tenth Plan, IGNOU would set up open universities in states where none exist at present expand the activities of Gyan Darshan and Gyan Vani. The target is to extend the coverage of the open learning system to the backward regions, remote inaccessible areas of the northeast and low female literacy blocks in some of the eastern states.

2.5.19 The Government, in April 2002, constituted the Committee on Promotion of Indian Education Abroad (COPIEA) under the chairmanship of Secretary, Department of Secondary & Higher Education. With the globalisation of the Indian economy, student mobility across national boundaries has increased phenomenally in the higher, technical and management sectors. A large number of foreign educational institutes have also started establishing their presence in India and there is immense potential for Indian educational institutions to set up campuses abroad. The COPIEA will monitor all activities aimed at promoting Indian education abroad and will regulate the operation of foreign educational institutions to safeguard the interests of the students and the larger national interest as well. To this end, a system of registration will be introduced under which institutions will have to furnish information on operations and adhere to certain guidelines relating to publicity, maintenance of standards, charging of fees, granting of degrees etc. The COPIEA would, over a period of time, develop a sectoral policy on foreign direct investment in the education sector.

## **Social Science Research Outside the University System**

2.5.20 The higher education system includes research institutions that are outside the university system. These are the Indian Council of Social Science Research (ICSSR), Indian Council of Philosophical Research (ICPR), Indian Council of Historical Research (ICHR), and Indian Institute for Advanced Studies (IIAS) and the National Council of Rural Institutes (NCRI). As these institutes have been doing valueable research on current political, social and economic issues, which are of great relevance, the Tenth Plan would be increase funding for them. They would also be subjected to external evaluations, including peer review, to increase their effectiveness.

#### **TECHNICAL AND MANAGEMENT EDUCATION**

2.5.21 The technical and management education sector has made immense contribution to the country's economic and industrial development. It has produced high quality skilled, technical and managerial manpower. Technical / management education is provided through the Indian Institutes of Technology (IITs), Indian Institutes of Management (IIMs) and 17 Regional Engineering Colleges (RECs). Other institutions in the central sector are: Indian Institute of Science (IISc), Bangalore, Indian Institute of Information Technology and Management (IITM), Gwalior, Indian Institute of Information Technology (IIIT), Allahabad, Indian School of Mines (ISM), Dhanbad, School of Planning and Architecture (SPA), New Delhi, National Institute of Foundry and Forge Technology (NIFFT), Ranchi, National Institute of Training and Industrial Engineering (NITIE), Mumbai, Technical Teachers' Training Institutes (TTTIs), North Eastern Regional Institute of Science and Technology (NERIST) and Sant Longowal Institute of Engineering and Technology (SLIET). In addition, there are various polytechnics and engineering colleges in the states and in the private sector.

2.5.22 The number of institutes has grown phenomenally. In 1947, there were only 46 engineering colleges and 53 polytechnics with an annual

intake of 6,240 students. Due to initiatives taken during successive Plan periods, and particularly because of large-scale private sector participation, the number of All India Council of Technical Education (AICTE)- approved technical and management institutions has risen to 4,791 in 2001-02 with an annual intake of 6.7 million students.

2.5.23 The Ninth Plan period saw a phenomenal increase in the number of institutions in the technical and management education sector in the country with the AICTE granting approval for the setting up of 1,715 institutions across the country mainly through private initiatives. These cover courses/ programmes in engineering, technology, management, architecture, town planning, pharmacy, applied arts and crafts etc. There has also been a corresponding increase in the enrolment of students to meet the growing demand for quality technical/ managerial manpower, especially in the field of information technology (IT) and IT related fields. Networking facilities have also been upgraded.

2.5.24 There is greater use of technology in the teaching-learning process in the IITs in transforming pedagogy etc. The community polytechnics scheme started in 1978-79 made substantial contributions towards transfer of advanced technologies at low cost to the rural population and cost-effective strategies to upgrade skills.

2.5.25 A large number of central, state and accredited technical institutions in the private sector have benefited under the schemes of Modernisation and Removal of Obsolescence, Research and Development, initiated in the Seventh Plan and Thrust Areas in Technical Education started in the Ninth Plan. Infrastructure facilities for research and development (R&D) have been upgraded under these schemes. Special emphasis has been given to strengthening the infrastructure facilities in the premier institutes viz., IITs, IIMs, IISc, RECs, etc. Besides, the IITs and IISc have implemented Technology Development Missions in the areas of food processing engineering, material technology, genetic engineering, bio-technology etc. The Technology Development Missions, started in the Eighth Plan, succeeded in establishing strong industry-institute linkages. Technologies developed in projects carried out under different programmes have been successfully transferred to industry.

2.5.26 Technician Education has been strengthened and the quality of students passing out of Polytechnics has improved through the World Bankassisted state sector project which covered 279 polytechnics in nine states in the first phase and 249 polytechnics in ten states in the second phase. The Technical Education Project III effectively began from January 2001 and is aimed at assisting polytechnics in the backward areas of the northeast, Jammu and Kashmir and the Andaman and Nicobar Islands.

2.5.27 A National Programme of Human Resource Development (HRD) in IT targeting mainly

#### Box 2.5.2

## Recommendations of the Task Force on HRD in IT (2001)

- Creating information on IT manpower.
- Promoting initiatives in HRD in IT with focus on bridging the digital divide, innovation in pedagogy etc.
- Monitoring the intake and out-turn of IT professionals by institutes with the objective to double intake by 2001-02 and triple it by 2003.
- Setting up of exclusive IT institutes, improving their quality, infrastructure and promoting networking.
- Launching an IT faculty development initiative.
- Evolving curriculum and courseware of IT institutes
- Promoting technology-mediated IT education using a web-based and multimedia approach.
- Improving connectivity.
- Promoting postgraduate education and research.
- Facilitating interface with the IT industry.
- Sharing investments between the central/ state governments and industry.

IT education at the degree level and beyond, was launched in January 2000 in pursuance of the recommendations made by the Task Force on HRD in IT. The components of this programme, include upgrading of computing facilities and connectivity; promotion of technology-enhanced IT education; faculty development initiatives; curriculum and course initiatives; and promotion of interface with industry. Further, a Task Force constituted by the Planning Commission to suggest strategies for India's transformation into a knowledge superpower, has highlighted how advances in IT, biotechnology and other emerging areas could be harnessed for India's economic and social development.

2.5.28 Although there is enormous growth in capacity expansion and the turnout of world-class technical manpower, the technical education sector is still beset with some problems. These include lack of adequate training programmes and highly qualified faculty for the knowledge industries; shortage of funds/resources for technical institutions; inadequate linkages between the IITs, RECs and other engineering institutions; etc.

#### Box 2.5.3

## Tenth Plan – Objectives, Key Issues and Focus

The key issues in technical and management education during the Tenth Plan would be a continuing focus on increasing intake; quality of education, including research in technology. Other issues include: faculty development; optimal utilisation of resources through networking; development of information technology education; modernisation of the curriculum; international benchmarking; developing capacity in new and emerging technology areas; strategic planning and management of the technical education system and developing the informal sector.

2.5.29 The thrust on knowledge-based industries calls for strengthening the existing infrastructure, modernisation of laboratories, workshops, libraries, computer facilities and research and development.

- 2.5.30 Industry-oriented and practical programmes will be offered in selected polytechnics, developed into centres of excellence i.e., Indian Polytechnic Institutes (IPIs) to meet the specialised demand for middle level supervisory technical personnel of manufacturing industries. In addition to giving an opportunity for diploma holders to obtain higher qualifications, this programme will also provide the much-needed multi-skilled manpower to industry. Such polytechnics, besides playing a leading role in strengthening the diploma-level education, would, also, act as model institutions.
- 2.5.31 In line with the report of the R.A. Mashelkar Committee the RECs, which have great potential, will be expanded/modernised/upgraded into National Institutes of Technology and be conferred the status of deemed to be universities with greater academic and administrative autonomy.
- 2.5.32 Appropriate schemes will be formulated and implemented in the Tenth Plan to enhance the productivity of the informal sector, improve the skills of workers and facilitate the adaptation of better technologies. The Community Polytechnic scheme will be restructured/expanded by including all the AICTE-approved institutions under its ambit by the end of the Tenth Plan. Emphasis will be given to components relating to transfer of technology, manpower development and technical and support services when implementing the scheme.
- 2.5.33 Pharmaceutical institutions, institutions offering courses in architecture and planning and hotel management and catering will be supported for starting advance level courses, R&D and continuing education programmes.
- 2.5.34 The IITs and the IISc will continue their work in implementing the Technology Development Missions in various areas and providing strong support to industry-institute-linkages.
- 2.5.35 The recommendation of the Rama Rao Committee on enhancing the quality of post graduate education and research capability through doctoral and fellowship programmes will be

- implemented in the Tenth Plan. The Committee recommended the enhancement of the scholarship/fellowship rates to encourage postgraduate education, and better networking among institutions.
- 2.5.36 The Tenth Plan will take up several initiatives for strategic planning and management of technical education. These include an electronic management information system (EMIS) scheme to be supported by the AICTE at the national level to plan the coordinated development of the technical education system and to be implemented in selected lead institutions. The information collected through the EMIS will be available on-line and provide an effective real time decision support system to central and state governments for effective planning, development and monitoring. It would also support other stakeholders in taking informed decisions and choices.
- 2.5.37 The National Technical Manpower Information System (NTMIS), which gives a complete technical manpower profile, will be strengthened and expanded to other areas of technical education, namely, management, pharmacy, hotel management and catering, and applied arts. This would assist central and state governments and the AICTE to monitor the mismatch between supply and demand of technical manpower and facilitate planning and development of technical education in the country.
- 2.5.38 Two schemes will be launched to optimise resources and to make the system cost effective. One will involve networking of similar institutions in the areas of faculty and student exchange, joint academic and research programmes, faculty mentors, joint consultancy, continuing education and distance learning programmes, designing and updating curricula, preparation of instructional material, staff development and data and information sharing etc. The second will attempt to avoid duplication of efforts and wastage of scarce resources, establish common laboratory facilities in specialised areas which will also be shared by other institutions and used by industry on cost-sharing basis.

#### **New Schemes for the Tenth Plan**

2.5.39 Several new schemes are proposed in the Tenth Plan to upgrade the quality of technical education. With a view to making the education system flexible and enabling students to learn at their own time and pace, distance and web-based learning is planned in the various engineering and management institutions. Educational Technology Centres will be established/strengthened at IITs, RECs, selected engineering colleges, management institutions and TTTIs. These centres will take up preparation of course material and use multi-media software to put them online.

2.5.40 Full fledged departments of bio-technology will be established at IITs, RECs, IISc, Bangalore with undergraduate, postgraduate and doctoral programmes and for the development of new and emerging technology areas like advanced new material technology, bio-technology, nanotechnology, bio-informatics, robotics etc. This will provide a competitive edge to the country in the long-term development of biotechnology potential.

## LANGUAGES, BOOK PROMOTION, COPYRIGHT ACTIVITIES AND SCHOLARSHIPS

#### Languages

India has a rich heritage of languages. 2.5.41 The strategies for their development find an important place both in the National Policy on Education, and the Programme of Action. Efforts to promote and develop all the 18 languages listed in the Eighth Schedule of the Constitution continued through various ongoing central initiatives during the Ninth Plan. The programmes include: the appointment of teachers in Hindi, modern Indian languages and Urdu; preparation of bilingual, trilingual and multilingual dictionaries, teaching of Hindi by the Central Hindi Directorate, Delhi, through correspondence courses; development of Hindi teaching methodologies and training of Hindi teachers from non-Hindi speaking areas, comparative linguistic studies etc., by the Kendriya Hindi Shikshan Mandal. Besides, there are schemes for training of teachers in the modern Indian languages, research in language analysis, pedagogy and technology by the Central Institute of Indian Languages, Mysore. Emphasis is also given to minority languages with schemes for the development, promotion and propagation of Sindhi and Urdu languages by the National Councils for promotion of the two languages. Development of Sanskrit through a number of interventions and programmes of the Rashtriya Sanskrit Sansthan, Delhi, and Maharshi Sandipani Rashtriya Veda Vidya Prathisthan, Ujjain. Significant progress has been made in the development of languages during the Plan period.

#### Box 2.5.4

## Tenth Plan – Objectives, Key Issues and focus

The key issues during the Tenth Plan would be using technology for the development of Indian languages like the digitalisation of manuscripts; upgrading pedagogical skills; preservation of manuscripts and contemporary writing; promoting educational development/mainstreaming of minorities; education in human values.

2.5.42 The Tenth Plan will emphasise the following in its approach to language development:

#### **Development of Modern Indian languages**

2.5.43 Taking into account the rich cultural diversity of India, the development of Indian literature will get prime attention in the Tenth Plan. Five major projects, which lay stress on digitalisation of manuscripts and documents, research analysis, translation, the preservation of manuscripts and accessibility to information, will be taken up. The Central institute of Indian Languages and the National Book Trust, Delhi, will play lead roles in undertaking translation of literature into all languages and making them available to the people at affordable prices. The National Council for Indian Languages will provide the necessary impetus and

guidance for the development of Indian languages in the Plan period. Further, special efforts will be made to document the endangered languages.

#### **Hindi Language and Modern Technology**

2.5.44 Hindi is proposed to be developed both as the national language (Rajyabhasha) as well as the link language in the country. New centres of the Kendriya Hindi Sansthan are proposed to be opened to train Hindi teachers, and new schemes formulated to promote the language within India and abroad, using modern technology and through short-term Hindi learning courses.

#### **Promotion and Development of Sanskrit**

2.5.45 Sanskrit has a pre-eminent position among all languages as its knowledge helps access the vast treasures of wisdom contained in our ancient scriptures. The Government is committed to the development of Sanskrit, which will be done with the help of modern technology. It is proposed to digitalise Sanskrit classics and books in the Tenth Plan and teach Sanskrit through self-teaching CDs and through Internet.

2.5.46 Further, programmes will also concentrate on the identification, collation and preservation of ancient manuscripts. Particular attention will be paid on promoting links between Sanskrit and science. There is a vast treasure house of scientific knowledge in the ancient texts that needs to be made available to and popularised by promoting partnership between Sanskrit scholars and the scientific community. Efforts will also be made during the Plan to expedite the Sanskrit Encyclopedic dictionary project.

#### **Area Intensive and Madarasa Modernisation Programme (AIMMP)**

The National Policy on Education accords priority to mainstreaming of the educationally backward and disadvantaged sections of the society. Two centrally sponsored schemes, the Area Intensive Programme for Educationally Backward

Minorities (AIPEBM), and the Modernisation of Madarsa Education (MME) have been under way since 1993 and are meant to foster the educational development of minorities. Since they were initiated, 1,423 schools/hostels for girls/class rooms and other facilities have been established for the educationally backward minorities. Modern subjects - English, mathematics, Science and Social studies have been introduced in the madarsas under the modernisation scheme. Grants are also provided to establish and upgrade the library facilities. Besides, the National Council for Promotion of Urdu language has established 110 Urdu desktop publishing (DTP) centres to cater to the minorities. In the Tenth Plan, the AIPEBM and MME will be merged to form one umbrella scheme, the Area Intensive and Madarasa Modernisation Programme (AIMMP) to give more focused attention to the educational development of the minorities.

Education in Human Values (EHV)

2.5.48 The Strengthening of Culture and Values in Education scheme, initiated in 1987, is being implemented in line with the policy of making education a forceful tool for inculcation of social and moral values. It was renamed as Education in Human Values in 1992. The scheme will sensitise students, parents, teachers and the community and inculcate universal and eternal values oriented towards the unity and integrity of the country. It envisages the elimination of obscurantism, religious fanaticism violence, superstition and fatalism. Value Education Centres have been set up in NCERT, National Institute of Educational Planning and Administration (NIEPA), the National Open School (NOS), ICPR, IGNOU, IIT Delhi, IIM Lucknow and UGC. Special arrangements have been made for training of teachers in value education. It is proposed to make the scheme more broad-based and increase its scope by involving educational institutions and teacher training institutes in the states and Union Territories to seek their active participation in the programme.

#### **Scholarships**

2.5.49 The various scholarship schemes are proposed to be modified keeping in view the problems faced in their implementation during the Ninth Plan, the changing educational scenario and the need to improve the quality of education. The schemes are to be reviewed and revised to make them uniform and will be fully financed by the central government.

#### **Book Promotion**

2.5.50 Book promotion activities are carried out mostly through the National Book Trust. During the Ninth Plan, the Trust organised three World Book Fairs, six National and 25 Regional Book Fairs to inculcate reading habit among the people. With more children going to school and increased adult literacy, there is a need to promote the availability of books in the country.

#### **Box 2.5.5**

## Tenth Plan – Objectives, Key Issues and focus

The vision of 'Books for All' coincides with the vision of 'Education for All'. This calls for the promotion of the reading habit amongst the people and making books available at affordable prices. Production of quality books for children, including textbooks and workbooks, will be a priority.

2.5.51 'Books for All' is the proclaimed goal for the Tenth Plan, in line with the vision of 'Education for All'. This calls for making books available at affordable prices. Efforts will be made to secure easy accessibility to books for all segments of the population. Steps will also be taken to improve the quality of books, encourage creative writing and protect the copyright of authors and preserve the age-old wisdom.

2.5.52 During the Tenth Plan, the National Book Trust will continue its efforts to increase the production of quality books and expand the distribution system.

#### Copyright

2.5.53 India is a major producer and exporter of copyright material, namely, books, computer

software, films and music. The major copyright industries have registered significant growth over the last few years. The exports of books and other printed material has grown from Rs. 26 crore in 1986-87 to Rs. 215 crore (estimated) in 1998-99.

## Box 2.5.6 Tenth Plan – Objectives, Key Issues and focus

The phenomenal growth in the exports of copyright material, viz. books, computer software, films and music, requires measures for the enforcement of copyright. The focus during the Tenth Plan will be on creating greater awareness of copyright laws among the enforcement personnel and general public, setting up separate cells in state police headquarters, and encouraging research in the higher education system.

2.5.54 Several measures have been taken to strengthen the enforcement of copyright. These include amendment of the Copyright Rules in 1995; the Copyright Act in 1999, and promulgation of the International Copyright Order in 1999. Other measures included the setting up of the Copyright Enforcement Advisory Council, seminars/workshops to create greater awareness about copyright laws among the enforcement personnel and general public and creation of separate cells in state police headquarters, etc. The thrust areas in copyright and related rights in the Tenth Plan are strengthening of the enforcement machinery.

#### **General Agreement on Trade in Services (GATS)**

2.5.55 The GATS covers the education sector and is listed for negotiations in the World Trade Organisation. The process of consultation amongst various agencies to firm up the country's position in this regard has been intensified and will be fully addressed during the Tenth Plan.

#### PLANNING, MONITORING AND STATISTICS

2.5.56 The Ninth Plan gave priority to the review of the implementation of the National Policy on

Education and its Programme of Action and consultations with the state governments/Union Territories. Lack of timely and reliable data, which is so vital to educational planning, has been an area of concern.

# During the latter half of the Ninth Plan, increased attention has been given to encouraging Indian education abroad and measures for implementing Educational Exchange Programmes.

#### Box 2.5.7

## Tenth Plan – Objectives, Key Issues and focus

The key issues during the Tenth Plan would be review of the implementation of the National Policy on Education and undertaking research in education planning and administration. The Plan would also focus on providing training and consultancy services; strengthening the statistical machinery at the Centre, states and Union Territories; equalisation of educational opportunities for the disadvantaged; and educational development of the northeastern region.

During the Tenth Plan, efforts would be made for continuous and effective review of the implementation of the National Policy on Education and the institutional mechanisms for implementing it would be revived. NIEPA would assume a proactive role in policy research to bring structural changes in educational administration and in imparting training to the administrators. The institute would undertake and coordinate research in education planning and administration; and provide training and consultancy services. The statistical machinery both at the Centre and in the states/Union Territories is poised for a major overhaul so that reliable and validated data is made available to planners and administrators. Removal of disparities and equalisation of educational opportunities to the disadvantaged and neglected regions would also continue to receive priority attention.

## **Indian National Commission for Cooperation** with UNESCO

2.5.58 India has been playing an active role in promoting UNESCO's ideals and objectives, and fulfilling bilateral/multilateral obligations and international cooperation in the field of education.

#### Box 2.5.8

## Tenth Plan – Objectives, Key Issues and focus

India's interface with UNESCO, international cooperation in the field of education, operationalisation of Educational Exchange Programmes, encouraging Indian education abroad, and development of the Auroville Foundation would get increased attention during the Tenth Plan.

- 2.5.59 The Indian National Commission for Cooperation with UNESCO (INCCU) has been handling UNESCO work, particularly in the formulation and implementation of its programmes including the participation programme and review of Education for All initiatives at the international level. All the ongoing activities of the Commission are proposed to be continued during the Tenth Plan.
- 2.5.60 A proposal to enter into separate bilateral agreements with foreign countries independent of the cultural exchange programmes, to strengthen international cooperation in the field of education will be actively pursued. The proposed exchange programmes will include programmes for exchange of academics, educationists, scientists, scholars and technologists. It is also proposed to continue the on-going schemes for strengthening of external academic relations with enhanced provisions for outgoing delegations.
- 2.5.61 The Government would continue funding the Auroville Foundation for its maintenance and developmental activities. The Sri Aurobindo International Institute of Educational Research (SAIIER) is also proposed to be funded for undertaking research activities.

## Recommendations of Expenditure Reforms Commission:

2.5.62 The Expenditure Reforms Commission's recommendations relating to the downsizing of the Ministry of Human Resource Development and its autonomous bodies, merger of activities etc., are receiving attention and follow up action will be undertaken during the Tenth Plan.

#### THE PATH AHEAD

2.5.63 Higher education, whether in the general or the technical stream, must have links with all national goals and endeavours. To this end, a large number of centres for excellence to turn out quality manpower in areas relevant to industry and society need to be established with the triangular partnership of academia, industry and government. These institutes of excellence are essential to make

India a knowledge superpower and would help in retaining our competitive edge in the global economy.

2.5.64 To ensure the quality of education, it is necessary to make our accreditation process more transparent, time-bound and free from the regime of controls. Institutions like the NAAC and AICTE should make public the benchmarks as well as other normative standards, which are absolute minimum requirements for starting colleges and institutes of technical education. There is a need to enforce these minimum standards without any dilution or compromise. Modernisation of syllabi, examination reforms and greater attention to issues of governance of universities and colleges, all require urgent attention.

2.5.65 Schemewise break-up of the Tenth Plan outlay of Department of Secondary and Higher Education is given in the Appendix.

Annexure - 2.5.1

## Department of Secondary and Higher Education Ninth Plan outlay/expenditure and Tenth Plan (2002-07) approved outlay

(Rs. crore)

SI. No.	Name of the Scheme	Ninth Plan Allocation	Ninth Plan Anticipated Expenditure	Tenth Plan approved Outlay
1.	Secondary Education	2,603.49	2,322.68	4,325.00
2.	University and Higher Education	2,520.06	2,270.92	4,176.50
3.	Technical Education	2,373.51	2,109.54	4,700.00
4.	Language Development	324.45	298.40	434.00
5.	Scholarships	25.32	3.23	52.00
6.	Book Promotion	16.25	26.06	67.00
7.	Planning and Administration.	65.38	21.46	70.50
	Total	7,908.40	7,052.29	13,825.00